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

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

FIRST REPORT AND ORDER
AND
FURTHER NOTICE OF PROPOSED RULEMAKING

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

TABLE OF CONTENTS

Paragraph Number

I. INTRODUCTION 1
II. BACKGROUND 4
A. History of EAS 4
B. The Current EAS 5
C. Recent Events 12
III. DISCUSSION 16
A. General Matters 16
B. Digital Television 19
C. Digital Cable 27
D. Digital Audio Broadcasting 33
E. Satellite Digital Audio Radio Service 40
F. Direct-to-Home Satellite Services 49
G. Administrative Matters 59
H. Conclusion 60
IV. FURTHER NOTICE OF PROPOSED RULEMAKING 61
V. PROCEDURAL MATTERS 82
A. *Ex Parte* Presentations 82
B. Comment Filing Procedures 83
C. Accessible Formats 84
D. Regulatory Flexibility Analysis 85
E. Paperwork Reduction Act Analysis 87

F. Congressional Review Act 88
VI. ORDERING CLAUSES 89
APPENDIX A – LIST OF COMMENTERS
APPENDIX B – FINAL RULES
APPENDIX C – PENETRATION DATA
APPENDIX D – FINAL REGULATORY FLEXIBILITY ANALYSIS
APPENDIX E – INITIAL REGULATORY FLEXIBILITY ANALYSIS

I. INTRODUCTION

1. One of the most fundamental and significant statutory mandates of the Federal Communications Commission (Commission) is the promotion of safety of life and property through the use of wire and radio communication.[1] For over forty years, the Commission has sought to satisfy this mandate in large part by requiring that the American public be provided with an effective and robust national alert and warning system. Since 1994, this function has been performed by the Emergency Alert System (EAS), which is jointly administered by the Commission, the Federal Emergency Management Agency (FEMA), one of the component agencies of the Department of Homeland Security (DHS), and the Department of Commerce and its component, the National Oceanic and Atmospheric Administration's National Weather Service (NWS).[2] Today, we take steps to advance our important public safety mission by adopting rules that expand the reach of EAS, as currently constituted, to cover digital communications technologies that are increasingly being used by the American public to receive news and entertainment -- digital television and radio, digital cable,[3] and satellite television and radio.[4]

2. Consumers have increasingly begun to adopt new digital technologies as replacements for the analog broadcast and cable systems that are currently required to implement EAS. Accordingly, an increasingly large percentage of television viewers and radio listeners receive their programming from systems that may have no independent duty to provide EAS, or any other alert and warning system, to their customers. For example, as of 2005, almost 25% of TV households subscribed to Direct Broadcast Satellite (DBS) services,[5] yet such satellite services are under no obligation to participate in EAS. More than 23% of TV households subscribe to digital cable television services which are not specifically addressed in the Commission's EAS rules.[6] Further, the number of subscribers in the Satellite Digital

[1] *See* 47 U.S.C. § 151.

[2] The respective roles of the Commission, FEMA, and NWS are based on a 1981 Memorandum of Understanding, s*ee State and Local Emergency Broadcasting System* (EBS) *Memorandum of Understanding Among the Federal Emergency Management Agency* (FEMA)*, Federal Communications Commission* (Commission)*, and the National Oceanic and Atmospheric Administration* (NOAA) (Approved by National Industry Advisory Committee (NIAC) on April 21, 1982), a 1984 Executive Order, *Assignment of National Security and Emergency Preparedness Telecommunications Functions*, Exec. Order No. 12,472, 49 Fed. Reg. 13,471 (1984), and a 1995 Presidential Statement of Requirements, *see Presidential Communications with the General Public During Periods of National Emergency,* The White House (September 15, 1995).

[3] For purposes of this Order and our Part 11 rules only, the term "digital cable systems" is defined as the portion of a cable system that delivers channels in digital format to subscribers at the input of a Unidirectional Digital Cable Product or other navigation device.

[4] *See Review of the Emergency Alert System*, Notice of Proposed Rulemaking, EB Docket No. 04-296, 19 FCC Rcd 15775 (2004) (*EAS NPRM*). Further, we recognize the importance of the issue raised in the *EAS NPRM* of whether participation in state and local EAS activations should remain voluntary, particularly in light of Hurricane Katrina, which highlighted the need for effective public alert and warning. Resolution of this issue will require coordination with our Federal and State partners, and will also be the subject of a subsequent order.

[5] *See infra* Appendix C.

[6] *See infra* Appendix C..

Audio Radio Service (SDARS) -- also known as "satellite radio" -- increased from approximately 140,000 to more than 6 million between June 2002 and June 2005.[7] SDARS licensees are not currently required to participate in EAS. Finally, digital audio broadcasters using in-band, on-channel (IBOC) technology and digital television (DTV) broadcasters also reach increasingly large portions of the American public,[8] but currently have no EAS obligations. Clearly, some level of EAS participation must be established for these new digital services to ensure that large portions of the American public are able to receive national and/or regional public alerts and warnings.

3. In the Further Notice of Proposed Rulemaking, we seek further comment on how to amend the EAS rules to ensure that EAS messages more effectively reach individuals with hearing and vision disabilities. The Commission is committed to ensuring that persons with disabilities have equal access to public warnings. We also seek additional comment on what actions the Commission, along with our Federal, State and industry partners, should take to help expedite the development of a robust, state-of-the-art, digitally-based public alert and warning system.

II. BACKGROUND

A. History of EAS

4. This country has had some type of national warning system in place since 1951, when President Harry S. Truman created CONELRAD (Control of Electromagnetic Radiation) in 1951. CONELRAD provided a means for the President to address the American people, to provide attack warning, and to supply emergency information.[9] CONELRAD soon became obsolete, however, and in 1963, President John F. Kennedy replaced it with the Emergency Broadcast System (EBS).[10] Our national warning system was further improved in 1994 when the Commission adopted rules that replaced EBS with EAS. EAS represented not only a technological advancement, but also an expansion of the warning system beyond the traditional broadcast media, to include cable systems. In 1997, the Commission further extended EAS obligations to wireless cable systems.[11]

B. The Current EAS

5. Jurisdiction. EAS is a national public warning system that, together with other emergency notification mechanisms, is part of an overall public alert and warning system, under the jurisdiction of FEMA.[12] The Commission's authority to regulate emergency alerts and warnings emanates from sections 1, 4(i) and (o), 303(r), and 706 of the Communications Act of 1934, as amended, (Act).[13] The Commission, FEMA and NWS together implement EAS at the federal level.[14] In addition,

[7] *See infra* Appendix C.

[8] *See infra* Appendix C.

[9] *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). *See also EAS NPRM*, 19 FCC Rcd at 15776-78, paras. 6-8.

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

[11] *See Amendment of Part 73, Subpart G, of the Commission's Rules Regarding the Emergency Broadcast System,* Second Report and Order, FO Docket No. 91-301, FO Docket No. 91-171, 12 FCC Rcd 15503 (1997) (*Second Report and Order*).

[12] *See supra* n.2.

[13] 47 U.S.C. §§ 151 (stating 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), 154(i) and (o) (providing 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; and providing 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

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State Emergency Coordination Committees (SECCs) and Local Emergency Coordination Committees (LECCs) develop state and local EAS plans.

6. The Commission's role includes prescribing rules that establish technical standards for EAS, procedures for radio and television broadcast stations and cable systems to follow in the event EAS is activated, and EAS testing protocols. The President has sole responsibility for determining when the system will be activated at the national level,[15] and has delegated this authority to the director of FEMA. FEMA is responsible for implementation of the national-level activation of EAS, tests, and exercises.

7. At the state and local level, NWS plays a critical role as the originator of emergency weather information. NWS broadcasts NWS forecasts, warnings, watches, and other non-weather-related hazard information 24 hours a day. Through its All-Hazards Network, NWS originates approximately 80% of all EAS alerts, supplying local alerts to broadcast and cable entry points designated in approved EAS state and local plans. SECCs and LECCs prepare coordinated emergency communications systems and develop state and local emergency communications plans and procedures for EAS and other public alert and warning systems states may use in combination with EAS.

8. EAS Structure. Under the Commission's rules, national activation of EAS for a Presidential message 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.[16] Broadcast stations and cable systems covered by the Commission's EAS rules must cease their normal broadcasting and transmit such a Presidential message. Use of EAS for state or local emergency information is voluntary. Broadcasters and cable systems may decide individually whether to transmit such messages that originate at the state or local level.[17] The Commission's rules impose EAS obligations only on analog radio and television stations, and wired and wireless cable television systems. Other systems, such as DBS services, DTV, SDARS, and Digital Audio Broadcasting (DAB) currently have no EAS requirements.

9. EAS is essentially a hierarchal distribution system.[18] At the request of the President, FEMA has designated 34 radio broadcast stations as Primary Entry Point (PEP) stations to which it distributes "Presidential Level" messages, the initial message in the national chain.[19] As the entry point

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property), 303(r) (generally granting rulemaking authority to the Commission), 606 (granting 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).

[14] *See supra* n.2.

[15] The Stafford Act 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. Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), as amended, 42 U.S.C. § 5121, *et. seq*.

[16] 47 C.F.R. § 11.44(a).

[17] 47 C.F.R. § 11.55(a); *see also Amendment of Part 11 of the Commission's Rules Regarding the Emergency Alert System*, Report and Order, EB Docket No. 01-66, 17 FCC Rcd 4055, 4057, para. 3 (2002) (*2002 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, FO Docket 91-301, FO Docket 91-171, 10 FCC Rcd 1786, 1809, para. 66 (1994) (*First Report and Order*), *reconsideration granted in part, denied in part*, 10 FCC Rcd 11494 (1995).

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

[19] 47 C.F.R. § 11.14.

for national level EAS messages, the PEP stations are designated National Primary (NP). 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 must monitor two EAS sources, including its regional PEP station, for Presidential messages, and serves as the point of contact for local authorities and NWS officials to activate EAS. Other 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 below LP-1 must monitor two EAS sources including their LP-1 station. If a Presidential message is sent, broadcast stations and cable systems receiving it are required to air the message in the format received.[20] For non-Presidential messages, these monitoring stations and cable systems may carry the message at their discretion, but if they choose to transmit the message they must comply with the Commission's Part 11 rules governing such messages.

10. Although EAS is designed primarily to convey Presidential messages in times of emergency, most emergencies originate at the state and local level. State and local emergency operations managers can also 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.[21] State Primary Entry Points can be broadcast stations, state emergency operation centers, or other statewide networks, and can act as sources of state EAS messages originating from the Governor or a State Emergency Operations Center. State Relay sources relay state common emergency messages into local areas.[22] 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.[23]

11. 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.[24] EAS messages enter the EAS system via equipment that is able both to encode and decode EAS messages, often called ENDEC units. 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.[25] EAS equipment also provides a method to automatically interrupt regular programming and is capable of providing warnings in the primary language that is used by the station or cable system.[26] 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 the message.

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[20] *See* 47 C.F.R. § 11.51(k) (stating that broadcast stations and cable systems and wireless cable systems are required to transmit all received EAS messages in which the header code contains the Event codes for Emergency Action Notification (EAN), Emergency Action Termination (EAT), and Required Monthly Test (RMT), and when the accompanying location codes include their State or State/county and stating that these EAS messages must be retransmitted unchanged except for the identification of the broadcast station, cable system, wireless cable system, or other entity retransmitting the message). Section 11.31(a)(3) states that the EAS message may be audio, video or text and Section 11.31(c) sets out a representation of the EAS protocol, including the message format which includes "transmission of audio, video or text messages." 47 C.F.R. § 11.31(a)(3), 11.31(c); *see also* 47 C.F.R. §§ 11.11 (requiring that all EAS participants use the common EAS protocol defined in section 11.11).

[21] 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.

[22] 47 C.F.R. § 11.18(d).

[23] 47 C.F.R. § 11.18(b).

[24] 47 C.F.R. § 11.31.

[25] 47 C.F.R. § 11.31(a).

[26] 47 C.F.R. §§ 11.33(a)(4), 11.51(k)(1), 11.54.

C. Recent Events

12. In our August 2004 Notice of Proposed Rulemaking (*EAS NPRM*),[27] we acknowledged the tremendous impact that digital technologies are having on broadcast, cable and satellite news and entertainment industries, and noted the potential for effective warning offered by digital media's ability to supply sophisticated services that can communicate across various platforms. In this context we asked whether EAS in its present form was the most effective mechanism for warning the American public of an emergency and, if not, how EAS can be improved. In response to the *EAS NPRM*, we received approximately 160 comments, including comments from entities from all major communications sectors. Many of these commenters discussed the state of the art public alert and warning potential that these sectors now offer.

13. Further, FEMA and NOAA, the Commission's co-administrators of EAS, have initiated a series of pilot projects that explore the use of digital and other cutting edge technologies to create an Integrated Public Alert and Warning System.[28] These pilot projects involve partnerships and extensive coordination between government and private industry. For example, the one-year Digital Emergency Alert System (DEAS) National Capital Region Pilot demonstrates how the 294 digital public television stations across the country can act as a wireless network capable of broadcasting data, or "datacasting," public alerts and warnings during times of national crisis.[29] Phase one of this pilot project uses datacasting of DEAS text, voice, and video over public television stations. Phase two will further develop and test Common Alerting Protocol (CAP) messages and DEAS-enabled relays to cell phones, Internet, pagers, electronic bulletin boards, etc.[30] Additionally, FEMA and NOAA are involved in a Geo-Targeted Alerting System pilot project designed to integrate real-time weather models and hazardous air flow predictions providing DHS with the ability to identify specific areas to which to issue targeted homeland security alerts and warnings using reverse 911 technologies.[31]

14. Both Houses of Congress have indicated that effective public alert and warning is one of their highest priorities. On September 7, 2005, a representative from the Commission testified regarding this subject in connection with Hurricane Katrina before the United States House of Representatives, Committee on Energy and Commerce. On July 27, 2005, representatives from the Commission, FEMA and NOAA presented statements regarding all-hazards alert systems to the United States Senate, Committee on Commerce, Science and Transportation, Subcommittee on Disaster Prevention and Prediction. Additionally, on September 22, 2004, representatives from the Commission and FEMA and NOAA testified regarding EAS before the United States House of Representatives, Select Committee on Homeland Security, Subcommittee on Emergency Preparedness and Response. Finally, the recently enacted Intelligence Reform and Terrorism Prevention Act of 2004[32] includes requirements for a study

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[27] *See generally EAS NPRM*, 19 FCC Rcd 15775.

[28] Testimony of Michael D. Brown, Under Secretary of Homeland Security for Emergency Preparedness and Response, Federal Emergency Management Agency, House of Representatives, Committee on Appropriations, Subcommittee on Homeland Security, March 9, 2005 and Testimony of Reynold N. Hoover, Director, Office of National Security Coordination, FEMA, Department of Homeland Security, All-Hazards Alert Systems, Senate Committee on Commerce, Science and Transportation, Subcommittee on Disaster Prevention and Prediction, July 27, 2005.

[29] Testimony of John M. Lawson, President and CEO, Association of Public Television Stations (APTS), Senate Hearing, July 27, 2005.

[30] Information on CAP *available at* http://www.incident.com/cookbook/index.php/CAP_Fact_Sheet (last visited Aug. 11, 2005).

[31] Reverse 911 is a term that describes a calling system that places calls generated by a public safety call center to a specific audience.

[32] Intelligence Reform and Terrorism Prevention Act of 2004, Pub. L. No. 108-458, 118 Stat. 3638 (2004) (to be codified at scattered sections U.S.C.). Information regarding pending federal legislation related to emergency alert and warning (i.e. Tsunami Preparedness Act, S. 50, 109th Cong (2005)) can be found in the CRS Report for

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about the use of telecommunications networks as part of an all-hazards warning system.[33]

15. Most recently, the White House established The Task Force on Effective Warnings, constituted under the National Science and Technology Council. Co-chaired by DHS and NOAA, the task force includes representatives from DHS, the Department of Commerce, the Department of Defense, the Department of Interior, the Department of Transportation, the Department of Agriculture, the Department of State, the Commission, the Environmental Protection Agency, the National Aeronautics and Space Administration, plus other departments, agencies and White House offices. The Task Force is charged with examining existing and planned disaster warning communication systems, networks and facilities, and to make recommendations to ensure effective disaster warning systems for the nation.

III. DISCUSSION

A. General Matters

16. The examination of EAS that we have begun in this docket, in combination with the recent government and industry efforts mentioned above, offers a unique opportunity for us to integrate effective public alert and warning into the sophisticated services and features of digital media at an early developmental stage. We agree with commenters that digital technologies offer new and more effective possibilities for public warning.[34] As noted above, government and industry are engaged in a series of efforts, either alone or in concert, to develop a fully integrated, state of the art, digitally-based public alert and warning system for the American public. Accordingly, we adopt a Further Notice of Proposed Rulemaking seeking comment on the actions the Commission should take to help expedite the development of such a system.[35]

17. Our immediate concern, and the subject of this Order, is to ensure that increasingly popular digital technologies deliver some level of basic national or regional warning now, while more sophisticated alert and warning systems are being developed. It is an essential element of this agency's mission to ensure that the American public receives public alerts and warnings. For the reasons indicated below, we believe that the current EAS is overall the most effective way to provide such a basic level of warning as we transition to more sophisticated systems. Accordingly, we adopt rules today to ensure that DTV, DAB, digital cable, DBS and SDARS consumers are provided with effective, basic alert and warning information now, in a manner that will neither interfere with nor impede the ongoing development of a fully integrated state of the art warning system. We seek to facilitate this steady transition to a digital warning system by extending the EAS obligations of analog broadcasters and cable systems to these additional digital communications systems.

18. We believe that the benefits of requiring DTV, DAB, digital cable, DBS and SDARS licensees to participate in the current EAS far outweigh any burdens associated with implementing these requirements. EAS represents a significant and valuable investment that provides effective alert and warning during the time that new, digitally-based public alert and warning systems are being developed. We agree with those commenters who argue that EAS should remain an important component of any

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Congress. *See* Linda K. Moore and Shawn Reese, *Emergency Communications: The Emergency Alert System (EAS) and All-Hazard Warnings*, Congressional Research Service, The Library of Congress, CRS Report for Congress, at CRS-9-12 (updated Sept. 2, 2005), *available at* http://www.uscongress.com/section/pdf/CRSRL32527_9_11.pdf (last visited Sept. 21, 2005).

[33] *Id*., § 7502(a).

[34] *See e.g.*, Contra Costa County Community Warning System (Contra Costa County) Comments at 10; Dr. Peter L. Ward (Dr. Ward) Comments at 4; Developers — Sage Alerting Systems ENDEC, Gerald LeBow and Harold Price (Developers) Comments at 8-9; Jefferson Pilot Communications Company (Jefferson Pilot) Comments at 1.

[35] The Further Notice also seeks comment on wireless-related issues and whether participation in state and local EAS activations should remain voluntary.

future alert and warning system. Further, in most cases, the digital platforms affected by this Order either have in place the ability to distribute EAS warnings, or can do so in a reasonable amount of time and with reasonable cost. Accordingly, based on our examination of the record in this proceeding, we do not believe that requiring these digital services to install and use EAS equipment will impose undue regulatory or financial burdens. As we have indicated above, we will continue, along with other agencies and industry, to explore ways in which emergency information might be made available in a more efficient, effective, and technologically current fashion.

B. Digital Television

19. Background. Television broadcasting in the United States is in the midst of a conversion from analog to digital technology.[36] The majority of television stations serving all markets in the United States are already airing DTV[37] programming,[38] and the Commission set a target date of December 31, 2006 for the completion of the DTV transition.[39] In the Balanced Budget Act of 1997, Congress made this target date statutory, providing that a broadcast license that authorizes analog television service may not be renewed to authorize such service for a period that extends beyond December 31, 2006 unless the Commission grants an extension based on specific criteria enumerated in the statute.[40] When the DTV transition is complete, some of the spectrum currently used for broadcast television will be reclaimed and put to other uses, notably public safety. The Commission has adopted standards and rules that address the transition of the nation's television broadcasters from analog to DTV, which are set forth in Part 73 of our rules.[41] None of these rules, however, have addressed EAS participation.

20. In the *1994 EAS Report and Order*, the Commission encouraged, but did not require, DTV[42] broadcasters to participate in EAS, and specifically provided for the voluntary participation of DTV broadcasters.[43] In the *EAS NPRM***,** the Commission sought comment on whether to make participation compulsory.[44] The Commission asked commenters to address the possibility that when

[36] In the Telecommunications Act of 1996, Congress provided that initial eligibility for any advanced television licenses issued by the Commission should be limited to existing broadcasters, conditioned on the eventual return of either the current 6 MHz channel or the new digital channel. 47 U.S.C. § 336; Pub. L. No. 104-104, 110 Stat. 56 (1996).

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

[38] Approximately 88.5% of the authorized DTV channels are operational and on the air. *DTV Stations Authorized to Be on the Air*, Video Division, Media Bureau, Federal Communications Commission, (July 18, 2005) *available at* http://www.fcc.gov/mb/video/files/dtvonairsum.html.

[39] *Advanced Television Systems and Their Impact upon the Existing Television Broadcast Service*, Fifth Report and Order, MM Docket No. 87-268, 12 FCC Rcd 12809, 12843-44, paras. 82-86 (1997) (*DTV Fifth Report and Order*).

[40] 47 U.S.C. § 309(j)(14). As of September 20, 2005, no such extension requests have been filed. Congress has recently been considering proposed legislation that would establish a date certain for the transition end date. *See, e.g.,* Spectrum Availability for Emergency-Response and Law Enforcement to Improve Vital Emergency Service Act, S. 1268, 109th Cong. (2005); *DTV Transition Act of 2005: Hearing on a Staff Discussion Draft Before the Subcomm. on Telecomm. & the Internet, House Comm. on Energy and Commerce*, 109th Cong. (2005), *available at* http://energycommerce.house.gov/108/Hearings/05262005hearing1533/hearing.htm.

[41] *See, e.g.,* 47 C.F.R. §§ 73.622-625.

[42] At that time, DTV was referred to as High Definition Television or HDTV.

[43] *First Report and Order*, 10 FCC Rcd at 1786, 1811. TV stations were not operating digitally at the time and therefore were not a necessary link in disseminating emergency information.

[44] *EAS NPRM*, 19 FCC Rcd at 15786, para. 29.

television stations turn off their analog signals as part of the DTV transition, they could leave a market devoid of an EAS participating broadcaster.[45] The Commission also noted that DTV broadcasters have the ability to multicast, *i.e.,* to transmit more than one program stream on their assigned channel.[46] We sought comment on whether DTV broadcasters should be required to transmit EAS messages on all program streams, or whether they should be permitted to transmit on only one stream and force tune receivers to that stream.[47]

21. Discussion. Based on the record before us, we find that revising our EAS rules to apply to DTV broadcasters furthers the public interest by ensuring that the public - regardless of the form of technology used - receives emergency information. Accordingly, we will require DTV broadcasters to comply with our Part 11 rules.[48] DTV broadcasters must participate in all national EAS activations.[49] Participation in state and local EAS activations will remain voluntary, but if DTV broadcasters choose to transmit state and local EAS messages they must comply with the Commission's Part 11 rules governing those messages.[50] Essentially, DTV providers will now have the same EAS obligations as analog television broadcasters, including, *inter alia,* the obligations to install ENDEC units so that the monitoring and transmitting functions are available during the times stations are in operation and transmit EAS test messages.[51] These requirements will be effective on December 31, 2006.

22. The Commission has recognized that digital broadcasters remain public trustees of the nation's airwaves and have a responsibility to serve the public interest.[52] We agree with NAB/MSTV's assertions that extending EAS rules to DTV is a natural extension of these public interest obligations.[53] Participation of DTV broadcasters will enhance the effectiveness of EAS and ensure that many more people have access to critical emergency information.[54] Given the ongoing transition to DTV, continued exemption of this service from the requirement to provide national EAS warnings does not serve the public interest. As we suggested in the *EAS NPRM*, if EAS participation remained voluntary and DTV broadcasters opted not to participate, some communities could be left without an EAS television broadcast source. Commenters overwhelmingly support extending EAS rules to DTV broadcasters and support the Commission's effort to restructure EAS in a comprehensive digital environment.[55] No

[45] *Id*.

[46] We note that 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*, APTS (June 2003), *available at* http://www.apts.org/html/homeland/hswhitepaper.pdf.

[47] *EAS NPRM*, 19 FCC Rcd at 15786, para. 30. "Force tuning" technology allows a provider to switch subscribers from any programmed channel or stream to a specific channel or stream that will carry EAS messages.

[48] This includes broadcasters of digital low power television and digital Class A television.

[49] *See infra* Appendix B, 47 C.F.R. § 11.54(b).

[50] *See infra* Appendix B, 47 C.F.R. § 11.55(a) and (c).

[51] *See, e.g*., 47 C.F.R. §§ 11.35(a), 11.61.

[52] *See* 47 U.S.C. § 336; *see also DTV Fifth Report and Order*, 12 FCC Rcd at 12810-11, para. 2.

[53] National Association of Broadcasters and Association for Maximum Service TV, Inc. (NAB/MSTV) Comments at 18-19.

[54] *See Second Report and Order,* 12 FCC Rcd at 15793, para. 38 (in extending EAS requirements to wireless cable providers, explaining that "[w]e believe it is important to provide emergency information to as many people as possible through different means of delivery and that including a wide variety of multichannel video providers such as wireless cable could provide important safety information to viewers.").

[55] Entergy Nuclear Northeast, Michael J. Slobodien (Entergy) Comments at 2-3; NAB/MSTV Comments at 16-17; North Carolina Association of Broadcasters (NCAB) Comments at 13; Developers Comments at 8-9; Liberty Corporation (Liberty) Comments at 3; Society of Broadcast Engineers, Inc. (SBE) Comments at 19-20; Thomas A. Newell, Facilities Engineer (Newell) Comments at 4.

commenters oppose extending EAS rules to DTV broadcasters. In effect, extending EAS to DTV will simply retain the status quo established in 1994 – television broadcasters will continue to be required to participate in EAS at the national level.

23. In addition, we conclude that when a DTV broadcaster participates in EAS activations, it must provide the EAS message to viewers of all program streams that the DTV broadcaster provides over a particular channel.[56] All DTV viewers should have access to the potentially life-saving emergency information contained in EAS messages. We agree with commenters that argue that EAS messages should be transmitted on all program streams.[57] RERC Wireless supports requiring DTV broadcasters to transmit EAS messages on all program streams, contending that EAS messages are too important to risk missing because a person is tuned to the wrong channel.[58] Ohio EMA agrees that we should require all program streams to air the EAS message.[59]

24. NAB and MSTV contend that DTV broadcasters should be required to transmit EAS messages only on programming streams intended for the general public, but they do not explain why EAS information would not be suitable for all program streams, including those that are subscription based.[60]

25. We conclude that all viewers should be informed of critical emergency information regardless of which program stream they are viewing. We see no reason to exempt subscription-based streams, particularly when we have extended and are extending EAS obligations to other subscription-based services, including analog cable systems, digital cable systems, wireless cable systems, SDARS and DBS. The public interest obligations of DTV broadcasters to meet the emergency needs of their viewing audience must extend to carrying EAS alerts on all program streams.

26. We recognize that DTV broadcasters may need to resolve technical issues, such as equipment procurement, installation, and training in order to comply with the requirements that we establish today. Accordingly, we afford DTV broadcasters more than a year to comply with these rules. Moreover, we grant DTV broadcasters the flexibility to determine the method they will use to distribute EAS messages to all program streams, as long as all viewers receive the EAS message on the channel that they are watching. For example, DTV broadcasters may separately transmit EAS messages on all program streams or, if the technology is available, transmit EAS messages on one stream and force tune all receivers to that stream. We do not mandate force tuning, however, as recommended by Harris Corporation,[61] because most DTV receivers currently on the market do not have force tuning capabilities.[62] We believe that DTV broadcasters should have the option to utilize force tuning

[56] *See infra* Appendix B, 47 C.F.R. § 11.51(c). This requirement applies only to program streams and not to data streams.

[57] Cox Broadcasting, Inc. (Cox) Comments at 7-8 (agreeing that DTV providers should have the ability to provide EAS information in their program streams, but not in the data streams); Developers Comments at 8-9; Gary E. Timm, Chair, Wisconsin SECC (Timm) Comments at 6; Hearst-Argyle Television, Inc. (Hearst-Argyle) Comments at 6; Liberty Comments at 3; NCAB Comments at 13; Ohio Association of Broadcasters (OAS) Comments at 14-15; Rehabilitation Engineering Research Center on Telecommunications Access (RERC) Comments at 5-6; Consumer Electronics Association (CEA) Reply Comments at 9; SBE Reply Comments at 5 (asserting that EAS messages should be provided in program data streams but not in their auxiliary data streams).

[58] Rehabilitation Engineering Research Center on Mobile Wireless Technologies (RERC Wireless) Comments at 8.

[59] Ohio Emergency Management Agency (Ohio EMA) Comments at 3.

[60] NAB/MSTV Comments at 16-17.

[61] Harris Corporation contends that, although software changes may be required for the forced display of graphics and the forced-change of program streams, such changes are not significant. Harris Corporation (Harris) Comments at 5-6.

[62] We agree with the commenters who argue that force tuning should not be required. Hearst-Argyle Comments at 6; OAS Comments at 14-15.

technologies when feasible, as long as every viewer receives the same EAS message regardless of the channel he or she is watching. The extent of the costs or burdens that this requirement will impose on DTV broadcasters will vary by station based on several factors, such as wiring architecture. Because these EAS obligations require equipment with which broadcasters are familiar and which is largely already in place at DTV facilities, we believe that the cost and burden of our requirement will not be so significant as to outweigh the benefit of providing the American public with critical emergency information.

C. Digital Cable

27. Background. The Cable Act of 1992 requires cable systems to provide their subscribers with access to "the same emergency information as is afforded by the [E]mergency [B]roadcast [S]ystem..."[63] In 1994, when the Commission replaced the EBS with EAS, it required cable systems to participate.[64] Thus, cable systems, like broadcasters, are required to carry Presidential EAS messages, and permitted to transmit state and local EAS messages on a voluntary basis.[65] In 1997, the Commission extended EAS requirements to wireless cable systems.[66]

28. The Commission's EAS requirements do not specifically refer to digital cable, which was not in widespread use in 1994 when EAS was implemented. In the *EAS NPRM*, the Commission sought comment on whether it should extend EAS obligations to digital media, including digital cable television.[67] In addition, the Commission raised some technical questions regarding digital cable service participation in EAS.[68]

29. Digital cable offers a number of advantages over analog cable. For instance, the digital format eliminates unwanted noise and interference from programming. Further, digital compression allows more than five times the number of stations to be delivered via the same bandwidth, on additional channel capacity that allows digital cable operators to deliver "near on-demand" programming by staggering the start times of programs on different channels.[69] Because of these advantages, digital cable is increasingly deployed with analog cable in the marketplace. By 2005, more than 23% of TV households subscribed to digital cable.[70]

30. Discussion. We specifically extend the EAS obligations set forth in Part 11 of our rules to digital cable systems. As noted *supra* in footnote 3, for purposes of this Order and our Part 11 rules only, the term "digital cable systems" is defined as the portion of a cable system that delivers channels in digital format to subscribers.[71] Essentially, digital cable systems will now have the same EAS obligations

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

[64] *First Report and* Order, 10 FCC Rcd at 1788, para. 1.

[65] *Id.* at 1806-07, paras. 58-59.

[66] *See Second Report and Order*, 12 FCC Rcd at 15504, para. 1. 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).

[67] *EAS NPRM*, 19 FCC Rcd at 15786, para. 29.

[68] *Id.* at paras. 29-30.

[69] Jade Clayton, McGraw-Hill Telecom Dictionary 183 (2d ed. 2000).

[70] *See infra* Appendix C.

[71] The signal is provided to the subscriber in digital format at the input of Unidirectional Digital Cable Product or other navigation device.

as analog cable systems. Specifically, we will require digital cable systems to participate in national level EAS activations.[72] Participation in state and local EAS activations will continue to be voluntary, but digital cable systems that choose to participate must comply with the Part 11 rules.[73] Like DTV broadcasters, our examination of the record reveals that digital cable providers are familiar with EAS equipment and have already installed this equipment. Accordingly, we believe the burden of equipment purchase, installation and training is similar to that of DTV broadcasters and find that the same compliance deadline of December 31, 2006 is appropriate for digital cable providers.

31. The 1992 Cable Act, as cited above, manifested Congress's belief "that emergency information should be accessible to all television viewers, regardless of the distribution medium in use."[74] Our decision here furthers that statutory goal. We also find that specifically imposing these requirements on digital cable systems is in the public interest. Given the growing deployment of digital cable systems, safety of life and property will be promoted[75] by ensuring that viewers of digital cable have access to the same potentially life-saving emergency information as other television viewers. We agree with commenters like SBE who support expanding EAS to include digital cable systems.[76] SBE agrees that digital cable should be treated in the same manner as over-the-air broadcast and digital broadcast signals.[77] SBE believes that in order to achieve a meaningful and working public warning system, short of creating an entirely new one, emergency, life-saving messages should be transmitted by all means possible.[78] PPW contends that if over-the-air digital broadcast television is required to participate in EAS, then digital cable should also be required to participate.[79] As PPW correctly notes, this is in line with the 1992 Cable Act requirement that cable television participate in the distribution of emergency messages.[80] No commenters opposed extending EAS obligations to digital cable.

32. We will permit digital cable systems that are participating in EAS activations to determine the method they will use to distribute EAS messages to viewers of digital cable channels as long as all viewers receive the complete EAS message on the channel that they are watching. For example, digital cable systems may transmit EAS messages on all digital channels or transmit EAS messages on a single channel and force tune all receivers to that channel.[81] We note that the Plug-and-Play agreement[82] provides that, to be labeled as "Digital Cable Ready," a television set must respond to EAS messages that are transmitted in compliance with the Digital Video Service Multiplex and Transport

[72] *See infra* Appendix B, 47 C.F.R. § 11.54(b).

[73] *See infra* Appendix B, 47 C.F.R. § 11.55(a) and (c)(4).

[74] H.R. Rep. No. 102-628, H.R. Rep. No. 628, 102nd Cong., 2d Session 1992, at 110.

[75] *See* 47 U.S.C. § 151.

[76] *See, e.g.,* Entergy Comments at 2-3, FEMA, Director, Office of Nat'l Security Coordination (FEMA) Comments at 2, Partnership for Public Warning (PPW) Comments at 19, SBE Comments at 19.

[77] SBE Comments at 19.

[78] *Id*.

[79] PPW Comments at 19.

[80] *Id*.

[81] *See, e.g.,* Ohio EMA Comments at 3 (indicating that the force tuning of receivers is a viable EAS option if technology allows such an alternative).

[82] The Plug-and-Play Agreement is a Memorandum of Understanding ("MOU") between representatives of the cable television and consumer electronics industries that details a comprehensive agreement on a cable compatibility standard for integrated, unidirectional digital cable television receivers, as well as other unidirectional digital cable products. This agreement was essentially adopted by the Commission. *See Implementation of Section 304 of the Telecommunications Act of 1996,* Second Report and Order and Second Further Notice of Proposed Rulemaking, PP Docket No. 00-67, 18 FCC Rcd 20885 (2003). We await a similar agreement on Two-Way Plug-and-Play.

System Standard for Cable Television.[83] Under the rules we adopt today, digital cable systems with fewer than 5,000 subscribers must, like analog and wireless cable systems with fewer than 5,000 subscribers, provide a video interruption and an audio alert message on all channels and the EAS message on at least one channel.[84]

D. Digital Audio Broadcasting

33. Background. In 2002, the Commission permitted terrestrial over-the-air AM and FM radio stations to begin digital transmissions on an interim basis using the IBOC technical system developed by iBiquity Digital Corporation.[85] The Commission established interim requirements in the *DAB R&O,* including the requirement that, during interim IBOC operations, radio stations must broadcast the same main channel program material in both analog and digital modes.[86] In a subsequent Further Notice of Proposed Rulemaking, we sought comment regarding what amendments to the Commission's rules would be necessary to facilitate the adoption of DAB and specifically sought comment on issues related to the broadcast of emergency information.[87]

34. Radio stations using IBOC DAB technology are able to provide enhanced sound fidelity, improved reception, multiple audio streams, and new data services to digital-ready radio receivers.[88] This technology makes use of the existing AM and FM bands (In-Band) by adding digital carriers to a radio station's analog signal, allowing broadcasters to transmit digitally on their existing channel assignments (On-Channel) while simultaneously maintaining their analog service.[89] Thus, IBOC permits the transmission of both analog and digital signals within the spectral emission mask of a single AM or FM channel, placing digital information on frequencies immediately adjacent to the analog signal.[90] This technology allows new radios to receive both digital broadcasts and analog broadcasts from stations that have not yet converted to digital.[91] This system is designed to blend to analog when digital reception fails. Radio stations will eventually convert to all-digital modes of operation. DAB does not require use of additional spectrum and there is no statutory mandate to convert to a digital format.

35. In the *EAS NPRM,* the Commission noted that DAB has the ability to transmit more than one program stream in its assigned channel, a practice referred to as multicasting, and that the Commission had recently reached the tentative conclusion that the EAS rules should apply to all audio

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[83] *See* ANSI/SCTE 54 2003: "Digital Video Service Multiplex and Transport System Standard for Cable Television." Section 15.38 of our rules specifically mentions this standard. *See* 47 C.F.R. § 15.38. ANSI/SCTE 54 2003 specifies that emergency alert information transmitted shall conform to ANSI-J-STD-042-2002: "Emergency Alert Message for Cable" (also known as SCTE 18 2002).

[84] *See infra* Appendix B, 47 C.F.R. § 11.51(g).

[85] *Digital Audio Broadcasting Systems and Their Impact on the Terrestrial Radio Broadcast Service*, First Report and Order, MM Docket No. 99-325, 17 FCC Rcd 19990 (2002) (*DAB R&O*).

[86] *See DAB R&O,* 17 FCC Rcd at 20004-05, para. 41.

[87] *See also Digital Audio Broadcasting Systems and Their Impact on the Terrestrial Radio Broadcast Service*, Further Notice of Proposed Rulemaking and Notice of Inquiry, MM Docket No. 99-325, 19 FCC Rcd 7505, 7506, 7519, paras. 1, 37-38 (2004) (*DAB FNPRM*). The Commission's statutory authority for implementing rules regarding DAB is derived from, *inter alia*, Sections 1, 4, 303, and 307 of the Communications Act. 47 U.S.C. §§ 151, 154, 303, and 307.

[88] These data services are able to transmit information such as station, song and artist identification, stock and news updates, and local traffic and weather bulletins.

[89] *See DAB FNPRM*, 19 FCC Rcd at 7506, para. 2.

[90] IBOC technology transmits the digital signals using orthogonal frequency division multiplexing.

[91] Existing analog radios continue to receive analog broadcast signals.

streams broadcast by radio stations using DAB.[92] Because most DAB broadcasters currently use the digital part of their signal to replicate their analog programming, we sought comment on whether EAS messages should be carried on the analog, digital or both program streams. We also asked how EAS messages should be carried when a digital audio broadcaster transmits different programs on its digital and analog streams. Finally, we sought comment regarding whether IBOC receivers have the ability to be force tuned.

36. Discussion. We revise our Part 11 EAS rules to apply to DAB broadcasters.[93] We agree with most commenters that we should extend EAS requirements to DAB providers as a natural extension of radio broadcasters' public interest obligations.[94] Accordingly, we will require DAB broadcasters to air all national EAS messages.[95] Participation in state and local EAS activations will be voluntary, as it is for analog radio broadcasters.[96] If DAB broadcasters choose to participate in state and local EAS activations, they must comply with the Commission's Part 11 EAS rules.[97] Essentially, DAB providers will now have the same EAS obligations as analog radio broadcasters. For the same reasons we discuss in paragraphs 23-25, we will also require DAB broadcasters to transmit all EAS messages that they air on all audio streams.[98] Because DAB broadcasters will face similar burdens of equipment purchase, installation and training as DTV and digital cable providers, we apply the same date of compliance that we did for DTV and digital cable. Accordingly, these rules will be effective December 31, 2006.

37. As noted in the *DAB FNPRM*, we believe that fully informing the public of critical emergency information best serves the public interest and that this can be accomplished only if broadly applied.[99] The public interest obligations of DAB broadcasters to meet the emergency needs of their viewing audience must extend to carrying EAS alerts on all audio streams. Commenters generally agree that DAB broadcasters should participate in EAS and that EAS messages should be broadcast on all audio streams.[100] We agree with commenters who argue that EAS requirements should apply to all audio streams because the goal of EAS as a public warning system is to reach as many people as possible with lifesaving information and to do otherwise would result in the reduced effectiveness of EAS as digital radio listenership increases.[101] All listeners should be informed of critical emergency information regardless of which audio stream they are listening to. For the reasons stated in paragraphs 23-25 with respect to DTV, we see no reason to exempt subscription-based streams.[102] It would not serve the public

[92] *EAS NPRM*, 19 FCC Rcd at 15786, para. 29. *See also DAB FNPRM*, 19 FCC Rcd at 7519, paras. 37-38.

[93] This includes digital low power FM broadcasters.

[94] *See, e.g.*, Developers Comments at 3, 7-8; Harris Comments at 6; NAB/MSTV Comments at 17-18, 37; Larry A. Estlack (Estlack) Comments at 4; Ohio EMA Comments at 3; SBE Comments at 19, 21; Timm Comments at 6-7; Primary Entry Point Advisory Committee, Inc., (PEPAC) Comments at 4; RERC Wireless Comments at 8; WTOP-AM, (WTOP-FM) and WXTR-AM (WTOP/WXTR) Comments at 10; *see also* National Association of Broadcasters Comments at 23-24 in MM Docket No. 99-325.

[95] *See infra* Appendix B, 47 C.F.R. § 11.54(b).

[96] *See infra* Appendix B, 47 C.F.R. § 11.55(a).

[97] *See infra* Appendix B, 47 C.F.R. § 11.55(a) and (c).

[98] *See infra* Appendix B, 47 C.F.R. § 11.51(c).

[99] *See DAB FNPRM*, 19 FCC Rcd at 7519, paras. 37-38. *See also Second Report and Order*, 12 FCC Rcd at 15522, para. 38.

[100] *See, e.g.,* Cox Comments at 7-8 (agreeing that digital radio should have the ability to provide EAS information in their program streams, but not in the data streams); Developers Comments at 8; Newell Comments at 4; Ohio EMA Comments at 3; SBE Comments at 19-21; Timm Comments at 6; WTOP/WXTR Comments at 10.

[101] *See* SBE Comments at 19-21; WTOP/WXTR Comments at 10.

[102] NAB/MSTV and National Public Radio assert that we should extend EAS obligations only to audio streams available free to the general public. *See, e.g.*, NAB/MSTV Comments at 17-18 (asserting that EAS information

(continued....)

interest to exempt DAB broadcasters as they reach increasingly large portions of the American public from EAS obligations. Additionally, although there is no deadline to do so, radio stations will eventually convert to all-digital modes of operation.[103]

38. Although AM and FM radio broadcast stations using DAB may need to update EAS equipment to comply with these rules, particularly with respect to transmitting EAS messages on all audio streams, commenters indicate that these updates will neither be complex nor costly. NAB and MSTV assert that "EAS functionality will be fully preserved during the transition to digital radio using the IBOC technology."[104] National Public Radio has also stated that, using relatively inexpensive distribution amplifiers and switching devices, stations should be able to carry EAS or other emergency information virtually instantaneously via each free over-the-air program channel.[105] As noted above, access to the emergency information contained in EAS messages is critical. Based on our examination of the record in this proceeding, we conclude that the costs of complying with the EAS requirements that we adopt today are outweighed by the public safety benefits of ensuring that all listeners receive EAS messages.

39. Further, as we did above for DTV broadcasters, we afford DAB broadcasters more than a year to comply with these rules and we grant DAB broadcasters the flexibility to determine the method they will use to distribute EAS messages to listeners of all audio streams as long as all listeners receive the complete and timely EAS message on the stream that they are listening to.[106] SBE agrees that "whichever method yields the desired results" is acceptable.[107] We believe that these details are best left to industry to formulate effective methods and standards that fully integrate new and developing technologies.

E. Satellite Digital Audio Radio Service

40. Background. Governed by Part 25 of our rules, SDARS provides a wide variety of digital radio programming on a subscription basis to subscribers throughout the contiguous United States.[108] In 1997, the Commission granted SDARS licenses at auction to two entities: Sirius Satellite

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"may not be suitable" for supplementary services that deliver more focused programming or data or are only available to subscribers and "urg[ing] the Commission to require EAS functionality on secondary services intended for the general public, but at this time not to extend this requirement to other services"); National Public Radio, June 16, 2004, Comments in MM Docket No. 99-325 at 13 (agreeing that each free over the-air audio program service should participate in the emergency alert system). As EAS is being applied to other digital subscription services, we see no reason to defer this determination for DAB.

[103] In the *DAB FNPRM*, the Commission sought comment on the appropriate policies the Commission may adopt to encourage radio stations to convert from an analog-only radio service to a hybrid analog/digital radio service, and, eventually, to an all-digital radio service. *See DAB FNPRM*, 19 FCC Rcd at 7511-12, paras. 15-17.

[104] NAB/MSTV Comments at 17.

[105] National Public Radio June 16, 2004, Comments in Docket No. 99-325, at 13.

[106] Although one such method could consist of transmitting the EAS message on one stream and force tuning all receivers to that stream, we decline to require this force tuning method as Harris Corporation requests. *See* Harris Comments at 6 (acknowledging that IBOC receivers currently do not have the ability to be force tuned, but asserting that manufacturers could make basic adjustments to receivers to enable force tuning); *see also* Ohio EMA Comments at 3 (stating that force tuning of receivers is a viable EAS option, as technology allows for this to occur, but in the interim, EAS messages should be aired on all program streams); WTOP/WXTR Comments at 10 (noting that force tuning is one method of insuring that emergency messages reach the listening public and, while noting that there are technical details to be worked out, supporting it in principle).

[107] SBE Comments at 21-22.

[108] 47 C.F.R. § 25.201 (defining SDARS as "[a] radiocommunication service in which audio programming is digitally transmitted by one or more space stations directly to fixed, mobile, and/or portable stations, and which may involve complementary repeating terrestrial transmitters, telemetry, tracking and control facilities"). The (continued....)

Radio, Inc. (Sirius) (formerly, Satellite CD Radio, Inc.)[109] and XM Radio Inc. (XM) (formerly, American Mobile Radio Corporation).[110] Most SDARS programming is created in the licensees' central headquarters in New York City (Sirius) and Washington, D.C. (XM), but SDARS licensees also re-transmit the programming of third-party content providers. Content is currently transmitted exclusively on a nationwide basis.[111] SDARS licensees have recently begun providing metropolitan area traffic and weather updates on a round-the-clock basis by means of dedicated channels,[112] but all subscribers receive each of these channels on a nationwide basis. For example, both SDARS licensees have a dedicated channel providing traffic and weather reports for Philadelphia, which can be tuned into not only by subscribers in the Philadelphia area, but also by all other subscribers throughout the contiguous United States.

41. In the 1994 *EAS First Report and Order*, the Commission encouraged digital broadcasters to participate in the EAS system.[113] SDARS, however, is not a broadcast service, and is not

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Commission has not classified SDARS as either a broadcast or common carrier service under our rules. *Establishment of Rules and Policies for the Digital Audio Radio Satellite Service in the 2310-2360 MHz Frequency Band*, Report and Order, Memorandum Opinion and Order and Further Notice of Proposed Rulemaking, IB Docket No. 95-91, 12 FCC Rcd 5754, 5788-89, para. 84 (1997) (*SDARS Order*). At this time, SDARS licensees are not required to, and do not, serve Alaska or Hawaii. The Commission's statutory authority to regulate SDARS emanates primarily from Titles I and III of the Act. 47 U.S.C. §§ 151, *et seq.,* 301, *et seq.*

[109] *Satellite CD Radio, Inc. Application for Authority to Construct, Launch, and Operate Two Satellites in the Satellite Digital Audio Radio Service*, Order and Authorization, File Nos. 71-SAT-AMEND-97, 49/50-DSS-P/LA-905, 58/59-DSS-AMEND-90, 8/9-DSS-AMEND-92, 12/13-DSS-AMEND-92, 44/45-DSS-AMEND-92, 42-SAT-AMEND-95, 71-SAT-AMEND-97, 13 FCC Rcd 7971 (1997) (*Sirius Authorization Order*), *modified sub nom*, *Sirius Satellite Radio Inc. for Minor Modification of License to Construct, Launch and Operate a Non-Geostationary Satellite Digital Audio Radio Service System*, Order and Authorization, File No. SAT-MOD-19981211-00099, 16 FCC Rcd 5419 (2001).

[110] *American Mobile Radio Corporation Application for Authority to Construct, Launch and Operate Two Satellites in the Satellite Digital Audio Radio Service*, Order and Authorization, File Nos. 72-SAT-AMEND-97, 10/11-DSS-P-9312/15/92, 26/27-DSS-LA-931/15/93, 83/84-SAT-AMEND-953/10/95, 72-SAT-AMEND-97, 13 FCC Rcd 8829 (1997) (*XM Radio Authorization Order*).

[111] *See* Sirius Satellite Radio, Inc. Comments at 3 (Sirius Comments) ("Sirius cannot and does not broadcast programming on a local or regional basis; instead, all of Sirius' subscribers, regardless of location, receive precisely the same programming."); XM Radio Inc. Comments at 3-4 (XM Comments) ("As with all satellite radio programming, the traffic and weather information is simultaneously transmitted by XM's satellites and terrestrial repeaters directly to subscribers' receivers throughout XM's coverage area."). Although SDARS systems do utilize localized terrestrial transmitters to amplify their signal and fill gaps in satellite coverage, the authority for use of these terrestrial repeater networks is temporary, and SDARS operators are prohibited from originating programming at their terrestrial repeaters. *See Sirius Satellite Radio, Inc., Application for Special Temporary Authority to Operate Satellite Digital Audio Radio Service Complementary Terrestrial Repeaters*, Order and Authorization, File No. SAT-STA-20010724-00064, 16 FCC Rcd 16773, 16777, para. 11 (2001) (*Sirius STA Order*), *modified by*, Order, File No. SAT-STA-20010724-00064, 16 FCC Rcd 18481 (2001) (modifying, on the Commission's own motion, requirement that Sirius coordinate with WCS licensees to also include coordination with Multipoint Distribution Service and Instructional Television Fixed Service licensees); *XM Radio Inc., Application for Special Temporary Authority to Operate Satellite Digital Audio Radio Service Complementary Terrestrial Repeaters*, Order and Authorization, File No. SAT-STA-20010712-00063, 16 FCC Rcd 16781, 16784, para. 11 (2001), *modified by*, Order, File No. SAT-STA-200110712-00063, 16 FCC Rcd 18481 (2001) (modifying, on the Commission's own motion, requirement that XM coordinate with WCS licensees to also include coordination with Multipoint Distribution Service and Instructional Television Fixed Service licensees).

[112] *See* Sirius Comments at 3; XM Comments at 3-4.

[113] *See generally First Report and Order*, 10 FCC Rcd 1786. *See generally* 47 C.F.R. § 11.11(e). ("Organizations that choose to voluntarily participate [in the EAS] must comply with the requirements [set forth in Part 11].").

currently required to participate in EAS. In the *EAS NPRM*, the Commission sought comment on whether we should adopt rules extending EAS obligations to other digital networks, such as SDARS.[114] We also sought comment on whether SDARS licensees' national distribution structures affect their ability to discharge EAS obligations effectively.[115]

42. Both providers have already implemented some form of emergency alerts in their programming. XM, in addition to providing regional and local emergency information over its traffic and weather channels,[116] has a channel dedicated exclusively to public safety and emergency alerts.[117] XM indicates that this alert channel is committed to providing critical, updated information before, during, and after natural disasters, weather emergencies, and other hazardous incidents.[118] To ensure that critical emergency information is received and transmitted quickly on its traffic and weather channels and the channel dedicated to emergency alerts, XM states that its personnel monitor a variety of sources 24 hours a day including FEMA, the U.S. Department of Health and Human Services, NWS, and state and local public safety organizations.[119] Sirius currently has a voiceover alert capability that interrupts programming to transmit a voice message "instruct[ing] listeners that an emergency exists and that they should tune to one of Sirius' news program channels for further details."[120] Sirius used this voiceover alert capability during the Northeast Blackout in August 2003.[121]

43. Discussion. We amend Part 11 of our rules to require that all SDARS licensees participate in EAS. The new rules will require SDARS licensees to transmit national level EAS messages on all channels.[122] Both XM and Sirius have stated that, once received, they are currently capable of transmitting national EAS messages on every channel.[123] We will require that SDARS licensees receive national EAS messages through an ENDEC unit, the same manner as currently required of broadcasters and cable systems, from which they must directly monitor at least two sources, including one PEP station, or must directly monitor FEMA.[124] This should not be difficult to accomplish as XM currently already monitors EAS alerts from an LP-1 station through an ENDEC unit located at its Washington, D.C.

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[114] *EAS NPRM,* 19 FCC Rcd at 15786, para. 29.

[115] *Id.*

[116] *See* XM Comments at 4. In addition to weather related emergency information, XM also transmits Amber Alerts over its traffic and weather channels. *See* XM Comments at 5. These alerts include verbal delivery of critical information and a visual scroll of the alleged abductor's license plate number and other vital information, which appears on the LED screen of the subscriber's satellite radio receiver. *See id*.

[117] *See* XM Comments at 3, 5.

[118] *See* XM Comments at 5. We note that XM recently dedicated this channel to emergency information related to Hurricane Katrina.

[119] *See* XM Comments at 4, 9.

[120] *See* Sirius Comments at 3.

[121] *Id.* On August 14, 2003, an electrical power blackout affected approximately 50 million people in large portions of the northeastern and midwestern United States, as well as parts of Canada. *See, e.g.,* Washington Post, *Blackout 2003, available at* http://www.washingtonpost.com/wp-dyn/nation/specials/blackout2003 (last visited Sept. 20, 2005) (compiling 2003 Washington Post news reports on the blackout).

[122] *See infra* Appendix B, 47 C.F.R. §§ 11.11(a), 11.51(i), 11.54(b).

[123] *See* Sirius Comments at 2-3 (explaining that once a national level alert is received, Sirius can commit all channels to relaying that alert); XM Comments at 8 (explaining that in the event that a Presidential Level alert is delivered, XM's headquarters and operations center is staffed 24 hours per day, 7 days per week, and is equipped with a manual switching device that can force every XM channel to the emergency audio alert delivered by the President or his designate).

[124] *See infra* Appendix B, 47 C.F.R. §§ 11.11(a), 11.35(a), 11.51(i)(1), 11.52(d), 11.54(b)(1).

headquarters.[125] We strongly encourage SDARS licensees to have the ability to receive EAS alerts from state and local emergency managers and the ability to disseminate state and local EAS warnings on local traffic and weather channels that the SDARS licensees provide.[126] We will require SDARS licensees to inform their customers of the channels that will and will not be capable of supplying state and local EAS messages.[127] Finally, we will require SDARS licensees to test their ability to receive and distribute EAS messages in the same manner required of other EAS participants in section 11.61 of our rules and to keep records of all tests.[128] Although XM states that it is committed to testing its EAS equipment, it suggests that our rules should require it to conduct tests only on its XM Emergency Channel.[129] Although we commend XM for its commitment to test its EAS equipment, we disagree with its view regarding testing requirements. The EAS testing regime is designed to test not only the EAS participant's ability to receive the message from the source it monitors, but also the ability of the participant to disseminate an alert to its entire audience. SDARS licensees should monitor a state or local primary source to participate in testing. Because SDARS licensees will face burdens of equipment purchase, installation and/or training similar to those of DTV and DAB broadcasters and digital cable providers, these new rules will also take effect December 31, 2006.[130]

44. We believe that requiring SDARS licensees to transmit national EAS messages will serve the public interest because the current rules do not guarantee that the substantial and increasing number of people who subscribe to SDARS would receive EAS alerts on their SDARS receivers. There are currently over six million SDARS subscribers and this number continues to grow.[131] SDARS is an expanding service, with providers creating partnerships with wireless telephone providers, automobile manufacturers and major media companies.[132] Thus, extending national EAS obligations to SDARS will promote the safety of the large and growing number of Americans who are subscribing to this service. We disagree with commenters who claim that voluntary participation in national EAS activations by SDARS licensees would be sufficient.[133] Failure to mandate SDARS participation in national EAS activations could potentially leave a substantial number of Americans without access to critical information in the event of a national emergency. We agree with commenters who assert that the extension of EAS obligations to SDARS licensees is an important addition to the EAS system.[134] As

[125] *See* XM Comments at 8.

[126] We note that SDARS licensees are not required to provide traffic and weather channels. These new rules will apply only to those traffic and weather channels that they choose to offer.

[127] *See infra* Appendix B, 47 C.F.R. § 11.55(a)(2).

[128] *See infra* Appendix B, 47 C.F.R. § 11.61(a).

[129] *See* XM comments at 9.

[130] *See infra* Appendix B, 47 C.F.R. § 11.11(a).

[131] *See infra* Appendix C.

[132] *See e.g.* Jeff Leeds, *Venture to Put Live Shows On Internet And Radio*, N.Y. Times, July 13, 2005, at C4, *available at* 2005 WLNR 10935780 (XM teaming with America Online to offer live concerts via Internet, satellite, wireless and other media); *Cell Phone Companies Seek Profit in Music Services*, Washington Post, July 2, 2005, *available at* 2005 WLNR 10436405 (Sirius teaming with Sprint Corp. to offer commercial-free music and music video streams over mobile phones); Bloomberg News, *2 Automakers Reach Deals On Installing Satellite Radio*, N.Y. Times, Mar. 24, 2005, at C8, *available at* 2005 WLNR 4609972 (XM and Sirius teaming with various car manufacturers to include a satellite radio receiver as a standard or factory-installed option).

[133] *See* Sirius Comments at 2; XM Comments at 8, 11; Satellite Broadcasting and Communications Association (SBCA) Reply Comments at 2.

[134] *See* Alaska Broadcasters Association and the State Emergency Communications Committee (ABA/ASECC) Comments at 1-2; Developers Comments at 3; Entergy Comments at 2-3; Estlack Comments at 4; Newell Comments at 4; SBE Comments at 20-21; Timm Comments at 7.

noted above, both XM and Sirius have stated that, once received, they are currently capable of transmitting national EAS messages on every channel.[135] Moreover, we leave it to the SDARS licensees to design their distribution systems to comply with the EAS rules, as we share the concern of commenters that detailed EAS requirements would limit innovation in the area of developing new ways to provide EAS alerts.[136]

45. In addition, like broadcasters and cable providers, SDARS licensees will not be obligated to transmit state and local alerts. We note, as mentioned above, that SDARS licensees are currently providing some channels containing regional or local traffic and weather information. Because of the nature of this programming, and the likelihood that the audience is located or interested in a particular city or region, we strongly encourage SDARS licensees to develop and implement a distribution system that includes the ability to receive relevant state and local EAS warnings and the ability to transmit those warnings on channels that provide regional and local traffic and weather information. Most emergencies originate at the state and local level and the current EAS includes an interface for state and local emergency managers that allows them to originate and relay state and local EAS messages through radio and television broadcast stations, analog cable systems and wireless cable systems. Unlike broadcast stations and cable systems, however, the SDARS licensees produce and control their programming from facilities, primarily in Washington, D.C. and New York City, that are not necessarily located in the area for which the traffic and weather is being reported and are not located such that an ENDEC unit or units could be used to receive regional or local alerts relevant to every state or local area within the SDARS licensees' service areas. Accordingly, while we strongly encourage SDARS licensees to develop and implement the ability to receive relevant state and local EAS warnings, we do not believe it is appropriate at this time to mandate that SDARS licensees have such ability.

46. We recognize that SDARS is by nature a national service, and that as a result the development of methods to ensure receipt of state and local alerts by SDARS licensees is likely to be challenging.[137] Currently, both SDARS licensees have implemented methods of monitoring regional and local alerts to provide warnings on their various regional traffic and weather channels and we commend their regional and local public safety efforts.[138] Commenters alluded to the idea of a centralized system to which state and local officials could release emergency alerts as being a feasible solution for satellite licensees to receive regional EAS alerts.[139] Alternatively, the SDARS licensees also suggested that they could explore transmitting state and local alerts if they were contacted directly by state and local

[135] *See supra* note 123.

[136] *See* CEA Comments at 8-9 ("[T]he Commission's suggestions for mandatory standards on equipment would disserve the public interest. With technology ever more rapidly changing, only marketplace forces have the agility needed for manufacturers to adjust in a timely fashion to consumer needs and technological improvements. Particularly with regards to emergency alerts, FCC standards or other edicts are likely to be outmoded soon after adoption given that the rulemaking process often is longer than the life cycles of technologies."); XM Comments at 11-12; XM Reply Comments at 4.

[137] *See* SBCA Comments at 7 ("Satellite participation in national EAS would be possible, if somewhat difficult. Satellite participation in *state and local* EAS, however, is a far more daunting proposition.") (emphasis in original); Sirius Comments at 3-4; XM Comments at 9-10.

[138] *See supra* para. 42.

[139] *See* Dr. Ward Comments at 4 (contending the primary needs to move into the digital future of warning are: (1) a national standard data format for warning information; (2) a national source of official warnings that can be relayed by industry with no liability for message content; and (3) a robust secure, multi-stranded network that can relay official inputs to all types of systems that can rebroadcast or address the warning information to those directly at risk); XM Comments at 10-11 ("To the extent that a single entity were established to collect and transmit all state and local EAS alerts . . . XM could explore providing state and local EAS alerts for" regions not covered by its 21 metropolitan area traffic and weather channels).

emergency authorities.[140] We will allow SDARS licensees that choose to implement the ability to receive state and local EAS warnings to develop the methods by which they can receive state and local EAS messages.

47. The dissemination of state and local emergency messages by SDARS based on the listener's location is likely to be challenging as well. Unlike a national EAS message, transmission of a state or local emergency message to appropriate receivers is complicated by the fact that SDARS cannot and does not currently transmit content regionally.[141] Thus, transmission of local emergency information on all channels, which would reach all affected listeners, would also reach – and inconvenience – millions of unaffected listeners nationwide as well. If listeners are deluged with too many emergency messages, most of which are inapplicable to them, then emergency messages may well lose their impact. For this reason, we encourage SDARS licensees that choose to implement the ability to receive and transmit state and local EAS warnings to develop additional ways of distributing EAS messages to the appropriate listeners, regardless of the channel they are listening to. We note that both SDARS licensees suggested distributing state and local EAS messages over their existing traffic and weather channels,[142] and as indicated above, both currently provide some emergency information and alerts to subscribers over these regional content channels.[143] Finally, we require SDARS licensees to inform their customers of the channels that will and will not supply state and local EAS messages. This information should be provided on the SDARS licensee's website and also distributed in writing to customers at least annually.

48. To alert listeners to an emergency announcement that may interest them, Sirius also suggested exploring the possibility of pre-empting the text box that normally contains the channel name and current programming, to announce the state or region and type of alert, and the channel number

[140] *See* Sirius Comments at 5, n.13; XM Comments at 10-11.

[141] *See*, *e.g.*, SBCA Comments at 8; Sirius Comments at 3 ("Sirius cannot and does not broadcast programming on a local or regional basis…"); XM Comments at 10 (stating that with its extensive coverage area, satellite radio is fundamentally different than locally-based multichannel programming providers because the subscribers for these providers are all located in the vicinity of the emergency); SBCA Reply Comments at 3-4. Both current SDARS licensees implement a localized system of terrestrial repeaters, but XM and Sirius agree that it is infeasible to use those repeaters to transmit EAS alerts for both regulatory and technological reasons. *See Sirius STA Order*, 16 FCC Rcd at 16777, para. 11 (special temporary authority restricts the use of repeaters to the simultaneous retransmission of programming, in its entirety, transmitted by the satellite directly to SDARS subscriber's receivers). Sirius contends that it would need regulatory relief before it could use its terrestrial repeaters locally or regionally to preempt programming and deliver local or regional EAS alerts. Even if such regulatory relief were granted, Sirius contends it would have to deploy additional equipment in order to be able to use terrestrial repeaters to originate EAS alerts since Sirius' terrestrial repeaters are not technologically equipped to originate programming. Moreover, Sirius states that, because terrestrial repeaters are meant to address coverage gaps, Sirius' terrestrial repeater network does not cover the entire nation. Sirius Comments at 3. *See also* XM Comments at 2 (citing Commission temporary authority order granting XM use of terrestrial repeaters for the exclusive purpose of simultaneously retransmitting the programming delivered via XM's satellites); XM Reply Comments at 3 (agreeing with Sirius that use of terrestrial repeaters to transmit EAS alerts is infeasible for both regulatory and technological reasons).

[142] *See* Sirius Comments at 4 (Sirius proposes to distribute local and regional EAS messages by "pre-empt[ing] the relevant channel(s) normally used for local traffic and weather to transmit the authorized emergency information."); XM Comments at 9 (XM suggests "transmitting state and local EAS alerts to its subscribers on the Instant Traffic & Weather channel appropriate for the region in which the emergency occurs."); *see also* SBCA Reply Comments at 3 (SBC argues that the dissemination of state and local EAS warnings on satellite radio should be limited to the distribution on the traffic and weather channels of each provider).

[143] XM Comments at n. 6 ("XM currently provides Instant Traffic & Weather channels for the following cities and their surrounding areas: Atlanta, GA; Baltimore, MD; Boston, MA; Chicago, IL; Dallas/Ft. Worth, TX; Detroit, MI; Houston, TX; Los Angeles, CA; Miami/Ft. Lauderdale, FL; Minneapolis/St. Paul, MN; New York, NY; Orlando, FL; Philadelphia, PA; Phoenix, AZ; Pittsburgh, PA; San Diego, CA; San Francisco Bay Area, CA; Seattle, WA; St. Louis, MO; Tampa, FL; Washington, DC."). Sirius has similar traffic and weather channels for 20 markets/regions. *See* Sirius Comments at 3.

transmitting detailed information.[144] We strongly encourage such developments, and the use of the SDARS and DAB text box to display entire EAS messages, which we hope to see included in any next generation public alert and warning system.

F. Direct-to-Home Satellite Services

49. Background. Pursuant to section 303(v) of the Act, the Commission has jurisdiction to regulate direct-to-home (DTH) satellite services.[145] DTH satellite services include DBS[146] and Home Satellite Dish (HSD) services.[147] Under our current Part 11 rules, DBS providers and HSD providers are not required to participate in EAS, but may participate on a voluntary basis.[148] The Commission has encouraged such participation.[149] For purposes of this Order, DBS providers include the entities set forth in section 25.701(a) of our rules.[150] Accordingly, DBS providers include: (1) entities licensed to operate satellites in the 12.2 to 12.7 GHz DBS frequency bands; (2) entities licensed to operate satellites in the Ku band fixed satellite service (FSS) and that sell or lease capacity to a video programming distributor that offers service directly to consumers providing a sufficient number of channels so that four percent of the total applicable programming channels yields a set aside of at least one channel of non commercial programming pursuant to section 25.701(e) of the Commission's rules, or (3) non U.S. licensed satellite operators in the Ku band that offer video programming directly to consumers in the United States pursuant to an earth station license issued under part 25 of this title and that offer a sufficient number of channels to consumers so that four percent of the total applicable programming channels yields a set aside of one channel of non commercial programming pursuant to section 25.701(e) of the Commission's

[144] *See* Sirius Comments at 4.

[145] 47 U.S.C. § 303(v) ("Except as otherwise provided in this Act, the Commission from time to time, as public convenience, interest, or necessity requires shall… [h]ave exclusive jurisdiction to regulate the provision of DTH satellite services. As used in this subsection, the term 'direct-to-home satellite services' means the distribution or broadcasting of programming or services by satellite directly to the subscriber's premises without the use of ground receiving or distribution equipment, except at the subscriber's premises or in the uplink process to the satellite.").

[146] 47 C.F.R. § 25.201 (defining DBS service as "[a] radiocommunication service in which signals transmitted or retransmitted by space stations, using frequencies specified in § 25.202(a)(7), are intended for direct reception by the general public. For the purposes of this definition, the term direct reception shall encompass both individual reception and community reception.). *See also* 47 C.F.R. §§ 25.148 (Licensing provisions for the DBS Service), 25.202(a)(7) (listing frequencies available for use by the DBS service). Sections 25.148(f) and 25.215 of the Commission's rules address technical requirements for the DBS service and its space stations, respectively. *See* 47 C.F.R. §§ 25.148(f), 25.215.

[147] Our rules do not define HSD. The HSD service uses Fixed-Satellite Service (FSS) space stations, while the DBS service uses both DBS and FSS space stations. *See* 47 C.F.R. § 25.201 (defining fixed satellite services as a radiocommunication service between earth stations at given positions, when one or more satellites are used; the given position may be a specified fixed point or any fixed point within specified areas; in some cases this service includes satellite-to-satellite links, which may also be operated in the inter-satellite service; the fixed-satellite service may also include feeder links of other space radiocommunication services). *See infra* note 190 for more information regarding HSD.

[148] 47 C.F.R. §§ 11.11(e) ("Organizations using other communications systems or technologies such as, Direct Broadcast Satellite (DBS)…may join the EAS on a voluntary basis by contacting the FCC. Organizations that choose to voluntarily participate must comply with the requirements of this part."), 11.43 ("Entities that wish to voluntarily participate in the national level EAS may submit a written request to the Director, Office of Homeland Security, Enforcement Bureau."), 11.47(b) ("Other technologies and public service providers, such as DBS…that wish to participate in the EAS may contact the FCC's Office of Homeland Security, Enforcement Bureau, or their State Emergency Communications Committee for information and guidance.").

[149] *See generally First Report and Order*, 10 FCC Rcd 1786.

[150] 47 C.F.R. § 25.701(a).

rules.[151] This definition ensures that the EAS rules apply to the vast majority of existing DTH satellite services, particularly those for which viewers may have expectations as to available warnings based on experience with broadcast television services. The use of this definition will make the EAS obligations applicable to DTH-FSS licensees, including those who provide capacity to video programming distributors.[152]

50. HSD providers originally supplied satellite television; however, today, DBS providers serve most satellite television consumers.[153] Over the past 5 years, the number of DBS subscribers has steadily increased from almost 13 million in June 2000 to over 27 million in June 2005.[154] During the same time period, the number of HSD subscribers has steadily decreased from almost 1.5 million to fewer than 150,000.[155] DTH satellite service provides multi-channel video programming and now reaches almost 25% of U.S. households with a television.[156] DTH satellite providers receive programming from national programmers, such as HBO, ESPN, and CNN, and from local channels, such as the broadcast affiliates in a particular area, and then transmit these programs to customers' receivers. Because of this pass-through system, a satellite television customer receives EAS messages only if he receives the local broadcast stations as part of his programming package, and those stations carry the EAS message.

51. In the *EAS NPRM*, the Commission sought comment on: (1) whether we should adopt rules extending EAS obligations to DBS (2) whether it serves the public interest to continue to exempt such satellite services that reach increasingly larger numbers of Americans from any requirement to provide public warning; and (3) what burdens extending the EAS obligations would place on such services and whether the benefits outweigh the burdens.[157]

52. We also sought comment on technical issues involved with requiring DBS providers to

[151] *Id.*

[152] Under this approach, however, the DTH-FSS licensee will have the ability to delegate its responsibilities to such video programming distributors. Thus, compliance with EAS requirements may be established based upon a certification from a distributor that expressly states that the distributor has complied with the EAS obligations. Because we believe that it is appropriate for a DTH-FSS licensee to rely on the accuracy of certifications by program distributors offering DTH-FSS service, licensees will not be required to verify compliance by distributors unless there is evidence that the distributor has not met its obligation. If a satellite licensee has reason to believe that its customer-program distributor is not complying with these rules or has falsely certified compliance, the licensee should report the situation to the Commission for appropriate action. We believe that under this scheme, placing the ultimate compliance responsibility on the satellite licensees is not unduly burdensome, as certification requirements can be included in satellite carriage and leasing contracts. For reasons articulated in connection with use of a similar approach for DBS public interest obligations, we believe this approach will ensure implementation of EAS obligations without proving unduly burdensome. *Cf. Implementation of Section 25 of the Cable Television Consumer Protection and Competition Act of 1992, Direct Broadcast Satellite Public Interest Obligations*, Report and Order, MM Docket 93-25, 13 FCC Rcd 23254, 23264, para. 25 (1998), *reconsideration granted in part, denied in part*, 19 FCC Rcd 5647, 5650-54 (2004) (adopting a certification process for this purpose). We also note that some DBS providers are beginning to use the Ka band FSS to transmit video programming directly to consumers. Few consumers currently receive Ka band transmissions and most of the programming through Ka band FSS involves "local-into-local" broadcast television stations that are already required to participate in the EAS. Thus, we do not see any need to expand the definition of DBS provider to include the Ka band at this time. However, if it appears in the future that the Ka band is being used by DBS operators for programming other than local broadcast television signals, we will revisit this decision.

[153] Currently, DIRECTV, Inc. and DISH Network, a division of EchoStar Satellite, L.L.C., are two of the major providers of satellite television.

[154] *See infra* Appendix C.

[155] *Id*.

[156] *Id*.

[157] *EAS NPRM*, 19 FCC Rcd at 15786, para. 29.

comply with our EAS rules. For example, we asked how an EAS signal would be fed to a DBS operator, noting that, while it could be sent over fiber to their Local Receive Facility (LRF) where they offer local-into-local service,[158] they would not have an LRF where they do not provide local-into-local service.[159] Further, we noted that if an EAS alert needed to be sent to an area on the border of a Designated Market Area (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.[160] We also sought comment on how DBS operators would conduct testing.[161] Finally, to the extent that software updates are needed in set top boxes and legacy boxes that have already been deployed, we sought comment on what an appropriate implementation time frame would be.[162]

53. Discussion. In order to ensure that DBS subscribers receive an EAS message from the President in the event of a national emergency, we modify our EAS rules to require DBS providers to participate in national EAS activations by discontinuing regular programming and providing the national EAS message to viewers of all channels.[163] Accordingly, DBS providers will be required to comply with our Part 11 EAS rules. DBS providers must install equipment capable of encoding and decoding the EAS protocol and generating and detecting all EAS codes.[164] DBS providers may install this equipment at the location most convenient to their system designs. In addition to ensuring that EAS equipment complies with our rules, providers must also monitor two EAS sources upon receipt of an emergency action notification and ensure that their EAS monitoring equipment is operational.[165] Finally, as explained in more detail below, we will require DBS licensees to test their ability to receive and distribute EAS messages.[166]

54. Although DBS providers note that mandatory participation in EAS activations would be costly and technologically difficult,[167] SBCA asserts that DBS operators could participate in national EAS activations in some way if they are given sufficient development time to address technical and operational difficulties and invest in new hardware and software.[168] DIRECTV states that it could develop the systems and procedure necessary to deliver national EAS messages to its subscribers and that it is

[158] A satellite carrier provides "local-into-local" satellite service when it retransmits a local television signal back into the local market of that television station for reception by subscribers. *See* 47 C.F.R. § 76.66(a)(6).

[159] *EAS NPRM*, 19 FCC Rcd at 15786, para. 29.

[160] *Id*.

[161] *Id*.

[162] *Id*.

[163] *See infra* Appendix B, 47 C.F.R. §§ 11.11(a), 11.51(j), 11.54(b)(2).

[164] DTH satellite service providers must ensure that their EAS equipment is fully compliant with Part 11, including sections dealing specifically with EAS equipment. *See infra* Appendix B, 47 C.F.R. §§ 11.31(c)-(f), 11.33(a)(4), 11.34(e), 11.35(a)-(c).

[165] *See infra* Appendix B, 47 C.F.R. §§ 11.35(a), 11.54(b)(1).

[166] *See infra* Appendix B, 47 C.F.R. § 11.61(a).

[167] *See generally* SBCA Comments (objecting to national, state, and local participation); EchoStar Satellite, LLC (EchoStar) Reply Comments (objecting to mandatory state and local participation); *DIRECTV Ex Parte Comments* at 2 (filed October 20, 2005) (stating that achieving the ability to deliver national EAS messages would require a substantial investment of time and money and noting that any obligation to carry EAS messages on a state or local basis would be highly problematic, assuming the technological and managerial challenges could actually be overcome).

[168] *See* SBCA Comments at 3, 4 (stating that "DBS operators could, with sufficient lead time, participate in the national EAS system, although in a manner that would look very different than the EAS message formats currently prescribed for cable operators and broadcasters. But that such participation would entail technical and operational difficulties – including potential interference with more useful local broadcast EAS information.").

prepared to commit the assets necessary to do so.[169] We conclude that extending national level EAS requirements to DBS providers serves the public interest by ensuring that the significant portion of the American public that are DBS subscribers have access to this critical emergency information. We believe that the public safety benefit that would result from imposing a public alert and warning obligation on DBS providers far outweighs the burdens to such providers from implementing these new requirements. The majority of commenters agree that EAS requirements should be extended to include DBS services.[170] We strongly disagree with those few commenters that stated that requiring DBS providers to deliver EAS alerts would provide no more than a marginal benefit over the status quo.[171] Of all the services discussed in this order, DBS has by far the largest share of customers. There are currently more than 27 million DBS subscribers and that number continues to increase.[172] We applaud the innovative service that DBS providers deliver to their customers, but note that it is essential that these customers have access to the same type of emergency information that they have come to expect from traditional media sources. The Presidential EAS message must be accessible to all television viewers, regardless of the distribution medium.[173]

55. Although participation in state and local EAS activations remains voluntary, we will require DBS providers to pass through all EAS messages aired on local channels to subscribers receiving those channels.[174] Therefore, subscribers viewing local channels through DBS services will receive all EAS messages transmitted over those local channels.[175] Additionally, we conclude that DBS providers

[169] *See DIRECTV Ex Parte Comments* at 2-3.

[170] ABA/ASECC Comments at 2; Charter Communications, Inc. (Charter) Comments at 10; Dan Rau (Rau) Comments at 11; Douglas S. Simar (Simar) Comments at 2; Developers Comments at 8-9; Entergy Comments at 2-3; Municipalities and Municipal Organizations (Municipalities) Comments at 2; NAB/MSTV Comments at 16-17; Newell Comments at 4; North Carolina State Emergency Communications Committee (NC SECC) Comments at 5; Ohio EMA Comments at 3; SBE Comments at 19-20; Timm Comments at 4, 6.

[171] *See* SBCA Comments at 2, 5; EchoStar Reply Comments at 4.

[172] *See infra* Appendix C.

[173] As noted above (*see supra*, Section III.C), Congress explained, in legislative history enacting section 624(g) of the Cable Act, ". . . [t]he Committee believes that emergency information should be accessible to all television viewers, regardless of the distribution medium in use. The Committee believes that it is appropriate for cable operators to participate in EBS because cable television has become the predominant model of distribution of video programming for American households." H.R. Rep. No. 102-628-, H.R. Rep. No. 628, 102d Cong., 2d Sess. 1992, at 110. Since the Cable Act of 1992, DTH satellite service has joined cable to become one of the predominant methods of distribution of video programming to American households.

[174] *See infra* Appendix B, 47 C.F.R. § 11.55(a)(1).

[175] Section 338 of the Act requires satellite carriers to carry, upon request, all local television broadcast stations' signals in local markets in which the satellite carrier carries at least one local television broadcast signal pursuant to the statutory copyright license. *See* 47 U.S.C. § 338. Section 338 was adopted as part of the Satellite Home Viewer Improvement Act of 1999 (SHVIA). Pub. L. No. 106-113, 113 Stat. 1501, 1501A-526 to 1501A-545 (Nov. 29, 1999). Under the Commission's broadcast signal carriage rules, each satellite carrier providing local-into-local service pursuant to the statutory copyright license is generally obligated to carry any qualified local television station in the particular designated market area (DMA) that has made a timely election for mandatory carriage, unless the station's programming is duplicative of the programming of another station carried by the carrier in the DMA. *See* 47 C.F.R. § 76.66; *see also Implementation of Section 207 of The Satellite Home Viewer Extension And Reauthorization Act Of 2004, Reciprocal Bargaining Obligation*, MB Docket No. 05-89, FCC 05-119 (rel. Jun. 7, 2005); *Implementation of Section 207 of The Satellite Home Viewer Improvement Act Of 1999*, *Broadcast Signal Carriage Issues, Retransmission Consent Issues*, 16 FCC Rcd 1918, 1934 (2000) (*DBS Mandatory Carriage Report and Order*) (adopting satellite carriage rules), *recon*., 16 FCC Rcd 16544 (2001) (*DBS Mandatory Carriage Reconsideration Order*) (affirming and clarifying satellite carriage rules). A DMA is a geographic area that describes each television market exclusive of others, based on measured viewing patterns. *See* 17 U.S.C. § 122(j)(2)(A)-(C).

must be capable of receiving (from state and local emergency managers) and distributing state and local EAS messages or they must disclose their inability to do on their website and in writing to their customers at least annually.[176] As noted above, most emergencies originate at the state and local level and the current EAS system includes an interface for state and local emergency managers, providing a way to access the system and originate and relay EAS messages. We encourage DBS licensees to design their systems to include this capability and, specifically, to design their converter boxes to be capable of receiving the appropriate regional, state and local EAS messages. Any future Public Alert and Warning System will likely include EAS and may require DBS licensees to increase participation in regional, state and local EAS activations.

56. We acknowledge the concern that DBS providers have expressed regarding technical and operational difficulties they expect to encounter if they are required to provide national, state and local EAS messages.[177] We acknowledge that there are technical issues that will need to be resolved in order for DBS licensees to make the necessary changes to their systems.[178] We wish to give maximum flexibility to DBS providers. Accordingly, we will permit DBS providers to determine the method they will use to distribute EAS messages to viewers, as long as all viewers receive national EAS messages regardless of the channel that they are watching.[179] We agree with SBCA that, with respect to broadcast television channels carried for local markets, DBS providers can simply pass that channel through with the embedded national, state or local EAS message.[180] Because of the complexity associated with ensuring that national alert messages will be transmitted on all channels that do not originate at local broadcast stations, we are providing DBS providers more time to comply with these rules. DBS providers will need to modify their satellite uplink facilities at multiple locations. DBS providers will also need to develop and implement technologies within each of several dozen different satellite transponder data streams. DIRECTV estimates that such efforts will likely require approximately 18 months to implement fully.[181] Accordingly, these rules will take effect May 31, 2007.[182] We encourage DBS providers that have the capability to participate in EAS activations to do so as soon as possible.

57. We will require DBS licensees to test their ability to receive and distribute EAS messages in a manner similar to that required of other EAS participants in section 11.61 of our rules and to keep records of all tests.[183] DBS licensees should monitor a state or local primary source to participate in testing. The majority of commenters agree that DBS providers should conduct testing.[184] We recognize that requiring a DBS provider to conduct its weekly and monthly test on all channels simultaneously may

[176] *See infra* Appendix B, 47 C.F.R. § 11.55(a)(2).

[177] *See* SBCA Comments at 3, EchoStar Reply Comments at 2-4, *DIRECTV Ex Parte Comments* at 2.

[178] *See* Ohio EMA Comments at 3 (urging the Commission to allow ample time for the migration of new set-top technology and to propose an interim solution to providers until upgrades can be accomplished).

[179] *See infra* Appendix B, 47 C.F.R. § 11.51(j)(3).

[180] SBCA Comments at 5 (noting that DBS providers pass through all EAS information as part of their local-into-local retransmissions and stating that, therefore, the Commission could limit DBS participation in EAS activations to dissemination of alerts on nationally distributed channels such as ESPN or HGTV).

[181] *See DIRECTV Ex Parte Comments* at 2. DIRECTV makes this estimate "assuming, of course, that a companion system is devised to deliver the national EAS message to DBS operators." As noted above, DBS providers must locate equipment capable of encoding and decoding the EAS protocol and generating and detecting all EAS codes and must also monitor two EAS sources.

[182] *See infra* Appendix B, 47 C.F.R. § 11.11(a).

[183] *See infra* Appendix B, 47 C.F.R. § 11.61.

[184] *See* Ohio EMA Comments at 3, 5 (asserting that DBS providers should be required to participate in EAS and that all EAS participants should be subject to the same testing requirements at the national, state, and local levels); SBE Comments at 20 (asserting that DBS providers should conduct national testing on a periodic basis).

pose problems. Accordingly, we will require that DBS providers conduct EAS tests each month on at least 10% of the total channels they provide.[185] For purposes of this calculation, the total number of channels should not include those channels that the DBS provider passes through with the embedded national, state or local EAS message.[186] The channels tested should vary each month, and over the course of a year all channels should be tested.[187] DBS providers must log receipt of weekly tests in their records.[188] Requiring that only 10% of channels be tested each month and that weekly tests must only be logged in records should reduce the burdens associated with EAS testing for DBS providers. Any remaining burdens are outweighed by the public interest benefits of testing which ensures that DBS providers are able to receive and transmit EAS messages. These testing requirements are no more onerous to DBS providers than those required of any other EAS participant. Due to the potential technical difficulties and costs associated with transmission of weekly tests, in the attached Further Notice of Proposed Rulemaking, we seek comment regarding weekly test transmission requirements for DBS providers.

58. Although we encourage participation by HSD providers, we will not require their participation in EAS, because: (1) there were only approximately 145,000 HSD users in June 2005 and that number continues to decrease[189] and (2) as HSD users receive programming directly from programmers, it would be very burdensome for HSD providers to distribute EAS messages to subscribers.[190]

G. Administrative Matters

59. The Commission receives numerous questions about and requests for clarification and corrections of our EAS rules. We find that several minor administrative changes to our EAS rules are in order. Accordingly, we amend our EAS rules to delete all reference to the "FCC EAS mailing list" which we no longer maintain.[191] EAS information may now be obtained from our web site. www.fcc.gov/eb/eas. and from the general FCC information number 1888-CALLFCC. Further, we amend section 11.41 to change "Operating Handbook" to "EAS Operating Handbook."[192] In section 11.52(b) of our rules, we change the reference to 11.51(j)(2) to 11.51(m)(2).[193] Section 11.53(c) provides that, prior to commencing operations, broadcast stations must determine whether the EAS has been

[185] *See infra* Appendix B, 47 C.F.R. § 11.61(a)(1)(ii).

[186] *Id*.

[187] *Id*.

[188] *See infra* Appendix B, 47 C.F.R. § 11.61(a)(2)(ii).

[189] *See infra* Appendix C.

[190] Satellite television signals receivable by HSD receivers include both non-encrypted, free-to-air signals, and encrypted signals that require a receiver with an authorized decryption device to receive them. Many HSD antennas are capable of being pointed to all of the satellites that are above the horizon at the user's location. These satellites are operated by a number of FCC space station licensees that sell or lease satellite transponders to the various programmers providing the signals. The free-to-air program providers include such national providers as Bloomberg TV, C-SPAN, Fox News Channel, CNBC, NASA TV, and Voice of America. These national providers are not necessarily FCC licensees, as they may obtain satellite uplink facility services and transponder services from other entities. Other free-to-air providers include a number of local broadcast stations that will transmit the national EAS message and the regional and local EAS messages for their area. The free-to-air providers have no way of knowing the locations of all of the HSD viewers that may be watching their programming at any given time, and therefore could not be expected to transmit regional and local messages appropriate to all of their viewers.

[191] Section 11.41 is amended by deleting the last sentence "They should contact the FCC to ensure that they are on the FCC EAS mailing list." We no longer maintain a mailing list.

[192] *See infra* Appendix B, 47 C.F.R. § 11.41(c).

[193] *See infra* Appendix B, 47 C.F.R. § 11.52(b).

activated by monitoring the assigned EAS sources.[194] In order to clarify how EAS monitoring assignments are determined, we amend this section to add the following to the end of section 11.53(c): "as specified in their State or Local plan."[195] Finally, because section 76.305 no longer exists, the reference to that section in 11.54(b)(13) is changed to the correct reference: section 76.1711.[196]

H. Conclusion

60. We expand the reach of EAS, as currently constituted, to ensure that more Americans are able to receive national and/or regional public alerts and warnings. Digital technologies are rapidly becoming the norm for communications technologies and public alert and warning must keep pace with this digital revolution. Government and industry are engaged in the early stages of efforts to develop a fully integrated, state of the art, digitally-based public alert and warning system for the American public. Increasingly popular digital technologies must have the ability to deliver some level of basic national or regional warning now, during the time that more sophisticated alert and warning systems are being developed. Further, we amend our EAS rules to ensure that persons with disabilities have equal access to public warnings.

IV. FURTHER NOTICE OF PROPOSED RULEMAKING

61. In the *Order* we adopt today, we realize the immediate objective of ensuring that the large and growing segments of the population who rely on digital radio and television technologies are not left without access to alerts in the event of an emergency. While the current EAS performs a critical function, we believe it could be improved. In this *Further Notice of Proposed Rulemaking (FNPRM)*, we seek specific comments on what actions the Commission should take to help expedite the development of a more comprehensive system.

62. An accurate, wide-reaching public alert and warning system is critical to the public safety and a vital part of the Commission's core mission to promote the safety of life and property through a robust communications system. We should have a system that enables officials at the national, state and local levels to reach affected citizens in the most effective and efficient manner possible. It should have built-in redundancy features and use a variety of communications media so that officials can reach large numbers of people simultaneously.

63. Today's order is our first step to ensure that digital media is capable of receiving and disseminating EAS messages. We note that, in response to the *EAS NPRM*, commenters identified a number of approaches to digital alert and warning. We seek further comment on these approaches and ask what the Commission can do to facilitate the development of a more effective, comprehensive digital public alert and warning system. Specifically, what is the appropriate role for the Commission among the various government and industry entities that are involved in the creation of this system? We also seek comment on the Commission's statutory authority to regulate such a system. If a new system is adopted, should compliance be mandatory or voluntary? Should different communications technology – radio, television, wireline, wireless – be treated differently?

64. As noted in the *Order* that accompanies this *FNRPM,* government and industry have taken significant steps to develop a next-generation alert and warning system. Digital media have the potential to deliver a wholly new level of alert and warning capabilities, far beyond the capabilities of today's EAS. Text crawls and audio feeds can be replaced with full audio and video alert, information such as evacuation routes can be embedded in messages to the public, messages can be targeted to specialized audiences such as first responders and health care providers, and coordinated warnings can be sent over multiple platforms simultaneously.

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[194] *See* 47 C.F.R. § 11.53(c).

[195] *See infra* Appendix B, 47 C.F.R. § 11.53(c).

[196] *See infra* Appendix B, 47 C.F.R. § 11.54(b)(13); *see also* 47 C.F.R. § 76.1711.

65. The comments filed in response to the *EAS NPRM* reveal a multitude of technical approaches to a digital alert and warning system, from specific approaches to individual technologies to broad approaches to architecture and protocol design. Below we include a representative sample of issues for parties to address. The issues we include are representative, and do not constitute an exclusive list. Parties can – and should – comment on any next generation issues. In their comments, parties should consider what role the Commission should play in facilitating choice among these options. Are some more workable than others? Are some unworkable, either intrinsically or because they would not fit well in a system that must accommodate multiple communications platforms?

66. *System architecture/message distribution.* Some commenters argue that the current distribution system is flawed, and that EAS messages should be distributed directly to media outlets.[197] We seek comment on this assertion. Would such point-to-multi-point distribution deliver alerts more quickly to the public? Would it do so more efficiently? Many commenters, such as WTOP/WXTR, propose that a satellite-based system be used.[198] Would such a system be effective? Should it be deployed in addition to[199] or instead of the current system? APTS proposes that the PBS satellite system offers a model for distribution of national or state and local alerts.[200] We seek comment on the APTS proposal. We note that the PBS satellite system is an integral part of FEMA's Digital Emergency Alert System (DEAS) National Capital Region Pilot, and we expect to incorporate the results of that pilot into our record. We also seek comment on other distribution models. For example, given its inherent robustness, we believe the Internet should serve an important role in distribution of alerts and warnings.

67. *Common protocols*. The National Center for Missing & Exploited Children (NCMEC) argues that emergency alerts should flow rapidly and simultaneously through all available information conduits to first responders and the public.[201] Should such a ubiquitous distribution be a goal of a digitally-based alert system? Most commenters agree that in order for a digitally-based alert and warning system to be distributed simultaneously over multiple platforms, a common messaging protocol must be adopted.[202] We seek comment on this assertion. SWN Communications, Inc. contends that the Common Alerting Protocol (CAP), endorsed by the PPW and many public and private organizations responsible for alerts, offers the most practical means of quickly creating an effective interface between the emergency manager and multiple emergency alert and notification systems to significantly improve national alert and warning capability.[203] Should CAP be adopted as the common messaging protocol for any future digitally-based alert system? Should we require the adoption of CAP for EAS alerts? If CAP were to be adopted, would it allow simultaneous distribution to radio, television, and wireless media such as mobile telephones and PDAs? How would CAP be used to ensure uniformity of alerts across such multiple platforms? For example, if the White House were to issue a national message how would CAP accommodate an audio message with a shorter, text-based message appropriate for a PDA screen?

68. *Issues specific to particular technologies*. We also seek comment on issues in the

[197] *See e.g.*, Liberty Comments at 1.

[198] WTOP/WXTR Comments at 9-10.

[199] *See e.g.*, Cox Comments at 2-3 (current EAS infrastructure is a product of years of development and provides an excellent framework for transmitting EAS alerts to the pubic. The current system should be improved while taking advantage of technological advances).

[200] Association of Public Television Stations (APTS) Comments at 5-6.

[201] National Center for Missing & Exploited Children (NCMEC) Comments at 11.

[202] LogicaCMG plc (LogicaCMG) Comments at 15; NAB/MSTV Comments at 15-16; National Association of State Chief Information Officers (NASCIO) Comments at 3-4; RERC Comments at 9; SWN Communications, Inc. (SWN) Comments at 2; Timm Comments at 7; Trilithic, Inc. (Trilithic) Comments at 4; Cellular Emergency Alert Systems Association (CEASA) Reply Comments at 3-4.

[203] SWN Comments at 2.

comments that relate to specific technologies. For example, we seek comment on assertions by Echostar, Sirius and XM that DTH and SDARS providers should not be required to deliver state and local messages.[204] As we note in today's *Order,* because most EAS alerts are local, the ability to deliver a state or local message is an essential element of an effective alert and warning system. We seek comment on how technologies like DTH and SDARS, which are designed to receive and deliver national programming, could deliver local alerts. For example, should DTH providers design the capability into their transmission systems and their next generation digital set top boxes to deliver state and local EAS alerts to only the appropriate state and local audiences? We also seek comment on technical solutions that would allow SDARS providers to efficiently deliver state and local alerts and ask whether we should require all digital radio services (whether SDARS or DAB) to broadcast warnings over the digital displays on receivers. Finally, we seek comment on whether the Commission should adopt weekly test transmission requirements for DBS providers and, if so, what those requirements should be.

69. Wireless products are becoming an equal to television and radio as an avenue to reach the American public quickly and efficiently. We note the participation of the wireless industry in FEMA's current IPAWS pilot projects, which are discussed below. What further steps should the Commission take to facilitate wireless provision of alert and warning? Should the Commission require wireless carriers to provide alerts and warnings? We note that many commenters in the underlying proceeding have advocated a point-to-multi-point, or cell broadcast approach to wireless alert and warning.[205] In addition, commenters have identified technologies that enable wireless handsets to receive EAS alerts.[206] We seek comment on these and other approaches to wireless alert and warning. Parties should address whether each approach permits use of a common messaging protocol. Finally, we seek comment on whether each approach would require customers to return and replace their current handsets and, if so, whether any financial impact of handset return would offset the public benefit of providing wireless alert and warning? Parties should address economic as well as technical issues in their comments.

70. Finally, traditional telephone companies recently have indicated that they plan to compete with cable television service providers and DTV broadcasters in bringing high definition digital content to customers' homes through fiber optic connections.[207] Under these circumstances, should telephone companies have public alert and warning responsibilities similar to those of the other news and entertainment providers covered in this docket? Are there particular attributes of wireline technology that would make it easier to deliver alert and warning to the public? Are there attributes that do not lend themselves to the provision of alert and warning? Are there policy considerations the Commission should consider regarding requiring telephone companies that provide content also to provide alert and warning?

71. *Government Efforts To Develop Digital Warning System.* The Congressional Research Service (CRS) published a report titled, "Emergency Communications: The Emergency Alert System (EAS) and All-Hazard Warnings."[208] In the report, CRS noted many of the same government efforts to develop a digital warning system as discussed in the *EAS NPRM,* about which comments were filed in the record. Specifically, CRS discussed the ongoing pilot projects of FEMA, the Information Analysis and Infrastructure Protection directorate at DHS, and the Association of Public Television Stations (APTS) to develop an Integrated Public Alert and Warning System (IPAWS). CRS notes the project's current

[204] Sirius Comments at 3; XM Comments at 12; Echostar Reply Comments at 1-4.

[205] *See, e.g.,* LogicaCMG Comments at 2, 7-8.

[206] *See, e.g.,* Cellular Telecommunications & Internet Association (CTIA) Comments at 5, 8.

[207] *See* Verizon News Release*, Verizon FiOS TV Will Offer a New Customer Experience, Seidenberg Says* (April 18, 2005).

[208] Linda K. Moore and Shawn Reese, *Emergency Communications: The Emergency Alert System (EAS) and All-Hazard Warnings*, Congressional Research Service, The Library of Congress, CRS Report for Congress, at CRS-9-12 (updated Sept. 2, 2005), *available at* http://www.uscongress.com/section/pdf/CRSRL32527_9_11.pdf (last visited Sept. 21, 2005).

testing of digital media - including digital TV - to send emergency alert data over telephone, cable, wireless devices, broadcast media and other networks. What role should the Commission play with respect to these FEMA efforts?

72. *Performance Standards.* Will performance standards be necessary to ensure that the American public receives public alert and warning in an accurate and timely fashion? Should the Commission have a role in the development of such standards? Once developed, should the Commission have a role in the enforcement of such standards? Elements of proposed standards could be the length of time it takes to get a particular message, and the accuracy of the message. Will standards be necessary to ensure the accuracy and timeliness of messages delivered across multiple platforms? To ensure that standards are maintained, should the Commission adopt reporting obligations for providers of alert and warning? Alternatively, are current requirements, based on regular testing of equipment, sufficient? Are there other ways for the Commission to monitor implementation of its EAS rules without imposing reporting requirements? For example, could testing be monitored by third parties to ensure compliance? If the Commission adopts additional reporting requirements, what are the appropriate deadlines for such progress reports? Under what authority could the Commission take such actions?

73. *Coordination with State and Local Governments.* We recognize the historic and important role of states and localities in public safety matters, and the essential role that state and local governments play in delivering alert and warning. Recent experience also demonstrates the devastating impact that natural disasters can have on the health and safety of a substantial number of people in a particular state or region. For this reason, it may serve the public interest to give state governors the ability to utilize EAS facilities in order to disseminate potentially life-saving information under such circumstances. Accordingly, we seek comment on whether our rules should be amended to require EAS participants to transmit EAS messages issued by the governor(s) of the state(s) in which they provide service. We further ask whether, if such a requirement were adopted, we should also adopt an additional originator code for state governors in section 11.31(d) of our rules. We also seek comment on how we can best work with the states to help implement the EAS rules we adopt today as well as to develop the next generation of alert and warning systems. In particular, we note that there is a vital connection between state and local alert and warning and Federal efforts to mitigate disasters. In the *EAS NPRM*, we noted the importance of state and local EAS plans and sought comment on several issues related to these EAS plans, including whether periodic updating and review of these plans should be required and, if so, how often.[209] We now also seek comment on whether our rules should be revised to require that states notify the Commission of any changes in EAS participants' state EAS Local Area and/or EAS designation (PEP, LP1, LP2, SR, LR, etc.) within thirty days of such change. In the absence of any such change, should we require a yearly confirmation that all state EAS Local Area and EAS designations remain the same?

74. *Accessibility to Persons with Disabilities.* We also seek comment regarding how we may, consistent with the Order we adopt today, make EAS alerts more accessible to people with disabilities. The Commission is committed to ensuring that persons with disabilities have equal access to public warnings and are considered in emergency preparedness planning. In the United States, there are approximately 30.8 million adults with some level of hearing loss and approximately 19.1 million adults with vision trouble – that is 15% and 9.3% of the total U.S. adult population, respectively.[210] It is critical that we ensure that these large segments of our population have full access to EAS messages.

75. In the *EAS NPRM*, the Commission sought comment on whether there are disparities in or conflicts between the EAS rules and those contained in section 79.2 that should be reconciled or

[209] *EAS NPRM*, 19 FCC Rcd at 15784, para. 25.

[210] *Summary Health Statistics for U.S. Adults: National Health Interview Survey 2002*, U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics, *available at* http://www.cdc.gov/nchs/fastats/disable.htm.

combined and the manner in which such disparities or conflicts could be resolved in subsequent rules.[211] Currently, our Part 11 rules require EAS participants to provide all EAS warnings that they transmit in both aural and visual formats.[212] The visual EAS message transmitted by television stations, cable systems and wireless cable systems must include the elements of the EAS header code, specifically, the originator, event, location and the valid time period of the EAS message.[213] In addition, an EAS attention signal must precede the emergency message.[214]

76. Section 79.2 of our rules requires video programming distributors[215] to make the audio portion of emergency information accessible to persons with hearing disabilities using closed captioning or other methods of visual presentation.[216] Video programming distributors must also ensure that

[211] *EAS NPRM*, 19 FCC Rcd at 15790, para. 38.

[212] 47 C.F.R. §§ 11.54(b)(5)-(6), 11.55(c)(4). *See also* 47 C.F.R. § 73.1250(h) ("…[W]hen an emergency operation is being conducted under a national, State or Local Area Emergency Alert System (EAS) plan, emergency information shall be transmitted both aurally and visually unless only the EAS codes are transmitted as specified in § 11.51(b) of this chapter."). If organizations using other communications systems or technologies choose to participate in national, state, or local EAS activations, they must comply with the Commission's EAS rules, including the rules requiring that EAS warnings be provided in both aural and visual formats. *See* 47 C.F.R. § 11.11(e).

[213] 47 C.F.R. § 11.51(d), (g)(3), (h)(3); *see also* 47 C.F.R. § 11.31(c) (providing the elements of the EAS header code). The Emergency Alert System Handbooks for television broadcasters and cable systems state that these entities must visually and aurally transmit header code data.

[214] 47 C.F.R. §§ 11.31(a), 11.51(a). The modulation levels for the audio Attention Signal must comply with the aural signal requirements in Section 76.605 of the Commission's rules. 47 C.F.R. § 11.51 (g)(1), (h)(1); *see generally* 47 C.F.R. § 76.605.

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

[216] 47 C.F.R. § 79.2(b)(1)(i); *see also* 47 C.F.R. § 79.1(a)(4) (defining closed captioning as the "visual display of the audio portion of video programming"). Several proceedings have further clarified captioning and other methods of visual presentation, using examples including, but not limited to, open captioning, crawls, scrolls, maps, signs, charts, or handwritten information contained on a white board. *See Amendment of Part 73 of the Rules to Establish Requirements for Captioning of Emergency Messages on Television*, Report and Order, Docket No. 20659, 61 FCC 2d 18, paras. 9, 11, Appendix B (1976) (*1976 Order*) (visual presentations include, but are not limited to, slides containing manual methods such as hand printing or mechanical printing processes, or electronic captioning); *Closed Captioning and Video Description of Video Programming, Implementation of Section 305 of the Telecommunications Act of 1996, Video Programming Accessibility*, Report and Order, MM Docket No. 95-176, 13 FCC Rcd 3272 (1997) (*Closed Captioning Report and Order*) (adopting closed captioning rules codified in section 79.1), *recon.,* 13 FCC Rcd 19973 (1998) (*Closed Captioning Reconsideration Order*); *Closed Captioning and Video Description of Video Programming, Implementation of Section 305 of the Telecommunications Act of 1996, Accessibility of Emergency Programming*, Second Report and Order, MM Docket No. 95-176, 15 FCC Rcd 6615 (2000) (*Closed Captioning Second Report and Order*) (adopting rule codified in section 79.2 requiring emergency information be made accessible to persons with hearing disabilities). *See also Waterman Broadcasting Corp. of Florida, Inc., Licensee of WBBH-TV, Fort Myers-Naples, FL, Montclair Communications, Inc., Licensee of WZVN-TV, Fort Myers-Naples, FL,* Notice of Apparent Liability for Forfeiture, DA 05-2258, para. 4 (rel. Aug. 9, 2005); *McGraw-Hill Broadcasting Company, Inc., Licensee of KGTV, San Diego, CA*, Notice of Apparent Liability for Forfeiture, 20 FCC Rcd 3981, 3983, para. 6 (2005) (*McGraw-Hill NAL*).

emergency information provided in the video portion of a regularly scheduled newscast, or a newscast that interrupts regular programming, is accessible to persons with visual disabilities through aural description in the main audio, such as open video description.[217] Emergency information is defined as information about a current emergency that is intended to further the protection of life, health, safety, and property, *i.e.* critical details regarding the emergency and how to respond to the emergency.[218]

77. Many commenters to the *EAS NPRM* argued that one of the major shortcomings of EAS is the lack of the same specific information in the visual, text display of the EAS message as that present in the EAS audio feed generated by the source of the message.[219] SBE states that this discrepancy is because the visual portion of the EAS message is derived from the header code of the message, rather than from the audio feed.[220] We seek comment as to whether EAS television crawls lack specificity due to the "disconnect" between the generic information contained in the digital header codes and the information contained in the audio portion of the EAS message.

78. SBE argues that one solution to this problem would be the addition, by the EAS message originator, of textual information within the EAS message containing the same information as the audio message. We agree and encourage EAS message originators such as FEMA and state emergency operations centers to provide EAS messages in audio and visual format to make EAS messages fully accessible to individuals with hearing and visual disabilities. Video programming distributors could then provide detailed aural and text EAS messages merely by providing the EAS message in the format received.

79. Absent such action by EAS message originators, we seek comment on whether

[217] 47 C.F.R. § 79.2(b)(1)(ii); *see also Implementation of Video Description of Video Programming*, Report and Order, MM Docket No. 99-339, 15 FCC Rcd 15230, 15250-51, para. 50 (2000) (*Video Description Report and Order*) (extending section 79.2 to include provision that emergency information must be made accessible to persons with visual disabilities and adopting video description rules), *modified by,* Memorandum Opinion and Order on Reconsideration, 16 FCC Rcd 1251 (2001), (modifying video description rules contained in section 79.3), *vacated in part and reversed in part by*, *Motion Picture Association of America v. FCC*, 309 F.3d 796, 798-99 (D.C. Cir. 2002) (holding that the Commission's video description rules significantly implicated program content beyond the Commission's statutory authority), *rehearing and rehearing in banc denied* (D.C. Cir. 2003). Although the video description rules contained in section 79.3 have been vacated, video programming distributors are still required, under section 79.2(b)(1), to make emergency information accessible to persons with visual disabilities. *See* 47 C.F.R. § 79.2(b)(1). Section 713 of the Act defines "video description" as "the insertion of audio narrated descriptions of a television program's key visual elements into natural pauses between the program's dialogue." 47 U.S.C. § 613(g). Video programming distributors may use this definition as guidance in meeting the requirements of section 79.2(b)(1)(ii). *See* 47 C.F.R. § 79.2(b)(1)(ii). For example, if a map is displayed on the screen, the video programming distributor must provide an aural description of the geographic location encompassed by the map and any areas highlighted on the map in order to make the information accessible to persons with visual disabilities. In addition, emergency information provided in the video portion of programming that is not a regularly scheduled newscast, or a newscast that interrupts regular programming, such as a "crawl" or "scroll," must be accompanied by an aural tone to alert persons with vision disabilities that they should tune to another source, such as a radio, for more information. *See* 47 C.F.R. § 79.2(b)(1)(iii); *see also Video Description Report and Order*, 15 FCC Rcd at 15251, para. 51.

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

[219] *See* New Hampshire State Emergency Communications Committee (NH SECC) Comments at 6; Ohio EMA Comments at 4; SBE Reply Comments at 1 (arguing that there is a great disconnect between the generic information displayed on the crawl and the information contained in the audio portion of the EAS message).

[220] *See* SBE Reply Comments at 1.

individuals with hearing and vision disabilities may be subject to inconsistent aural and visual information in EAS alerts. We also seek comment on whether we should revise our EAS rules to require all video programming distributors subject to the Commission's Part 11 rules to provide the same information in both the visual and aural versions of all EAS messages, instead of only the header code information that EAS participants now provide visually or the critical details of the emergency information as required by section 79.2.[221] Should parties subject to the Commission's EAS rules be required to make an audio EAS message accessible to those with hearing disabilities by using a transcription of the audio message through the use of closed captioning or other methods of visual presentation, such as open captioning, crawls, or scrolls, that appear on the screen?[222] SBE argues that in order to provide a visual message identical to the audio feed, providers would have to transcribe the feed accurately and in real time into a character generator, something for which very few television stations and cable companies have the resources.[223] We seek comment on SBE's assertions. Should parties subject to the Commission's EAS rules be required to provide an audio feed that duplicates any text portion of an EAS alert? To the extent that an EAS message contains other visual elements, should parties subject to the Commission's EAS rules be required to describe such visual portions? Will these obligations impose different technical or financial burdens on the various media that must comply with the Commission's EAS rules?[224] Parties should discuss in detail any relevant technical or financial issues.

80. We also seek comment on how any next-generation, digitally-based alert and warning system can be developed in a manner that assures that persons with disabilities will be given equal access to alert and warning as other Americans. Further, we seek comment on how we can incorporate the Commission's existing disability access rules into the development of a more comprehensive EAS? For example, the Commission's rules set forth operational and technical standards for telecommunications relay services (TRS), a nationwide system which permits persons with hearing and speech disabilities to have access to the telephone system. Can a digitally-based alert and warning system take advantage of this system? Further, we seek comment on whether the development of such a state-of-the-art alert and warning system would affect the obligations imposed by the Commission's rules that implement section 255 of the Act, which requires telecommunications manufacturers and service providers to make their products and services accessible to people with disabilities? To what extent can revisions in the Commission's closed captioning rules be made to enhance the dissemination of emergency information? Commenters should comment on these and other issues relevant to how can we take account of those with disabilities as we develop a next generation EAS. Are there any additional steps that the Commission can take to ensure that people with disabilities are considered during the design process of such a system? For example, should the Commission adopt requirements that may be factored into the design process and, if so, what type of requirements?

81. *Multilingual EAS Messages.* Sections 11.54(b)(7) and 11.55(c)(4) of the Commission's rules provide that EAS announcements may be made in the same language as the primary language of the

[221] Video programming distributors that are EAS participants include, but are not limited to, broadcast television stations, cable systems, wireless cable systems and, as addressed in this Order, digital cable systems, DTV broadcasters and DBS providers.

[222] Closed captions are visual text displays that are hidden in the video signal. Viewers can access closed captions through their remote control or on-screen menu or through a special decoder. *See* 47 C.F.R. § 79.1(a)(4) (defining closed captioning). By contrast, access to open captions is not controlled by the viewer. Open captions are an integral part of the television picture, like subtitles in a movie. *See Closed Captioning Second Report and Order*, 15 FCC Rcd at 6618, n.19 (describing open captions). Crawls refers to text that advances very slowly across the bottom or top of the screen. Scrolls are displayed text or graphics that move up and down the screen.

[223] *Id.*

[224] We note that, as of January 1, 2006, all video programming distributors will be required to close caption 100 percent of new programming, subject to certain exceptions. *See* 47 C.F.R. §§ 79.1(b)(1), (b)(3), (d)-(f); *see also* 47 U.S.C. § 613.

station.[225] In the *EAS NPRM*, the Commission sought comment on whether current methods of providing alerts and warnings to non-English speaking persons are adequate and, if not, what additional provisions are necessary and what costs would be associated with implementing such provisions.[226] On September 22, 2005, the Independent Spanish Broadcasters Association, the Office of Communication of the United Church of Christ, Inc., and the Minority Media and Telecommunications Council filed a Petition for Immediate Relief with the Commission proposing changes to the Commission's EAS rules to require stations to air EAS messages in other languages in addition to English.[227] We seek comment on the issues raised in the petition and, for this purpose, we incorporate the petition as well as the other pleadings filed in response to the petition into the record of this proceeding.[228] For example, we seek comment on how this proposal would be implemented. We also seek comment on any other proposals regarding how to best alert non-English speakers. Until we address these issues, we encourage that multilingual emergency information be provided in areas where a significant proportion of the population has its primary fluency in languages other than English.

V. PROCEDURAL MATTERS

A. *Ex Parte* Presentations

82. This matter shall be treated as a "permit-but-disclose" proceeding in accordance with the Commission's *ex parte* rules.[229] 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.[230] Other requirements pertaining to oral and written presentations are set forth in section 1.1206(b) of the Commission's rules.

B. Comment Filing Procedures

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

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

    - For ECFS filers, if multiple docket or rulemaking numbers appear in the caption of this proceeding, filers must transmit one electronic copy of the comments for each docket or rulemaking number referenced in the caption. In completing the transmittal screen, filers

[225] 47 C.F.R. §§11.54(b)(7), 11.55(c)(4).

[226] *EAS NPRM*, 19 FCC Rcd at 15790, para. 40.

[227] Petition for Immediate Interim Relief filed by Independent Spanish Broadcasters Association, the Office of Communications of the United Church of Christ, Inc., and the Minority Media and Telecommunications Council filed September 22, 2005.

[228] *See e.g.*, Comments in Response to Petition for Immediate Interim Relief, filed by National Association of Broadcasters on October 4, 2005; Reply Comments of Consumers Union filed October 20, 2005.

[229] 47 C.F.R. §§ 1.200 *et seq*.

[230] *See* 47 C.F.R. § 1.1206(b)(2).

should include their full name, U.S. Postal Service mailing address, and the applicable docket or rulemaking number. Parties may also submit an electronic comment by Internet e-mail. To get filing instructions, filers should send an e-mail to ecfs@fcc.gov, and include the following words in the body of the message, "get form." A sample form and directions will be sent in response.

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

  Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail (although we continue to experience delays in receiving U.S. Postal Service mail). All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

  - The Commission's contractor will receive hand-delivered or messenger-delivered paper filings for the Commission's Secretary at 236 Massachusetts Avenue, NE., Suite 110, Washington, DC 20002. The filing hours at this location are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes must be disposed of before entering the building.

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

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

C. Accessible Formats

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

D. Regulatory Flexibility Analysis

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

86. As required by the Regulatory Flexibility Act of 1980, *see* 5 U.S.C. § 603, the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on small entities of the policies and rules addressed in this document. The IRFA is set forth in Appendix E. Written public comments are requested on the IRFA. These comments must be filed in accordance with the same filing deadlines as comments filed in response to this Further Notice of Proposed Rulemaking as set forth in paragraph 83, and have a separate and distinct heading designating them as responses to the IRFA.

E. Paperwork Reduction Act Analysis

87. This First Report and Order contains new and modified information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13. It will be submitted to the Office of Management and Budget (OMB) for review under Section 3507(d) of the PRA. OMB, the general public, and other Federal agencies are invited to comment on the new and modified information collection requirements contained in this proceeding. In addition, we note that pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, *see* 44 U.S.C. § 3506(c)(4), we

previously sought specific comment on how the Commission might "further reduce the information collection burden for small business concerns with fewer than 25 employees." In this present document, we have assessed the effects of expanding the reach of EAS to cover DTV, DAB, digital cable, DBS and SDARS providers, and find that this imposes minimal regulation on small entities to the extent consistent with our goal of advancing our public safety mission.

F. Congressional Review Act

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

VI. ORDERING CLAUSES

89. Accordingly, IT IS ORDERED that pursuant to sections 1, 4(i), 4(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, the Report and Order in EB Docket No. 04-296 IS ADOPTED, and that Part 11 of the Commission's Rules, 47 C.F.R. Part 11, is amended as set forth in Appendix B. The Order shall become effective 30 days after publication in the Federal Register. The rules set forth in Appendix B shall become effective for digital television broadcasters, digital audio broadcasters, digital cable systems and SDARS licensees on December 31, 2006, and for DBS providers on May 31, 2007, except that new or modified information collection requirements contained in Appendix B will not become effective prior to OMB approval.

90. IT IS FURTHER ORDERED that pursuant to sections 1, 4(i), 4(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, the Further Notice of Proposed Rulemaking in EB Docket No. 04-296 IS ADOPTED.

91. IT IS FURTHER ORDERED that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this First Report and Order and Further Notice of Proposed Rulemaking, including the Final Regulatory Flexibility Analysis and 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
LIST OF COMMENTERS

Comments in EB Docket No. 04-296

Commenters	Abbreviation
Abbott, Adrienne	Abbott
Alaska Broadcasters Association and the State Emergency Communications Committee	ABA/ASECC
Alert Systems, Inc.	Alert Systems
Alpena, MI, City of	Alpena
American Cable Association	ACA
American Foundation for the Blind	AFB
American Teleservices Association	ATA
Ann Arbor, MI, City of	Ann Arbor
Association of Public Television Stations	APTS
Auburn and Northborough, Massachusetts, Towns of	Auburn-Northborough
Brookstone, Melissa and Jennifer	Brookstone
California Broadcasters Association	CBA
Capitol Broadcasting Company, Inc.	CBC
Carlsbad, CA, City of	Carlsbad
Cellular Emergency Alert Service Association	CEASA
Cellular Telecommunications & Internet Association	CTIA
Charleston County, SC	Charleston
Charter Communications, Inc.	Charter
Consumer Electronics Association	CEA
Contra Costa County Community Warning System	Contra Costa County
Corr Wireless Communications, LLC	Corr
Cox Broadcasting, Inc.	Cox
Croghan, Bill	Croghan
Deeds, Douglas	Deeds
Developers ─ Sage Alerting Systems ENDEC, Gerald LeBow and Harold Price	Developers
Digital Alert Systems, LLC	DAS
Dodds, Betty J.	Dodds
Elk Grove Village	Elk Grove
Entergy Nuclear Northeast, Michael J. Slobodien	Entergy
Estlack, Larry A.	Estlack
Fontana, CA, City of	Fontana
Georgetown University	Georgetown
Global Marketing Solutions, Inc.	Global
Harris Corporation	Harris
Hearst-Argyle Television, Inc.	Hearst-Argyle
Howard-Thurst, Paul	Howard-Thurst
Intergovernmental Advisory Committee (Jenny Hansen), FCC	IAC
Intrado, Inc.	Intrado
Iowa City, Iowa, City of	Iowa City
Jefferson Pilot Communications Company	Jefferson-Pilot
Liberty Corporation	Liberty
LogicaCMG plc	LogicaCMG
Lowell, Massachusetts, City of	Lowell

Maine State Emergency Communications Committee	Maine SECC
Marquette, MI, City of	Marquette
McDonough, Robert	McDonough
Midland Radio Corporation	Midland
Municipalities and Municipal Organizations	Municipalities
Named State Broadcasters Associations	Named SBA
National Association of Broadcasters	NAB
National Association of Broadcasters and Association for Maximum Service TV, Inc.	NAB/MSTV
National Association of Broadcasters/Florida Association of Broadcasters	NAB/FAB
National Association of State Chief Information Officers	NASCIO
National Cable & Telecommunications Association	NCTA
National Center for Missing & Exploited Children	NCMEC
New Hampshire SECC, Edward W. Brouder, Jr., Chairman,	NH SECC
Newell, Thomas A., Facilities Engineer	Newell
North Carolina Association of Broadcasters	NCAB
North Carolina State Emergency Communications Committee	NC SECC
Ohio Association of Broadcasters	OAS
Ohio Emergency Management Agency	Ohio EMA
Osenkowsky, Thomas G.	Osenkowsky
Pappas Telecasting Companies	Pappas
Partnership for Public Warning	PPW
Primary Entry Point Advisory Committee, Inc.	PEPAC
Putkovich, Kenneth	Putkovich
RadioShack Corporation	RadioShack
Rau, Dan	Rau
Rehabilitation Engineering Research Center on Mobile Wireless Technologies	RERC Wireless
Rehabilitation Engineering Research Center on Telecommunications Access	RERC
Richards, Tristan, Chair, Maine SECC	Richards
Ruhwiedel, Henry	Ruhwiedel
Rural Cellular Association	RCA
Santa Clara County Emergency Managers Association	Santa Clara EMA
Satellite Broadcasting and Communications Association	SBCA
SatStream Systems Corp, Michael G. Lee	SatStream
Seven Ranges Radio Co., Inc.	Seven Ranges
Sheerin, Peter K.	Sheerin
Simar, Douglas S.	Simar
Sirius Satellite Radio, Inc.	Sirius
Society of Broadcast Engineers, Inc.	SBE
Southeastern Michigan Counties and Municipalities (Neil J. Lehto)	SE Michigan Counties
Stewart, Dwight	Stewart
Stussy, D.	Stussy
SWN Communications, Inc.	SWN
Telecommunications for the Deaf, Inc. et. al.	TDI
Telecommunications Industry Association	TIA
TFT, Inc.	TFT
Timm, Gary E., Chair, Wisconsin SECC	Timm
Torrance, CA, City of	Torrance
Trilithic, Inc.	Trilithic
Verizon	Verizon
Walnut Creek, CA, City of	Walnut Creek
Ward, Dr. Peter L.	Dr. Ward

WTOP-AM, (WTOP-FM) and WXTR-AM	WTOP/WXTR
XM Radio Inc.	XM
Yount, Steven	Yount

Reply Commenters	**Abbreviation**
Alert Systems, Inc.	Alert Systems
American Cable Association	ACA
Ann Arbor, MI, City of	Ann Arbor
BellSouth Entertainment, LLC	BellSouth
Cadillac, MI, City of	Cadillac
Cellular Telecommunications and Internet Association	CTIA
Consumer Electronics Association	CEA
Cowan, Terry A.	Cowan
Dubuque, Iowa, City of	Dubuque
"ec", Comments of	"ec"
EchoStar Satellite, LLC	EchoStar
FEMA, Director, Office of Nat'l Security Coordination	FEMA
Hoffman Estates, Illinois, Village of	Hoffman Estates
LogicaCMG plc	LogicaCMG
Mesa, Arizona, City of	Mesa
Municipalities and Municipal Organizations	Municipalities
Named State Broadcasters Associations	Named SBA
National Cable & Telecommunications Association	NCTA
Orange County Local Emergency Communications Committee	Orange County LECC
Oregon State Communications Commission	Oregon SCC
Putkovich, Kenneth	Putkovich
RadioShack Corporation	RadioShack
Ruhwiedel, Henry	Ruhwiedel
Satellite Broadcasting and Communications Association	SBCA
Society of Broadcast Engineers, Inc.	SBE
Southeastern Michigan Counties & Municipalities	SE Michigan Counties
St. Tammany Parish	St. Tammany
TFT, Inc.	TFT
T-Mobile USA, Inc.	T-Mobile
XM Radio Inc.	XM

Ex Parte Commenters	**Abbreviation**
3G Americas	3G
Active Data Exchange, Inc.	Active Data
Advanced Television Systems	ATS
Alert Systems, Inc.	Alert Systems
American Cable Association	ACA
Azos AI, LLC	Azos
Bautista, Greg	Bautista
Bekey, Ivan	Bekey
Cellular Emergency Alert Systems Association	CEASA
Cellular Emergency Alert Systems Association International (Mark Wood)	CEASA International
Cellular Telecommunications & Internet Association	CTIA
Consumer Electronics Association	CEA

Consumers Union 10/20/05 *ex parte* filing	Consumers Union
Cook, Katherine	Cook
Digital Alert Systems, LLC	DAS
DIRECTV, Inc.	DIRECTV
FCC, Office of Homeland Security, regarding Digital Television	DTV ex parte
FCC, Office of Homeland Security, regarding DTH Satellite Services	Satellite DTH ex parte
Gehlhar, Mhairi	Gehlhar
Global Marketing Solutions, Inc.	Global
Hines, Kinsey	Hines
Independent Spanish Broadcasters Association, Office of Communications of United Church of Christ, Inc., and Minority Media and Telecommunications Council	MMTC
INTELSAT	INTELSAT
Kluttz, Andrew	Kluttz
Labanow, David J.	Labanow
LogicaCMG Global Telecoms	LogicaCMG
Luna, Hector Eden	Luna
Named State Broadcasters Associations	Named SBA
National Association of Broadcasters	NAB
National Association of Telecommunications Officers and Advisors	NATOA
Nextel Communications, Inc.	Nextel
Nortel	Nortel
PanAmSat	PanAmSat
RadioShack Corporation	RadioShack
Robbins, Bert	Robbins
Ruhwiedel, Henry	Ruhwiedel
Rural Cellular Association	RCA
Schacter, Janice	Schacter
SES American	SES American
Sirius Satellite Radio, Inc.	Sirius
Trilithic, Inc.	Trilithic
USA Mobility, Inc.	USA Mobility
Ward, Dr. Peter L.	Dr. Ward
Wiley Rein & Fielding, LLP	Wiley Rein
XM Radio Inc.	XM

APPENDIX B

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

PART 11 – EMERGENCY ALERT SYSTEM (EAS)

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

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

2. Revise § 11.1 to read as follows:

§ 11.1 Purpose.

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

3. Amend § 11.11 by revising paragraphs (a), (b) and (e) to read as follows:

§ 11.11 The Emergency Alert System (EAS).

(a) The EAS is composed of analog radio broadcast stations including AM, FM, and Low-power FM (LPFM) stations; digital audio broadcasting (DAB) stations, including digital AM, FM, and Low-power FM stations; analog television broadcast stations including Class A television (CA) and Low-power TV (LPTV) stations; digital television (DTV) broadcast stations, including digital CA and digital LPTV stations; analog cable systems; digital cable systems which are defined for purposes of

this Part only as the portion of a cable system that delivers channels in digital format to subscribers at the input of a Unidirectional Digital Cable Product or other navigation device; wireless cable systems which may consist of Broadband Radio Service (BRS), or Educational Broadband Service (EBS) stations; DBS services, as defined in 47 C.F.R. § 25.701(a) (including certain Ku-band Fixed-Satellite Service Direct to Home providers); SDARS, as defined in 47 C.F.R. § 25.201; participating broadcast networks, cable networks and program suppliers; and other entities and industries operating on an organized basis during emergencies at the National, State and local levels. These entities are referred to collectively as EAS Participants in this Part, and are subject to this Part, except as otherwise provided herein. These rules in this Part are effective on December 31, 2006 for DTV, DAB, digital cable and SDARS providers, and on May 31, 2007 for DBS providers. At a minimum EAS Participants must use a common EAS protocol, as defined in §11.31, to send and receive emergency alerts in accordance with the effective dates listed above and in the following tables:

Analog and Digital Broadcast Stations

EAS Equipment Requirement	AM & FM	Digital AM & FM	TV	DTV	FM Class D\1\	LPTV \2\	LPFM \3\	Class A TV\4\
Two-tone encoder \5\ \6\	Y	Y 12/31/06	Y	Y 12/31/06	N	N	N	Y
EAS decoder	Y 1/1/97	Y 12/31/06	Y 1/1/97	Y 12/31/06	Y 1/1/97	Y 1/1/97	Y	Y
EAS encoder	Y 1/1/97	Y 12/31/06	Y 1/1/97	Y 12/31/06	N	N	N	Y
Audio message	Y 1/1/97	Y 12/31/06	Y 1/1/97	Y 12/31/06	Y 1/1/97	Y 1/1/97	Y	Y
Video message	N/A	N/A	Y 1/1/97	Y 12/31/06	N/A	Y 1/1/97	N/A	Y

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

Analog Cable Systems

[A. Analog cable systems serving fewer than 5,000 subscribers from a headend must either provide the National level EAS message on all programmed channels_including the required testing_by October 1, 2002, or comply with the following EAS requirements. All other analog cable systems must comply with B.]

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

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

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

\3\ The Video interrupt must cause all channels that carry programming to flash for the duration of the EAS emergency message. The audio alert must give the channel where the EAS messages are carried and be repeated for the duration of the EAS message.

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

Wireless Cable Systems (BRS/EBS STATIONS)

[A. Wireless cable systems serving fewer than 5,000 subscribers from a single transmission site must either provide the National level EAS message on all programmed channels_including the required testing_by October 1, 2002, or comply with the following EAS requirements. All other wireless cable systems must comply with B.]

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

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

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

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

\4\ The Video interrupt must cause all channels that carry programming to flash for the duration of the EAS emergency message. The audio alert must give the channel where the EAS messages are carried and be repeated for the duration of the EAS message.

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

Digital Cable Systems

[A. Digital cable systems serving fewer than 5,000 subscribers from a headend must either provide the National level EAS message on all programmed channels_including the required testing_by December 31, 2006, or comply with the following EAS requirements. All other digital cable systems must comply with B.]

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

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

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

\3\ The Video interrupt must cause all channels that carry programming to flash for the duration of the EAS emergency message. The audio alert must give the channel where the EAS messages are carried and be repeated for the duration of the EAS message.

\4\ All digital cable systems may comply with this requirement by providing a means to switch all programmed channels to a predesignated channel that carries the required audio and video EAS messages

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

SDARS and DBS

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

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

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

(b) Analog class D non-commercial educational FM stations as defined in § 73.506, digital class D non-commercial educational FM stations, analog LPFM stations as defined in §§ 73.811 and 73.853, digital LPFM stations, analog LPTV stations as defined in § 74.701(f), and digital LPTV stations as defined in § 74.701(k) are not required to comply with § 11.32. Analog and digital LPTV stations that operate as television broadcast translator stations, as defined in § 74.701(b) of this chapter, are not required to comply with the requirements of this part. FM broadcast booster stations as defined in § 74.1201(f) of this chapter and FM translator stations as defined in § 74.1201(a) of this chapter which entirely rebroadcast the programming of other local FM broadcast stations are not required to comply with the requirements of this part. International broadcast stations as defined in § 73.701 of this chapter are not required to comply with the requirements of this part. Analog and digital broadcast stations that operate as satellites or repeaters of a hub station (or common studio or control point if there is no hub station) and rebroadcast 100% of the programming of the hub station (or common studio or control point) may satisfy the requirements of this part through the use of a single set of EAS equipment at the hub station (or common studio or control point) which complies with §§ 11.32 and 11.33.

* * * * *

(e) Organizations using other communications systems or technologies such as low earth orbit satellite systems, paging, computer networks, etc. may join the EAS on a voluntary basis by contacting the FCC. Organizations that choose to voluntarily participate must comply with the requirements of this part.

4. Revise § 11.13 to read as follows:

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

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

(b) The Emergency Action Termination (EAT) is the notice to all EAS Participants and to the general public that the EAN has terminated.

5. Revise § 11.15 to read as follows:

§ 11.15 EAS Operating Handbook.

The EAS Operating Handbook states in summary form the actions to be taken by personnel at EAS Participant facilities upon receipt of an EAN, an EAT, tests, or State and Local Area alerts. It is issued by the FCC and contains instructions for the above situations. A copy of the Handbook must be located at normal duty positions or EAS equipment locations when an operator is required to be on duty and be immediately available to staff responsible for authenticating messages and initiating actions.

6. Revise § 11.19 to read as follows:

§ 11.19 EAS Non-participating National Authorization Letter.

This authorization letter is issued by the FCC to EAS Participants that have elected not to participate in the national level EAS. It states that the EAS Participant has agreed to go off the air or discontinue programming on all channels during a national level EAS message. For licensees this authorization will remain in effect through the period of the initial license and subsequent renewals from the time of issuance unless returned by the holder or suspended, modified, or withdrawn by the Commission.

7. Revise § 11.21 introductory text and paragraph (a) to read as follows:

§ 11.21 State and Local Area Plans and FCC Mapbook.

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

(a) The State plan contains procedures for State emergency management and other State officials, the NWS, and EAS Participants' personnel to transmit emergency information to the public during a State emergency using the EAS.

* * * * *

8. Amend § 11.31 by revising the format code for LLLLLLLL in paragraph (c), revising paragraph (d), and revising the footnotes in paragraphs (e) and (f) to read as follows:

§ 11.31 EAS protocol.

* * * * *

(c) * * *

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

* * * * *

(d) The only originator codes are:

Originator	ORG Code
EAS Participant	EAS
Civil authorities	CIV
National Weather Service	WXR
Primary Entry Point System	PEP

(e) * * *

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

replace their EAS equipment after February 1, 2004 must install equipment that is capable of receiving and transmitting these event codes.

(f) * * *

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

9. Amend § 11.33 by revising paragraphs (a)(4) and (b) introductory text to read as follows:

§ 11.33 EAS Decoder.

(a) * * *

(4) Display and logging. A visual message shall be developed from any valid header codes for tests and national activations and any preselected header codes received. The message shall include the Originator, Event, Location, the valid time period of the message and the local time the message was transmitted. The message shall be in the primary language of the EAS Participant and be fully displayed on the decoder and readable in normal light and darkness. All existing and new models of EAS decoders manufactured after August 1, 2003 must provide a means to permit the selective display and logging of EAS messages containing header codes for state and local EAS events. Effective May 16, 2002, analog radio and television broadcast stations, analog cable systems and wireless cable systems may upgrade their decoders on an optional basis to include a selective display and logging capability for EAS messages containing header codes for state and local events. EAS Participants that install or replace their decoders after February 1, 2004 must install decoders that provide a means to permit the selective display and logging of EAS messages containing header codes for state and local EAS events.

* * * * *

(b) Attention Signal. EAS Decoders shall have detection and activation circuitry that will demute a receiver upon detection of the two audio tones of 853 Hz and 960 Hz. To prevent false responses, decoders designed to use the two tones for receiver demuting shall comply with the following:

* * * * *

10. Amend § 11.34 by revising paragraph (e) to read as follows:

§ 11.34 Acceptability of the equipment.

* * * * *

(e) Waiver requests of the Certification requirements for EAS Encoders or EAS Decoders which are constructed for use by an EAS Participant, but are not offered for sale will be considered on an individual basis in accordance with part 1, subpart G, of this chapter.

* * * * *

11. Revise § 11.35 to read as follows:

§ 11.35 Equipment operational readiness.

(a) EAS Participants are responsible for ensuring that EAS Encoders, EAS Decoders and Attention Signal generating and receiving equipment used as part of the EAS are installed so that the monitoring and transmitting functions are available during the times the stations and systems are in operation. Additionally, EAS Participants must determine the cause of any failure to receive the required tests or activations specified in § 11.61(a)(1) and (a)(2). Appropriate entries indicating reasons why any tests were not received must be made in the broadcast station log as specified in §§ 73.1820 and 73.1840 of this chapter for all broadcast streams and cable system records as specified in §§ 76.1700, 76.1708, and 76.1711 of this chapter. All other EAS Participants must also keep records indicating reasons why any tests were not received and these records must be retained for two years, maintained at the EAS Participant's headquarters, and made available for public inspection upon reasonable request.

(b) If the EAS Encoder or EAS Decoder becomes defective, the EAS Participant may operate without the defective equipment pending its repair or replacement for 60 days without further FCC authority. Entries shall be made in the broadcast station log, cable system records, and records of other EAS Participants, as specified in part (a) of this rule, showing the date and time the equipment was removed and restored to service. For personnel training purposes, the required monthly test script must still be transmitted even though the equipment for generating the EAS message codes, Attention Signal and EOM code is not functioning.

(c) If repair or replacement of defective equipment is not completed within 60 days, an informal request shall be submitted to the District Director of the FCC field office serving the area in which the EAS Participant is located, or in the case of DBS and SDARS providers to the District Director of the FCC field office serving the area where their headquarters is located, for additional time to repair the defective equipment. This request must explain what steps have been taken to repair or replace the defective equipment, the alternative procedures being used while the defective equipment is out of service, and when the defective equipment will be repaired or replaced.

12. Revise § 11.41 to read as follows:

§ 11.41 Participation in EAS.

(a) All EAS Participants specified in § 11.11 are categorized as Participating National (PN) sources unless authorized by the FCC to be Non-Participating (NN) sources.

(b) An EAS Participant may submit a written request to the FCC asking to be an NN source. The FCC may then issue a Non-participating National Authorization letter. NN sources must go off the air during a national EAS activation after transmitting specified information.

(1) An EAS Participant that is an NN source under § 11.18(f) that wants to become a PN source in the national level EAS must submit a written request to the FCC.

(2) NN sources may voluntarily participate in the State and Local Area EAS. Participation is at the discretion of EAS Participant management and should comply with State and Local Area EAS Plans.

(c) All sources, including NN, must have immediate access to an EAS Operating Handbook.

13. Amend § 11.42 by revising paragraphs (a)(1), (a)(2), (b), and (c) to read as follows:

§ 11.42 Participation by communications common carriers.

(a) * * *

(1) An originating source from the nearest service area to a selected Test Center and then to the EAS Participant for the duration of the emergency, provided an Emergency Action Notification is issued by the White House and the originating source has a local channel from the originating point to the nearest service area.

(2) An independent broadcast station to the radio and television broadcast networks and any other EAS Participant provided the station has in service a local channel from the station's studio or transmitter directly to the broadcast source.

(b) Upon receipt of the Emergency Action Termination, the common carriers shall disconnect the originating source and the participating independent stations and restore the networks and other EAS Participants to their original configurations.

(c) During a National level EAS Test, common carriers which have facilities in place may, without charge, connect an originating source from the nearest exchange to a selected Test Center and then to any EAS Participant. Independent stations will not be connected during the test unless authorized by the FCC. Upon test termination, EAS Participants shall be restored to their original configurations.

* * * * *

14. Amend § 11.44 by revising paragraph (d) to read as follows:

§ 11.44 EAS message priorities.

* * * * *

(d) During a national emergency, the facilities of all EAS Participants must be reserved exclusively for distribution of Presidential Messages. NIC messages received from national networks which are not broadcast at the time of original transmission must be recorded locally by LP sources for transmission at the earliest opportunity consistent with the message priorities in paragraph (b) of this section.

15. Revise § 11.46 to read as follows:

§ 11.46 EAS public service announcements.

EAS Participants may use Public Service Announcements or obtain commercial sponsors for announcements, infomercials, or programs explaining the EAS to the public. Such announcements and programs may not be a part of alerts or tests, and may not simulate or attempt to copy alert tones or codes.

16. Revise § 11.47 to read as follows:

§ 11.47 Optional use of other communications methods and systems.

(a) Analog and digital broadcast stations may additionally transmit EAS messages through other communications means. For example, on a voluntary basis, FM stations may use subcarriers to transmit the EAS codes including 57 kHz using the RBDS standard produced by the National Radio Systems Committee (NRSC) and television stations may use subsidiary communications services.

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

17. Revise § 11.51 to read as follows:

§ 11.51 EAS code and Attention Signal Transmission requirements.

(a) Analog and digital broadcast stations must transmit, either automatically or manually, national level EAS messages and required tests by sending the EAS header codes, Attention Signal, emergency message and End of Message (EOM) codes using the EAS Protocol. The Attention Signal must precede any emergency audio message. After January 1, 1998, the shortened Attention Signal may only be used as an

audio alert signal and the EAS codes will become the minimum signaling requirement for National level messages and tests.

(b) When relaying EAS messages, EAS Participants may transmit only the EAS header codes and the EOM code without the Attention Signal and emergency message for State and local emergencies. Pauses in video programming before EAS message transmission should not cause television receivers to mute EAS audio messages. No Attention Signal is required for EAS messages that do not contain audio programming, such as a Required Weekly Test.

(c) By the effective dates provided in § 11.11(a), all analog and digital radio and television stations shall transmit EAS messages in the main audio channel. Effective December 31, 2006, all DAB stations shall also transmit EAS messages on all audio streams. Effective December 31, 2006, all DTV broadcast stations shall also transmit EAS messages on all program streams.

(d) By the effective dates provided in § 11.11(a), analog and digital television broadcast stations shall transmit a visual message containing the Originator, Event, Location and the valid time period of an EAS message. If the message is a video crawl, it shall be displayed at the top of the television screen or where it will not interfere with other visual messages.

(e) Analog class D non-commercial educational FM stations as defined in § 73.506 of this chapter, digital class D non-commercial educational FM stations, analog Low Power FM (LPFM) stations as defined in §§ 73.811 and 73.853 of this chapter, digital LPFM stations, analog low power TV (LPTV) stations as defined in § 74.701(f) of this chapter, and digital LPTV stations as defined in § 74.701(k) of this chapter are not required to have equipment capable of generating the EAS codes and Attention Signal specified in § 11.31.

(f) Analog and digital broadcast station equipment generating the EAS codes and the Attention Signal shall modulate a broadcast station transmitter so that the signal broadcast to other EAS Participants alerts them that the EAS is being activated or tested at the National, State or Local Area level. The minimum

level of modulation for EAS codes, measured at peak modulation levels using the internal calibration output required in §11.32(a)(4), shall modulate the transmitter at the maximum possible level, but in no case less than 50% of full channel modulation limits. Measured at peak modulation levels, each of the Attention Signal tones shall be calibrated separately to modulate the transmitter at no less than 40%. These two calibrated modulation levels shall have values that are within 1 dB of each other.

(g) Analog cable systems and digital cable systems with fewer than 5,000 subscribers per headend and wireless cable systems with fewer than 5,000 subscribers shall transmit EAS audio messages in the same order specified in paragraph (a) of this section on at least one channel. The Attention Signal may be produced from a storage device. Additionally, these analog cable systems, digital cable systems, and wireless cable systems:

(1) Must install, operate, and maintain equipment capable of generating the EAS codes. The modulation levels for the EAS codes and Attention Signal for analog cable systems shall comply with the aural signal requirements in § 76.605 of this chapter,

(2) Must provide a video interruption and an audio alert message on all channels. The audio alert message must state which channel is carrying the EAS video and audio message,

(3) Shall transmit a visual EAS message on at least one channel. The message shall contain the Originator, Event, Location, and the valid time period of the EAS message. If the visual message is a video crawl, it shall be displayed at the top of the subscriber's television screen or where it will not interfere with other visual messages.

(4) May elect not to interrupt EAS messages from broadcast stations based upon a written agreement between all concerned. Further, analog cable systems, digital cable systems, and wireless cable systems may elect not to interrupt the programming of a broadcast station carrying news or weather related emergency information with state and local EAS messages based on a written agreement between all parties.

(5) Wireless cable systems and digital cable systems with a requirement to carry the audio and video EAS message on at least one channel and a requirement to provide video interrupt and an audio alert message on all other channels stating which channel is carrying the audio and video EAS message, may comply by using a means on all programmed channels that automatically tunes the subscriber's set-top box to a pre-designated channel which carries the required audio and video EAS messages.

(h) Analog cable and digital cable systems with 10,000 or more subscribers; analog cable and digital cable systems serving 5,000 or more, but less than 10,000 subscribers per headend; and wireless cable systems with 5,000 or more subscribers shall transmit EAS audio messages in the same order specified in paragraph (a) of this section. The Attention Signal may be produced from a storage device. Additionally, these analog cable systems, digital cable systems, and wireless cable systems:

(1) Must install, operate, and maintain equipment capable of generating the EAS codes. The modulation levels for the EAS codes and Attention Signal for analog cable systems shall comply with the aural signal requirements in § 76.605 of this chapter. This will provide sufficient signal levels to operate subscriber television and radio receivers equipped with EAS decoders and to audibly alert subscribers. Wireless cable systems and digital cable systems shall also provide sufficient signal levels to operate subscriber television and radio receivers equipped with EAS decoders and to audibly alert subscribers.

(2) Shall transmit the EAS audio message required in paragraph (a) of this section on all downstream channels.

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

(4) May elect not to interrupt EAS messages from broadcast stations based upon a written agreement between all concerned. Further, analog cable systems, digital cable systems, and wireless cable systems may elect not to interrupt the programming of a broadcast station carrying news or weather related emergency information with state and local EAS messages based on a written agreement between all parties.

(5) Wireless cable systems and digital cable systems with a requirement to carry the audio and video EAS message on all downstream channels may comply by using a means on all programmed channels that automatically tunes the subscriber's set-top box to a pre-designated channel which carries the required audio and video EAS messages.

(i) Effective December 31, 2006, SDARS licensees shall transmit national audio EAS messages on all channels in the same order specified in paragraph (a) of this section.

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

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

(j) Effective May 31, 2007, DBS providers shall transmit national audio and visual EAS messages on all channels in the same order specified in paragraph (a) of this section.

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

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

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

(k) If manual interrupt is used as authorized in paragraph (m) of this section, EAS Encoders must be located so that EAS Participant staff, at normal duty locations, can initiate the EAS code and Attention Signal transmission.

(l) EAS Participants that are co-owned and co-located with a combined studio or control facility, (such as an AM and FM licensed to the same entity and at the same location or a cable headend serving more than one system) may provide the EAS transmitting requirements contained in this section for the combined stations or systems with one EAS Encoder. The requirements of § 11.32 must be met by the combined facility.

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

(1) Automatic interrupt of programming and transmission of EAS messages are required when facilities are unattended. Automatic transmissions must include a permanent record that contains at a minimum the following information: Originator, Event, Location and valid time period of the message. The decoder performs the functions necessary to determine which EAS messages are automatically transmitted by the encoder.

(2) Manual interrupt of programming and transmission of EAS messages may be used. EAS messages with the EAN Event code must be transmitted immediately and Monthly EAS test messages within 60 minutes. All actions must be logged and include the minimum information required for EAS video messages.

(n) EAS Participants may employ a minimum delay feature, not to exceed 15 minutes, for automatic interruption of EAS codes. However, this may not be used for the EAN event which must be transmitted immediately. The delay time for an RMT message may not exceed 60 minutes.

(o) Either manual or automatic operation of EAS equipment may be used by EAS Participants that use remote control. If manual operation is used, an EAS decoder must be located at the remote control location and it must directly monitor the signals of the two assigned EAS sources. If direct monitoring of the assigned EAS sources is not possible at the remote location, automatic operation is required. If automatic operation is used, the remote control location may be used to override the transmission of an EAS alert. EAS Participants may change back and forth between automatic and manual operation.

18. Revise § 11.52 to read as follows:

§ 11.52 EAS code and Attention Signal Monitoring requirements.

(a) EAS Participants must be capable of receiving the Attention Signal required by § 11.32(a)(9) and emergency messages of other broadcast stations during their hours of operation. EAS Participants must install and operate during their hours of operation, equipment capable of receiving and decoding, either

automatically or manually, the EAS header codes, emergency messages and EOM code. EAS Participants must comply with these requirements by the dates set forth in § 11.11.

NOTE TO PARAGRAPH (a): The two-tone Attention Signal will not be used to actuate two-tone decoders but will be used as an aural alert signal.

(b) If manual interrupt is used as authorized in § 11.51(m)(2), decoders must be located so that operators at their normal duty stations can be alerted immediately when EAS messages are received.

(c) EAS Participants that are co-owned and co-located with a combined studio or control facility (such as an AM and FM licensed to the same entity and at the same location or a cable headend serving more than one system) may comply with the EAS monitoring requirements contained in this section for the combined station or system with one EAS Decoder. The requirements of § 11.33 must be met by the combined facility.

(d) EAS Participants must monitor two EAS sources. The monitoring assignments of each broadcast station and cable system and wireless cable system are specified in the State EAS Plan and FCC Mapbook. They are developed in accordance with FCC monitoring priorities.

(1) If the required EAS sources cannot be received, alternate arrangements or a waiver may be obtained by written request to the FCC's EAS office. In an emergency, a waiver may be issued over the telephone with a follow up letter to confirm temporary or permanent reassignment.

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

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

(1) Automatic interrupt of programming is required when facilities are unattended. Automatic operation must provide a permanent record of the EAS message that contains at a minimum the following information: Originator, Event, Location and valid time period of the message.

(2) Manual interrupt of programming and transmission of EAS messages may be used. EAS messages with the EAN Event code must be transmitted immediately and Monthly EAS test messages within 60 minutes. All actions must be logged and recorded as specified in §§ 11.35(a) and 11.54(b)(13). Decoders must be programmed for the EAN and EAT Event header codes for National level emergencies and the RMT and RWT Event header codes for required monthly and weekly tests, with the appropriate accompanying State and State/county location codes.

19. Amend § 11.53 by revising paragraphs (a) and (c) to read as follows:

§ 11.53 Dissemination of Emergency Action Notification.

* * * * *

(a) National Level. The EAN is issued by the White House. The EAN message is sent from a government origination point to broadcast stations and other entities participating in the PEP system. It is then disseminated via EAS Participants.

* * * * *

(c) Analog and digital broadcast stations must, prior to commencing routine operation or originating any emissions under program test, equipment test, experimental, or other authorizations, determine whether the EAS has been activated by monitoring the assigned EAS sources as specified in their State or Local plan.

20. Amend § 11.54 by revising paragraphs (b), (c), (d) and (e) to read as follows:

§ 11.54 EAS operation during a National Level emergency.

* * * * *

(b) Immediately upon receipt of an EAN message, EAS Participants must:

(1) Monitor the two EAS sources assigned in the State or Local Area plan or FCC Mapbook for any further instructions. SDARS licensees and DBS providers may choose their two EAS sources, one of which must be a PEP station.

(2) Discontinue normal programming and follow the transmission procedures in the appropriate section of the EAS Operating Handbook. Announcements may be made in the same language as the primary language of the EAS Participant.

(i) Key EAS sources (National Primary (NP), Local Primary (LP), State Primary (SP), State Relay (SR) and Participating National (PN) sources) follow the transmission procedures and make the announcements in the National Level Instructions of the EAS Operating Handbook.

(ii) Non-participating National (NN) sources follow the transmission procedures and make the sign-off announcement in the EAS Operating Handbook's National Level Instructions section for NN sources. After the sign-off announcement, NN sources are required to remove their carriers or services from the air and monitor for the Emergency Action Termination message. NN sources using automatic interrupt under § 11.51(m)(1), must transmit the header codes, Attention Signal, sign-off announcement and EOM code after receiving the appropriate EAS header codes for a national emergency.

(3) After completing the above transmission procedures, key EAS and Participating National sources must transmit a common emergency message until receipt of the Emergency Action Termination Message. Message priorities are specified in § 11.44. If LP or SR sources of a Local Area cannot provide an emergency message feed, any source in the Local Area may elect to provide a message feed. This should be done in an organized manner as designated in State and Local Area EAS Plans.

(4) The Standby Script shall be used until emergency messages are available. The text of the Standby Script is in the EAS Operating Handbook's section for Participating sources.

(5) Analog and digital TV broadcast stations shall display an appropriate EAS slide and then transmit all EAS announcements visually and aurally as specified in §§ 11.51(a) through (e) and 73.1250(h) of this chapter.

(6) Analog cable systems, digital cable systems, and wireless cable systems shall transmit all EAS announcements visually and aurally as specified in § 11.51(g) and (h).

(7) DBS providers shall transmit all EAS announcements visually and aurally as specified in § 11.51(j).

(8) Announcements may be made in the same language as the primary language of the EAS participant.

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

(10) All analog and digital broadcast stations and analog cable systems, digital cable systems and wireless cable systems operating and identified with a particular EAS Local Area must transmit a common national emergency message until receipt of the Emergency Action Termination.

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

(12) National Primary (NP) sources must operate under the procedures in the National Control Point Procedures.

(13) The time of receipt of the EAN and Emergency Action Termination messages shall be entered by analog and digital broadcast stations in their logs (as specified in §§ 73.1820 and 73.1840 of this chapter), by analog and digital cable systems in their records (as specified in § 76.1711 of this chapter), by subject wireless cable systems in their records (as specified in § 21.304 of this chapter), and by all other EAS

Participants in their records as specified in § 11.35(a).

(c) Upon receipt of an Emergency Action Termination Message, EAS Participants must follow the termination procedures in the EAS Operating Handbook.

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

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

21. Amend § 11.55 by revising paragraphs (a), (c) introductory text, (c)(4) and (c)(7) to read as follows:

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

(a) The EAS may be activated at the State and Local Area levels by EAS Participants at their discretion for day-to-day emergency situations posing a threat to life and property. Examples of natural emergencies which may warrant activation are: tornadoes, floods, hurricanes, earthquakes, heavy snows, icing conditions, widespread fires, etc. Man-made emergencies may include: toxic gas leaks or liquid spills, widespread power failures, industrial explosions, and civil disorders.

(1) DBS providers shall pass through all EAS messages aired on local television broadcast stations carried by DBS providers under the Commission's broadcast signal carriage rules to subscribers receiving those channels.

(2) SDARS licensees and DBS providers may participate in EAS at the state and local level and make their systems capable of receiving and transmitting state and local level EAS messages on all channels. If an SDARS licensee or DBS provider is not capable of receiving and transmitting state and local EAS

message on all channels, it must inform its subscribers, on its website and in writing on an annual basis, of which channels are and are not capable of supplying state and local messages.

* * * * *

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

* * * * *

(4) EAS Participants participating in the State or Local Area EAS must discontinue normal programming and follow the procedures in the State and Local Area plans. Analog and digital television broadcast stations must comply with § 11.54(b)(5); analog cable systems, digital cable systems, and wireless cable systems must comply with § 11.54(b)(6); and DBS providers must comply with § 11.54(b)(7). EAS Participants providing foreign language programming should comply with § 11.54(b)(8).

* * * * *

(7) The times of the above EAS actions must be entered in the EAS Participants' records as specified in §§ 11.35(a) and 11.54(b)(13).

* * * * *

22. Revise § 11.61 to read as follows:

§ 11.61 Tests of EAS procedures.

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

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

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

(ii) Effective May 31, 2007, DBS providers must comply with this section by monitoring a state or local primary source to participate in testing. Tests should be performed on 10% of all channels monthly (excluding local-into-local channels for which the monthly transmission tests are passed through by the DBS provider), with channels tested varying from month to month, so that over the course of a given year, 100% of all channels are tested.

(2) Required Weekly Tests:

(i) EAS Header Codes and EOM Codes:

(A) Analog and digital AM, FM, and TV broadcast stations must conduct tests of the EAS header and EOM codes at least once a week at random days and times. Effective December 31, 2006, DAB stations must conduct these tests on all audio streams. Effective December 31, 2006, DTV stations must conduct these tests on all program streams.

(B) Analog cable systems and digital cable systems with 5,000 or more subscribers per headend and wireless cable systems with 5,000 or more subscribers must conduct tests of the EAS Header and EOM Codes at least once a week at random days and times on all programmed channels.

(C) Analog cable systems and digital cable systems serving fewer than 5,000 subscribers per headend and wireless cable systems with fewer than 5,000 subscribers must conduct tests of the EAS Header and EOM Codes at least once a week at random days and times on at least one programmed channel.

(D) SDARS providers must conduct tests of the EAS Header and EOM codes at least once a week at random days and times on all channels.

(ii) DBS providers, analog and digital class D non-commercial educational FM stations, and analog and digital LPTV stations are not required to transmit this test but must log receipt, as specified in §§ 11.35(a) and 11.54(b)(13).

(iii) The EAS weekly test is not required during the week that a monthly test is conducted.

(iv) EAS Participants are not required to transmit a video message when transmitting the required weekly test.

(3) Periodic National Tests. National Primary (NP) sources shall participate in tests as appropriate. The FCC may request a report of these tests.

(4) EAS activations and special tests. The EAS may be activated for emergencies or special tests at the State or Local Area level by an EAS Participant instead of the monthly or weekly tests required by this section. To substitute for a monthly test, activation must include transmission of the EAS header codes, Attention Signal, emergency message and EOM code and comply with the visual message requirements in § 11.51. To substitute for the weekly test of the EAS header codes and EOM codes in paragraph (2)(i) of this section, activation must include transmission of the EAS header and EOM codes. Analog and digital television broadcast stations, analog cable systems, digital cable systems, wireless cable systems, and DBS providers shall comply with the aural and visual message requirements in § 11.51. Special EAS tests at the State and Local Area levels may be conducted on daily basis following procedures in State and Local Area EAS plans.

(b) Entries shall be made in EAS Participant records, as specified in §§ 11.35(a) and 11.54(b)(13).

APPENDIX C

Penetration Data

This Appendix looks at trends of several different types of broadcast and subscription media over a five-year period. It provides quantitative evidence about the consumer adoption of new digital technologies as replacements for the analog broadcast and cable systems that are currently required to implement EAS. As a basis for this evidence, the study relies on 12 annual estimates of usage metrics for 7 different types of broadcast and subscription media. Estimates for each metric measuring media usage were obtained from publicly available sources and documents filed with the Commission, cited to in this Appendix. This study, although not exhaustive, uses the most reliable and detailed estimates publicly available. To provide a consistent comparison across the usage metrics, we used estimates reported for June of each year, when possible. In some cases, only year-end or other quarter estimates were available. Time periods of estimates are identified in the Sources and Notes to the Usage of Broadcast and Subscription Media Technologies chart in this Appendix.

Usage of Broadcast and Subscription Media Technologies

		Jun-00	Jun-01	Jun-02	Jun-03	Jun-04	Jun-05P†
(1)	**US Households**	105,757,000	106,867,000	108,508,000	112,117,000	113,530,000	113,800,000
(2)	**US Population**	282,192,162	285,102,075	287,941,220	290,788,976	293,655,404	295,507,134
(3)	**TV Households**	100,801,720	102,184,810	105,444,330	106,641,910	108,410,160	110,200,000
(4)	**TV Stations**	N/A	1,678	1,712	1,726	1,747	1,747
(5)	**DTV Households**	81,500	280,640	705,640	1,596,640	3,544,640	14,120,728
(6)	**DTV Stations on the Air**	75	119	278	1,247	1,423	1,525
(7)	**Digital Cable Subscribers**	6,000,000	10,900,000	15,900,000	20,000,000	22,900,000	26,000,000
(8)	**Radio Listeners**	135,375,400	136,218,800	140,497,100	141,759,200	144,319,000	145,846,300
(9)	**Radio Stations**	N/A	12,931	13,261	13,418	13,486	13,557
(10)	**DAB Receivers**	0	0	0	0	10,000	100,000
(11)	**DAB Stations**	0	0	0	72	135	359
	Satellite DARS Subscribers	0	0	140,065	797,439	2,580,693	6,232,116
(12)	XM Satellite Radio Subscribers	0	0	136,718	692,253	2,100,352	4,417,490
(13)	Sirius Satellite Radio Subscribers	0	0	3,347	105,186	480,341	1,814,626
	Direct-to-Home Satellite Subscribers	14,463,717	17,070,074	18,940,641	20,862,191	23,495,766	27,530,000
(14)	HSD Subscribers	1,476,717	1,000,074	700,641	502,191	335,766	145,000
(15)	DBS Subscribers	12,987,000	16,070,000	18,240,000	20,360,000	23,160,000	27,385,000

† Preliminary figures for 2005

Usage as a Percentage of Addressable Market

		Jun-00	Jun-01	Jun-02	Jun-03	Jun-04	Jun-05P†
(5)	**DTV Households***	0.08%	0.27%	0.67%	1.50%	3.27%	12.81%
(6)	**DTV Stations on the Air****	4.42%	7.01%	16.37%	73.44%	83.80%	89.81%
(7)	**Digital Cable Subscribers***	5.95%	10.67%	15.08%	18.75%	21.12%	23.59%
(8)	**Radio Listeners*****	47.97%	47.78%	48.79%	48.75%	49.15%	49.35%
(10)	**DAB Receivers*****	0.00%	0.00%	0.00%	0.00%	0.00%	0.03%
(11)	**DAB Stations******	0.00%	0.00%	0.00%	0.54%	1.00%	2.65%
	Satellite DARS Subscribers***	0.00%	0.00%	0.05%	0.27%	0.88%	2.11%
(12)	XM Satellite Radio Subscribers***	0.00%	0.00%	0.05%	0.24%	0.72%	1.49%
(13)	Sirius Satellite Radio Subscribers***	0.00%	0.00%	0.00%	0.04%	0.16%	0.61%
	Direct-to-Home Satellite Subscribers*	14.35%	16.71%	17.96%	19.56%	21.67%	24.98%
(14)	HSD Subscribers*	1.46%	0.98%	0.66%	0.47%	0.31%	0.13%
(15)	DBS Subscribers*	12.88%	15.73%	17.30%	19.09%	21.36%	24.85%

* Percentage of TV Households

** Percentage of DTV Stations Authorized (1,698 total)

*** Percentage of US Population

**** Percentage of All Radio Stations

† Preliminary figures for 2005

Sources & Notes:

(1) U.S. Census Bureau, *Current Population Survey* (Sept. 2005) (estimates are from July of each year).

(2) U.S. Census Bureau, *Population Estimates Program* (Jul. 2005) (estimates are from July of each year), *available at* http://factfinder.census.gov/servlet/DTTable?_bm=y&-geo_id=01000US&-ds_name=PEP_2004_EST&-_lang=en&-mt_name=PEP_2004_EST_G2004_T001&-format=&-CONTEXT=dt. U.S. Census Bureau, Population Division, *Interim State Population Projections*, Table A1 (Apr. 21, 2005) (reporting estimate as of July 1, 2005), *available at* http://www.census.gov/population/projections/SummaryTabA1.pdf.

(3) FCC, *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, MB Docket No. 04-227, Eleventh Annual Report, 20 FCC Rcd 2755, 2869-70, Appendix B, Table B-1 (Feb. 2005) (*Eleventh Annual Video Competition Report*) (citing estimates from Nielsen Media Research). NTCA, *Industry Overview* (citing Nielsen Media Research projections for Jan. 2006) *available at* http://www.ncta.com/Docs/PageContent.cfm?pageID=86.

(4) FCC, *Broadcast Station Totals (Index)* (includes educational stations), *available at* http://www.fcc.gov/mb/audio/totals/index.html.

(5) Consumer Electronics Association (CEA) *ex parte*, EB Docket 04-296 (filed Sept. 2, 2005) (responding to request for estimated cumulative year-end sales of ATSC tuner-equipped DTVs and ATSC tuner sales).

(6) FCC, Media Bureau, *DTV Stations Authorized To Be On The Air*, *available at* http://www.fcc.gov/mb/video/files/dtvonairsum.html (numbers on website change because website is updated on monthly basis to report current status).

(7) NCTA, *2005 Mid-Year Industry Overview*, 13 (estimates are from first quarter of each year) (2005), *available at* http://www.ncta.com/industry_overview/CableMid-YearOverview05FINAL.pdf.

(8) Arbitron, *Persons Using Radio Report* (2005), *available at* http://wargod.arbitron.com/scripts/ndb/ndbradio2.asp (reporting estimate of cumulative persons for summer of each year). Cumulative persons are the total number of different persons who tune to a radio station during the course of a daypart for at least five minutes. *Id.*

(9) FCC, *Broadcast Station Totals (Index)* (includes educational stations), *available at* http://www.fcc.gov/mb/audio/totals/index.html.

(10) iBiquity Digital Corporation estimates (2005).

(11) FCC, Media Bureau, Consolidated DataBase System (CDBS), *available at* http://www.fcc.gov/mb/databases/cdbs/.

(12) XM Satellite Radio Inc., 10-Q and 10-K SEC Filings.

(13) Sirius Satellite Radio Inc., 10-Q and 10-K SEC Filings.

(14) *Eleventh Annual Video Competition Report*, 20 FCC Rcd at 2869-70, Appendix B, Table B-1 (citing estimates from Sky Report, *available at* http://www.skyreport.com/dth_us.htm, SBCA Comments (from current docket and previous *Annual Video Competition Reports*)); Kagan Research, LLC, *The DBS Report,* 2 (May 27, 2005) (projecting estimate as of year-end 2005).

(15) *Id*.

APPENDIX D
FINAL REGULATORY FLEXIBILITY ANALYSIS

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),[1] an Initial Regulatory Flexibility Analysis (IRFA) was incorporated in the Notice of Proposed Rulemaking in EB Docket 04-296 (*EAS NPRM*).[2] The Commission sought written public comment on the proposals in the *EAS NPRM*, including comment on the IRFA. This Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.

A. Need for, and Objectives of, the Rules

2. Today's *Order* establishes rules that expand the reach of the Emergency Alert System (EAS), as currently constituted, to cover the following digital communications technologies that are increasingly being used by the American public to receive news and entertainment – digital television and radio, digital cable, and satellite television and radio. As noted in the *Order*, one of the most fundamental and significant statutory mandates of the Commission is the promotion of safety of life and property through the use of wire and radio communication. Clearly, some level of EAS participation must be established for new digital services to ensure that large portions of the American public are able to receive national and/or regional public alerts and warnings.

3. This *Order* is a follow-up to the *EAS NPRM* that was issued last year. In the *EAS NPRM*, the Commission solicited comment on an array of questions and potential rule changes to contribute to an efficient and technologically current public alert and warning system. The *EAS NPRM* also solicited comments and participation of state and local emergency planning organizations and all telecommunications industries to develop a more effective EAS. Today's *Order* takes initial steps to resolve the issues raised in the *EAS NPRM*.

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

4. There were no comments filed that specifically addressed the IRFA. Nonetheless, the agency considered the potential impact of the rules discussed in the IRFA on small entities and reduced the compliance burden for all small entities (as discussed in Appendix A of the *EAS NPRM*) in order to reduce the economic impact of the rules enacted herein on such entities.

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

5. The RFA directs agencies to provide a description of, and, where feasible, an estimate of, the number of small entities that may be affected by the rules adopted herein.[3] The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small

[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 Review of the Emergency Alert System*, Notice of Proposed Rulemaking, EB Docket No. 04-296, 19 FCC Rcd 15775, Appendix A (2004) (*EAS NPRM*).

[3] 5 U.S.C. § 604(a)(3).

organization," and "small governmental jurisdiction."[4] In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.[5] 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).[6]

6. A small organization is generally "any not-for-profit enterprise which is independently owned and operated and is not dominant in its field."[7] Nationwide, as of 2002, there were approximately 1.6 million small organizations.[8] The term "small governmental jurisdiction" is defined as "governments of cities, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand."[9] As of 1997, there were approximately 87,453 governmental jurisdictions in the United States.[10] This number includes 39,044 county governments, municipalities, and townships, of which 37,546 (approximately 96.2%) have populations of fewer than 50,000, and of which 1,498 have populations of 50,000 or more. Thus, we estimate the number of small governmental jurisdictions overall to be 84,098 or fewer. Nationwide, there are a total of approximately 22.4 million small businesses, according to SBA data.[11]

7. *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.[12] Business concerns included in this industry are those "primarily engaged in broadcasting images together with sound."[13] 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

[4] 5 U.S.C. § 601(6).

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

[6] 15 U.S.C. § 632.

[7] 5 U.S.C. § 601(4).

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

[9] 5 U.S.C. § 601(5).

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

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

[12] 13 C.F.R. § 121.201, North American Industry Classification System (NAICS) code 515120.

[13] Office of Management and Budget, North American Industry Classification System: United States, 1997, at 509 (1997). This category description continues, "These establishments operate television broadcasting studios and facilities for the programming and transmission of programs to the public. These establishments also produce or transmit visual programming to affiliated broadcast television stations, which in turn broadcast the programs to the public on a predetermined schedule. Programming may originate in their own studios, from an affiliated network, or from external sources." Separate census categories pertain to businesses primarily engaged in producing programming. *Id*. at 502-05, NAICS code 512120, Motion Picture and Video Production; NAICS code 512120, Motion Picture and Video Distribution; NAICS code 512191, Teleproduction and Other Post-Production Services; and NAICS code 512199, Other Motion Picture and Video Industries.

business concern qualifies as small under the above definition, business (control) affiliations[14]must be included.[15] 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).[16] Given the nature of this service, we will presume that all LPTV licensees qualify as small entities under the SBA size standard.

8. *Radio Stations.* The revised rules and policies potentially will apply to all AM and commercial FM radio broadcasting licensees and potential licensees. The SBA defines a radio broadcasting station that has $6 million or less in annual receipts as a small business.[17] A radio broadcasting station is an establishment primarily engaged in broadcasting aural programs by radio to the public.[18] Included in this industry are commercial, religious, educational, and other radio stations.[19] Radio broadcasting stations which primarily are engaged in radio broadcasting and which produce radio program materials are similarly included.[20] However, radio stations that are separate establishments and are primarily engaged in producing radio program material are classified under another NAICS number.[21] According to Commission staff review of BIA Publications, Inc. Master Access Radio Analyzer Database on March 31, 2005, about 10,840 (95%) of 11,410 commercial radio stations have revenue of $6 million or less. We note, however, that many radio stations are affiliated with much larger corporations having much higher revenue. Our estimate, therefore, likely overstates the number of small entities that might be affected by our action.

9. *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.[22] According to Census Bureau data for 1997, in this category there was a total of 1,311 firms that operated for the entire year.[23] 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.[24] Thus, under this size standard, the majority of firms can be considered small. In addition, limited preliminary census data for 2002 indicate that the total number of cable and other program distribution companies increased approximately 46 percent from 1997 to 2002.[25]

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[14] "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).

[15] "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).

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

[17] *See* 13 C.F.R. § 121.201, NAICS code 515112 (changed from 513112 in October 2002).

[18] *Id*.

[19] *Id*.

[20] *Id*.

[21] *Id*.

[22] 13 C.F.R. § 121.201, NAICS code 517510 (formerly 513220).

[23] 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).

[24] *Id*.

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

(continued....)

10. *Cable System Operators (Rate Regulation Standard)*. The Commission has developed its own small business size standard for cable system operators, for purposes of rate regulation. Under the Commission's rules, a "small cable company" is one serving fewer than 400,000 subscribers nationwide.[26] We have estimated that there were 1,439 cable operators who qualified as small cable system operators at the end of 1995.[27] Since then, some of those companies may have grown to serve over 400,000 subscribers, and others may have been involved in transactions that caused them to be combined with other cable operators. Consequently, the Commission estimates that there are now fewer than 1,439 small entity cable system operators that may be affected by the rules and policies proposed herein.

11. *Cable System Operators (Telecom Act Standard)*. The Communications Act of 1934, as amended, (Act) also contains a size standard for small cable system operators, which is "a cable operator that, directly or through an affiliate, serves in the aggregate fewer than 1 percent of all subscribers in the United States and is not affiliated with any entity or entities whose gross annual revenues in the aggregate exceed $250,000,000."[28] The Commission has determined that there are 67,700,000 subscribers in the United States.[29] Therefore, an operator serving fewer than 677,000 subscribers shall be deemed a small operator, if its annual revenues, when combined with the total annual revenues of all its affiliates, do not exceed $250 million in the aggregate.[30] Based on available data, the Commission estimates that the number of cable operators serving 677,000 subscribers or fewer, totals 1,450.[31] The Commission neither requests nor collects information on whether cable system operators are affiliated with entities whose gross annual revenues exceed $250 million,[32] and therefore are unable, at this time, to estimate more accurately the number of cable system operators that would qualify as small cable operators under the size standard contained in the Act.

12. *Multipoint Distribution Systems*. The established rules apply to Multipoint Distribution Systems (MDS) operated as part of a wireless cable system. The Commission has defined "small entity" for purposes of the auction of MDS frequencies as an entity that, together with its affiliates, has average

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preliminary data indicate that the total number of "establishments" increased from 4,185 to 6,118. In this context, the number of establishments is a less helpful indicator of small business prevalence than is the number of "firms," because the latter number takes into account the concept of common ownership or control. The more helpful 2002 census data on firms, including employment and receipts numbers, will be issued in late 2005.

[26] 47 C.F.R. § 76.901(e). The Commission developed this definition based on its determination that a small cable system operator is one with annual revenues of $100 million or less. *Implementation of Sections of the 1992 Cable Act: Rate Regulation*, Sixth Report and Order and Eleventh Order on Reconsideration, 10 FCC Rcd 7393 (1995), 60 FR 10534 (February 27, 1995).

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

[28] 47 U.S.C. § 543(m)(2).

[29] *See FCC Announces New Subscriber Count for the Definition of Small Cable Operator*, Public Notice, DA 01-158, 16 FCC Rcd 2225 (Jan. 24, 2001).

[30] 47 C.F.R. § 76.901(f).

[31] *See* FCC Announces New Subscriber Count for the Definition of Small Cable Operators, Public Notice, DA 01-158, 16 FCC Rcd 2225 (rel. Jan. 24, 2001).

[32] The Commission does receive such information on a case-by-case basis if a cable operator appeals a local franchise authority's finding that the operator does not qualify as a small cable operator pursuant to section 76.901(f) of the Commission's rules. *See* 47 C.F.R. § 76.909(b).

gross annual revenues that are not more than $40 million for the preceding three calendar years.[33] This definition of small entity in the context of MDS auctions has been approved by the SBA.[34] 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.

13. MDS also includes licensees of stations authorized prior to the auction. As noted above, the SBA has developed a definition of small entities for pay television services, cable and other subscription programming, which includes all such companies generating $12.5 million or less in annual receipts.[35] This definition includes MDS and thus applies to MDS licensees that did not participate in the MDS auction. Information available to us indicates that there are approximately 392 incumbent MDS licensees that do not generate revenue in excess of $11 million annually. Therefore, we estimate that there are at least 440 (392 pre-auction plus 48 auction licensees) small MDS providers as defined by the SBA and the Commission's auction rules which may be affected by the rules adopted herein. In addition, limited preliminary census data for 2002 indicate that the total number of cable and other program distribution companies increased approximately 46 percent from 1997 to 2002.[36]

14. *Instructional Television Fixed Service*. The established rules would also apply to Instructional Television Fixed Service (ITFS) facilities operated as part of a wireless cable system. The SBA definition of small entities for pay television services also appears to apply to ITFS.[37] There are presently 2,032 ITFS licensees. All but 100 of these licenses are held by educational institutions. Educational institutions are included in the definition of a small business.[38] However, we do not collect annual revenue data for ITFS licensees, and are not able to ascertain how many of the 100 non-educational licensees would be categorized as small under the SBA definition. Thus, we tentatively conclude that at least 1,932 are small businesses and may be affected by the established rules.

15. *Satellite Telecommunications and Other Telecommunications*. The Commission has not developed a small business size standard specifically for providers of satellite service. The appropriate size standards under SBA rules are for the two broad categories of Satellite Telecommunications and Other Telecommunications. Under both categories, such a business is small if it has $12.5 million or less in average annual receipts.[39] 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.[40] 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.

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[33] 47 C.F.R. § 21.961(b)(1).

[34] *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).

[35] 13 C.F.R. § 121.201, NAICS code 515210.

[36] *See supra* note 25.

[37] 13 C.F.R. § 121.201, NAICS code 515210.

[38] 5 U.S.C. § 601(3).

[39] 13 C.F.R. § 121.201, NAICS codes 517410 and 517910.

[40] 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).

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."[41] 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. In today's *Order*, we have taken steps to advance our public safety mission by adopting rules that expand the reach of EAS, as currently constituted, to cover the following digital communications technologies: digital television and radio, digital cable, and satellite television and radio.

18. As indicated above, we have revised our EAS rules to make them apply to DTV broadcasters. The *Order* requires that DTV broadcasters comply with our Part 11 rules.[42] Thus, DTV broadcasters must participate in all national EAS activations. Participation in state and local EAS activations will remain voluntary, but if DTV broadcasters choose to transmit state and local EAS messages they must comply with the Commission's Part 11 rules governing those messages. Essentially, DTV providers will now have the same EAS obligations as analog television broadcasters. In addition, the *Order* requires that, when DTV broadcasters participate in EAS activations, they must provide the EAS message to viewers of all program streams.[43]

19. We have revised our EAS rules to require digital cable systems to participate in national level EAS activations. Digital cable systems will now have the same EAS obligations as analog cable systems.[44] Participation in state and local EAS activations will continue to be voluntary, but digital cable systems that choose to participate must comply with the Part 11 rules. The *Order* requires that digital cable systems with fewer than 5,000 subscribers must, like analog and wireless cable systems with fewer than 5,000 subscribers, provide a video interruption and an audio alert message on all channels and the EAS message on at least one channel.[45]

20. We also have revised our EAS rules to make them apply to digital audio broadcasting (DAB) providers. The *Order* requires DAB providers to air all national EAS messages.[46] Participation in state and local EAS activations will be voluntary, as it is for analog radio broadcasters. If DAB providers choose to participate in state and local EAS activations, they must comply with Part 11 of our rules. DAB providers will now have the same EAS obligations as analog radio broadcasters. The *Order* also requires DAB providers to transmit all EAS messages that they air on all audio streams.[47]

21. We have revised our EAS rules to require that all Satellite Digital Audio Radio Service

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

[42] *See supra Order* at para. 21.

[43] *Id*. at para. 23.

[44] *Id* at para. 30.

[45] *Id*. at para. 32.

[46] *Id*. at para. 36.

[47] *Id*.

(SDARS) licensees participate in EAS in its current form. The *Order* requires SDARS licensees to transmit national level EAS messages on all channels.[48] We also strongly encourage SDARS licensees to have the ability to receive EAS alerts from state and local emergency managers and the ability to disseminate state and local EAS warnings on any local traffic and weather channels that the SDARS licensees provide. We have required SDARS licensees to inform their customers of the channels that will and will not supply state and local EAS messages. This information should be provided on the SDARS licensee's website and should also be distributed in writing to customers at least annually.

22. In addition, in order to ensure that Direct Broadcast Satellite (DBS) subscribers receive an EAS message from the President in the event of a national emergency, we have revised our EAS rules to require that DBS providers participate in national EAS activations.[49] For purposes of this *Order*, DBS providers include the entities set forth in section 25.701(a) of the Commission's rules.[50] The *Order* permits DBS providers to determine the method they will use to distribute EAS messages to viewers, as long as all viewers receive the national EAS message on the channel they are watching. We note that SBCA commented that DBS providers need additional development time to participate in national EAS activations. SBCA focuses on the technical and operational difficulties involved in investing in new hardware and software, but has provided no cost estimate.[51] However, DIRECTV commented that it was prepared to commit the assets to develop the systems and procedure necessary to deliver National EAS.[52] We have determined that the public safety benefit that would result from imposing a timely public alert and warning obligation on DBS providers far outweighs the burdens to such providers from implementing these new requirements.

23. Although participation in state and local EAS activations remains voluntary, we have required DBS providers to pass through all EAS messages aired on local channels to subscribers receiving those channels so that subscribers viewing local channels through DBS services will receive all EAS messages transmitted over those local channels. We have also required DBS providers to be capable of receiving (from state and local emergency managers) and distributing state and local EAS messages or they must disclose their inability to do on their website and in writing to their customers at least annually.[53]

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[48] *Id*. at para. 43.

[49] *Id.* at para. 53.

[50] *See* 47 C.F.R. § 25.701(a). For purposes of this *Order* we use the definition of DBS providers set forth in this section of our rules. Accordingly, DBS providers include: (1) entities licensed to operate satellites in the 12.2 to 12.7 GHz DBS frequency bands; (2) entities licensed to operate satellites in the Ku band fixed satellite service (FSS) and that sell or lease capacity to a video programming distributor that offers service directly to consumers providing a sufficient number of channels so that four percent of the total applicable programming channels yields a set aside of at least one channel of non commercial programming pursuant to section 25.701(e) of the Commission's rules, or (3) non U.S. licensed satellite operators in the Ku band that offer video programming directly to consumers in the United States pursuant to an earth station license issued under part 25 of this title and that offer a sufficient number of channels to consumers so that four percent of the total applicable programming channels yields a set aside of one channel of non commercial programming pursuant to section 25.701(e) of the Commission's rules. *See* 47 C.F.R. § 25.701(a).

[51] *See* SBCA Comments at 3-4 (stating that "DBS operators could, with sufficient lead time, participate in the national EAS system, although in a manner that would look very different than the EAS message formats currently prescribed for cable operators and broadcasters. But that such participation would entail technical and operational difficulties – including potential interference with more useful local broadcast EAS information.").

[52] *DIRECTV Ex Parte Comments* at 2-3.

[53] *See supra* Appendix B, 47 C.F.R. § 11.55(a)(2).

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

24. The RFA requires an agency to describe any significant alternatives that it has considered in developing its approach, which may include the following four alternatives (among others): "(1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance and reporting requirements under the rule for such small entities; (3) the use of performance rather than design standards; and (4) an exemption from coverage of the rule, or any part thereof, for such small entities."[54]

25. The *EAS NPRM* invited comments on a number of alternatives to the imposition of EAS obligations on the digital communications technologies discussed in this *Order* that are increasingly being used by the American public. For example, the *EAS NPRM* specifically sought comment on the technical alternatives to providing EAS messages. In particular, the *EAS NPRM* sought comment on whether the EAS system could 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? What technologies should serve as the basis for such a model? Alternatively, should EAS requirements be extended to other services such as cellular telephones?[55]

26. The Commission has considered each of the alternatives described above, and in today's *Order* imposes minimal regulation on small entities to the extent consistent with our goal of advancing our public safety mission by adopting rules that expand the reach of EAS. The affected service providers have generally expressed their willingness to cooperate in a national warning system, and we anticipate that this addition of new providers to EAS can be accomplished swiftly and smoothly. We believe that the benefits of requiring DTV, DAB, digital cable, DBS and SDARS providers to participate in the current EAS far outweigh any burdens associated with implementing these requirements. EAS represents a significant and valuable investment that is able to provide effective alert and warning during the time that new, digitally-based public alert and warning systems are being developed. We agree with those commenters who argue that EAS should remain an important component of any future alert and warning system. Further, in most cases, the digital platforms affected by this *Order* either have in place the ability to distribute EAS warnings, or can do so in a reasonable amount of time and with minimal cost. As we have indicated above, we will continue, along with other agencies and industry, to explore ways in which emergency information might be made available in an efficient, effective, and technologically current fashion.

27. **Report to Congress:** The Commission will send a copy of the *Order*, including this FRFA, in a report to be sent to Congress and the Government Accountability Office pursuant to the Congressional Review Act.[56] In addition, the Commission will send a copy of the *Order*, including this FRFA, to the Chief Counsel for Advocacy of the SBA. A copy of the *Order* and FRFA (or summaries thereof) will also be published in the Federal Register.[57]

[54] 5 U.S.C. § 603(c)(1) – (c)(4).

[55] *See EAS NPRM*, 19 FCC Rcd at 15776, para. 4.

[56] *See* 5 U.S.C. § 801(a)(1)(A).

[57] *See* 5 U.S.C. § 604(b).

APPENDIX E
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 Further Notice of Proposed Rulemaking *(Further Notice)*. Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the *Further Notice* provided in Section IV of the item. The Commission will send a copy of the *Further Notice*, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).[2] In addition, the *Further Notice* and IRFA (or summaries thereof) will be published in the Federal Register.[3]

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

2. Today's *Order*, which accompanies the *Further Notice*, is the Commission's first step to ensure that digital media is capable of receiving and disseminating EAS messages. In the *Order*, the Commission realized the immediate objective of ensuring that the large and growing segments of the population who rely on digital radio and television technologies are not left without access to alerts in the event of an emergency. Although the current EAS performs a critical function, the Commission believes it could be improved. An accurate, wide-reaching public alert and warning system is critical to the public safety and a vital part of the Commission's core mission to promote the safety of life and property through a robust communications system. The Commission believes that such a system should be technologically up-to-date, should have built-in redundancy features, and should use a variety of communications media to allow officials at the national, state and local levels to send messages to reach the greatest number of citizens in the affected areas in the most effective and efficient manner possible.

3. Accordingly, the Commission is initiating this *Further Notice* to seek additional comment on what actions the Commission, along with our Federal, State and industry partners, should take to help expedite the development of a robust, state-of-the-art, digitally-based public alert and warning system. The Commission also seeks comment on the appropriate role for the Commission among the various government and industry entities that are involved in the creation of this system. In their comments, parties should also comment on the Commission's statutory authority to regulate such a system.

4. The comments filed in response to the EAS Notice of Proposed Rulemaking (*EAS NPRM*) reveal a multitude of technical approaches to a digital alert and warning system, from specific approaches to individual technologies to broad approaches to architecture and protocol design. The Commission does not seek to duplicate that significant effort, but rather seeks comment on a representative group of issues. The issues on which comment is sought do not constitute an exclusive list. Parties can – and should – comment on any issues relevant to specific technologies that can aid the development of a next-generation alert and warning system.

[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.*

5. Specifically, the Commission seeks comment on the appropriate role for the Commission in developing system architecture and common protocols that could be used for message distribution across different platforms. The Commission also asks questions specific to particular technologies, such as how DTH and SDARS could deliver local alerts; how best to involve wireless providers; and whether traditional wireline telephone companies that become content providers should have an obligation to provide alerts. To ensure that the American public receives public alert and warning in an accurate and timely fashion from this next-generation system, the Commission seeks comment whether it will need to adopt performance standards and reporting requirements.

6. The Commission also seeks comment regarding how it may, consistent with the *Order* adopted today, make EAS alerts more accessible to people with disabilities. The Commission is committed to ensuring that persons with disabilities have equal access to public warnings and are considered in emergency preparedness planning. The Commission notes that it previously sought comment on whether there are disparities in or conflicts between the EAS rules and the Commission's other disability access rules contained in section 79.2, and if so, the manner in which such disparities or conflicts could be resolved in subsequent rules. The Commission notes comments filed on this issue, and asks whether it should revise the EAS rules to require all video programming distributors subject to the Commission's EAS rules to provide the same information in both the visual and aural versions of all EAS messages, instead of only the header code information that EAS participants now provide visually or the critical details of the emergency information as required by section 79.2. Further, the Commission asks whether the EAS rules should require EAS participants to provide an audio feed that duplicates any text portion of an EAS alert. Finally, the Commission seeks comment on how any next-generation, digitally-based alert and warning system can be developed in a manner that assures that persons with disabilities will be given equal access to alert and warning as other Americans.

7. The Commission recognizes the historic and important role of states and localities in public safety matters, and the essential role of states and localities in public safety matters, and the essential role that state and local governments play in delivering alert and warning. Accordingly, the Commission seeks comment on how it can best work with the states to help implement the EAS rules adopted in the *Order* as well as to develop the next generation of alert and warning systems. In particular, the Commission notes that there is a vital connection between state and local alert and warning and Federal efforts to mitigate disasters. The Commission seeks comment on whether its rules should be revised to require that states notify the Commission of any changes in EAS participants' state EAS Local Area and/or EAS designation (PEP, LP1, LP2, SR, LR, etc.) within thirty days of such change, and in the absence of a change, a yearly confirmation that all state EAS Local Area and EAS designations remain the same.

8. On September 22, 2005, the Independent Spanish Broadcasters Association, the Office of Communication of the United Church of Christ, Inc., and the Minority Media and Telecommunications Council filed a Petition for Immediate Relief with the Commission proposing changes to the Commission's EAS rules to require stations to air EAS messages in other languages in addition to English. The Commission seeks comment on the issues raised in the petition and, for that purpose, incorporates the petition as well as the other pleadings filed in response to the petition into the record of this proceeding. The Commission seeks comment on how this proposal would be implemented, and seeks comment on any other proposals regarding how to best alert non-English speakers.

B. Legal Basis

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

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

10. The RFA directs agencies to provide a description of, and, where feasible, an estimate of, the number of small entities that may be affected by the rules adopted herein.[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]

11. A small organization is generally "any not-for-profit enterprise which is independently owned and operated and is not dominant in its field."[8] Nationwide, as of 2002, there were approximately 1.6 million small organizations.[9] The term "small governmental jurisdiction" is defined as "governments of cities, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand."[10] As of 1997, there were approximately 87,453 governmental jurisdictions in the United States.[11] This number includes 39,044 county governments, municipalities, and townships, of which 37,546 (approximately 96.2%) have populations of fewer than 50,000, and of which 1,498 have populations of 50,000 or more. Thus, we estimate the number of small governmental jurisdictions overall to be 84,098 or fewer. Nationwide, there are a total of approximately 22.4 million small businesses, according to SBA data.[12]

12. *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.[13] Business concerns included in this industry are those "primarily engaged in broadcasting images together with sound."[14] According to Commission staff review of BIA Publications, Inc. Master Access

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[4] 5 U.S.C. § 604(a)(3).

[5] 5 U.S.C. § 601(6).

[6] 5 U.S.C. § 601(3) (incorporating by reference the definition of "small-business concern" in the Small Business Act, 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register." 5 U.S.C. § 601(3).

[7] 15 U.S.C. § 632.

[8] 5 U.S.C. § 601(4).

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

[10] 5 U.S.C. § 601(5).

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

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

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

[14] Office of Management and Budget, North American Industry Classification System: United States, 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

(continued....)

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[15] must be included.[16] 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).[17] Given the nature of this service, we will presume that all LPTV licensees qualify as small entities under the SBA size standard.

13. *Radio Stations.* The proposed rules and policies potentially will apply to all AM and commercial FM radio broadcasting licensees and potential licensees. The SBA defines a radio broadcasting station that has $6 million or less in annual receipts as a small business.[18] A radio broadcasting station is an establishment primarily engaged in broadcasting aural programs by radio to the public.[19] Included in this industry are commercial, religious, educational, and other radio stations.[20] Radio broadcasting stations which primarily are engaged in radio broadcasting and which produce radio program materials are similarly included.[21] However, radio stations that are separate establishments and are primarily engaged in producing radio program material are classified under another NAICS number.[22] According to Commission staff review of BIA Publications, Inc. Master Access Radio Analyzer Database on March 31, 2005, about 10,840 (95%) of 11,410 commercial radio stations have revenue of $6 million or less. We note, however, that many radio stations are affiliated with much larger corporations having much higher revenue. Our estimate, therefore, likely overstates the number of small entities that might be affected by our action.

14. *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.[23] According to Census Bureau data for 1997, in this category there was a total of 1,311 firms that operated for the entire year.[24] Of this total, 1,180 firms had annual receipts of under $10

(...continued from previous page)
external sources." Separate census categories pertain to businesses primarily engaged in producing programming. *Id*. at 502-05, NAICS code 512120, Motion Picture and Video Production; NAICS code 512120, Motion Picture and Video Distribution; NAICS code 512191, Teleproduction and Other Post-Production Services; and NAICS code 512199, Other Motion Picture and Video Industries.

[15] "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).

[16] "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).

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

[18] *See* 13 C.F.R. § 121.201, NAICS code 515112 (changed from 513112 in Oct. 2002).

[19] *Id*.

[20] *Id*.

[21] *Id*.

[22] *Id*.

[23] 13 C.F.R. § 121.201, NAICS code 517510 (formerly 513220).

[24] 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).

million, and an additional 52 firms had receipts of $10 million to $24,999,999.[25] Thus, under this size standard, the majority of firms can be considered small. In addition, limited preliminary census data for 2002 indicate that the total number of cable and other program distribution companies increased approximately 46 percent from 1997 to 2002.[26]

15. *Cable System Operators (Rate Regulation Standard)*. The Commission has developed its own small business size standard for cable system operators, for purposes of rate regulation. Under the Commission's rules, a "small cable company" is one serving fewer than 400,000 subscribers nationwide.[27] We have estimated that there were 1,439 cable operators who qualified as small cable system operators at the end of 1995.[28] Since then, some of those companies may have grown to serve over 400,000 subscribers, and others may have been involved in transactions that caused them to be combined with other cable operators. Consequently, the Commission estimates that there are now fewer than 1,439 small entity cable system operators that may be affected by the rules and policies proposed herein.

16. *Cable System Operators (Telecom Act Standard)*. The Act also contains a size standard for small cable system operators, which is "a cable operator that, directly or through an affiliate, serves in the aggregate fewer than 1 percent of all subscribers in the United States and is not affiliated with any entity or entities whose gross annual revenues in the aggregate exceed $250,000,000."[29] The Commission has determined that there are 67,700,000 subscribers in the United States.[30] Therefore, an operator serving fewer than 677,000 subscribers shall be deemed a small operator, if its annual revenues, when combined with the total annual revenues of all its affiliates, do not exceed $250 million in the aggregate.[31] Based on available data, the Commission estimates that the number of cable operators serving 677,000 subscribers or fewer, totals 1,450.[32] The Commission neither requests nor collects information on whether cable system operators are affiliated with entities whose gross annual revenues exceed $250 million,[33] and therefore are unable, at this time, to estimate more accurately the number of cable system

[25] *Id*.

[26] *See* U.S. Census Bureau, 2002 Economic Census, Industry Series: Information, Table 2, Comparative Statistics for the United States (1997 NAICS Basis): 2002 and 1997, NAICS code 513220 (issued Nov. 2004). The preliminary data indicate that the total number of "establishments" increased from 4,185 to 6,118. In this context, the number of establishments is a less helpful indicator of small business prevalence than is the number of "firms," because the latter number takes into account the concept of common ownership or control. The more helpful 2002 census data on firms, including employment and receipts numbers, will be issued in late 2005.

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

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

[29] 47 U.S.C. § 543(m)(2).

[30] *See FCC Announces New Subscriber Count for the Definition of Small Cable Operator*, Public Notice, DA 01-158, 16 FCC Rcd 2225 (rel. Jan. 24, 2001).

[31] 47 C.F.R. § 76.901(f).

[32] *See FCC Announces New Subscriber Count for the Definition of Small Cable Operators*, Public Notice, DA 01-158, 16 FCC Rcd 2225 (rel. Jan. 24, 2001).

[33] The Commission does receive such information on a case-by-case basis if a cable operator appeals a local franchise authority's finding that the operator does not qualify as a small cable operator pursuant to section 76.901(f) of the Commission's rules. *See* 47 C.F.R. § 76.909(b).

operators that would qualify as small cable operators under the size standard contained in the Act.

17. *Multipoint Distribution Systems*. The established rules apply to Multipoint Distribution Systems (MDS) operated as part of a wireless cable system. The Commission has defined "small entity" for purposes of the auction of MDS frequencies as an entity that, together with its affiliates, has average gross annual revenues that are not more than $40 million for the preceding three calendar years.[34] This definition of small entity in the context of MDS auctions has been approved by the SBA.[35] 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.

18. MDS also includes licensees of stations authorized prior to the auction. As noted above, the SBA has developed a definition of small entities for pay television services, cable and other subscription programming, which includes all such companies generating $12.5 million or less in annual receipts.[36] This definition includes MDS and thus applies to MDS licensees that did not participate in the MDS auction. Information available to us indicates that there are approximately 392 incumbent MDS licensees that do not generate revenue in excess of $11 million annually. Therefore, we estimate that there are at least 440 (392 pre-auction plus 48 auction licensees) small MDS providers as defined by the SBA and the Commission's auction rules which may be affected by the rules adopted herein. In addition, limited preliminary census data for 2002 indicate that the total number of cable and other program distribution companies increased approximately 46 percent from 1997 to 2002.[37]

19. *Instructional Television Fixed Service*. The established rules would also apply to Instructional Television Fixed Service (ITFS) facilities operated as part of a wireless cable system. The SBA definition of small entities for pay television services also appears to apply to ITFS.[38] There are presently 2,032 ITFS licensees. All but 100 of these licenses are held by educational institutions. Educational institutions are included in the definition of a small business.[39] However, we do not collect annual revenue data for ITFS licensees, and are not able to ascertain how many of the 100 non-educational licensees would be categorized as small under the SBA definition. Thus, we tentatively conclude that at least 1,932 are small businesses and may be affected by the established rules.

20. *Wireless Service Providers*. The SBA has developed a small business size standard for wireless small businesses within the two separate categories of Paging[40] and Cellular and Other Wireless Telecommunications.[41] Under both SBA categories, a wireless business is small if it has 1,500 or fewer

[34] 47 C.F.R. § 21.961(b)(1).

[35] *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).

[36] 13 C.F.R. § 121.201, NAICS code 515210.

[37] *See supra* note 26.

[38] 13 C.F.R. § 121.201, NAICS code 515210.

[39] 5 U.S.C. § 601(3).

[40] 13 C.F.R. § 121.201, NAICS code 517211.

[41] 13 C.F.R. § 121.201, NAICS code 517212.

employees. According to Commission data,[42] 1,012 companies reported that they were engaged in the provision of wireless service. Of these 1,012 companies, an estimated 829 have 1,500 or fewer employees and 183 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 data, 437 carriers reported that they were engaged in the provision of wireless telephony.[43] We have estimated that 260 of these are small businesses under the SBA small business size standard.

21. *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.[44] 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.[45] These small business size standards, in the context of broadband PCS auctions, have been approved by the SBA.[46] 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.[47] On March 23, 1999, the Commission reauctioned 155 C, D, E, and F Block licenses; there were 113 small business winning bidders.[48] On January 26, 2001, the Commission completed the auction of 422 C 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.[49] 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.[50]

22. *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

[42] FCC, Wireline Competition Bureau, Industry Analysis and Technology Division, Trends in Telephone Service at Table 5.3 (June 2005) (*Trends in Telephone Service*). This source uses data that are current as of October 1, 2004.

[43] *Id*. Table 5.3, page 5-5.

[44] *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, 7850-52, paras. 57-60 (1996) (*Broadband PCS Report and Order*); *see also* 47 C.F.R. § 24.720(b).

[45] *See Broadband PCS Report and Order*, 11 FCC Rcd at 7852, para. 60.

[46] *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.

[47] FCC News, *Broadband PCS, D, E and F Block Auction Closes*, No. 71744 (rel. Jan. 14, 1997).

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

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

[50] In addition, we note that, as a general matter, the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service. Also, the Commission does not generally track subsequent business size unless, in the context of assignments or transfers, unjust enrichment issues are implicated.

communications business having 1,500 or fewer employees), and "is not dominant in its field of operation."[51] 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.[52] 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.[53] According to Commission data,[54] 1,303 carriers have reported that they are engaged in the provision of incumbent local exchange services. Of these 1,303 carriers, an estimated 1,020 have 1,500 or fewer employees and 283 have more than 1,500 employees. Consequently, the Commission estimates that most providers of incumbent local exchange service are small businesses that may be affected by our proposed rules.

23. *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.[55] According to Commission data,[56] 769 carriers have reported that they are engaged in the provision of either competitive access provider services or competitive local exchange carrier services. Of these 769 carriers, an estimated 676 have 1,500 or fewer employees and 93 have more than 1,500 employees. In addition, 12 carriers have reported that they are "Shared-Tenant Service Providers," and all 12 are estimated to have 1.500 or fewer employees. In addition, 39 carriers have reported that they are "Other Local Service Providers." Of the 39, an estimated 38 have 1,500 or fewer employees and one has more than 1,500 employees. Consequently, the Commission estimates that most providers of competitive local exchange service, competitive access providers, "Shared-Tenant Service Providers," and "Other Local Service Providers" are small entities that may be affected by our proposed rules.

24. *Satellite Telecommunications and Other Telecommunications*. The Commission has not developed a small business size standard specifically for providers of satellite service. The appropriate size standards under SBA rules are for the two broad categories of Satellite Telecommunications and Other Telecommunications. Under both categories, such a business is small if it has $12.5 million or less in average annual receipts.[57] For the first category of Satellite Telecommunications, Census Bureau data

[51] 15 U.S.C. § 632.

[52] 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).

[53] 13 C.F.R. § 121.201, NAICS code 517110.

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

[55] 13 C.F.R. § 121.201, NAICS code 517110.

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

[57] 13 C.F.R. § 121.201, NAICS codes 517410 and 517910.

for 1997 show that there were a total of 324 firms that operated for the entire year.[58] 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.

25. 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."[59] 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

26. There are potential reporting or recordkeeping requirements proposed in this *Further Notice*, particularly with regard to state and local EAS participation and participation by digital broadcasters. For example, the Commission is considering whether to adopt performance standards and reporting obligations for EAS participants.[60] The proposals set forth in this *Further Notice* are intended to advance our public safety mission and enhance the performance of the EAS while reducing regulatory burdens wherever possible.

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

27. The RFA requires an agency to describe any significant alternatives that it has considered in developing its approach, which may include the following four alternatives (among others): "(1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance and reporting requirements under the rule for such small entities; (3) the use of performance rather than design standards; and (4) an exemption from coverage of the rule, or any part thereof, for such small entities."[61]

28. The *EAS NPRM* invited comments on a number of alternatives to the imposition of EAS obligations on the digital communications technologies. The Commission has considered each of those comments and in today's *Order* imposes minimal regulation on small entities to the extent consistent with our goal of advancing our public safety mission by adopting rules that expand the reach of EAS. We believe that requiring DTV, DAB, digital cable, DBS and SDARS providers to install and use EAS equipment will not impose undue regulatory or financial burdens.

29. This *Further Notice* seeks additional comment to help expedite the development of a robust, state-of-the-art, digitally-based public alert and warning system, and to further minimize the

[58] 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).

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

[60] *See, e.g.*, *supra Further Notice,* at para. 72.

[61] 5 U.S.C. § 603(c)(1) – (c)(4).

impact on small entities. In particular, we seek comment on how DTH and SDARS could deliver local alerts; how best to involve wireless providers; and how the Commission can best work with the states to help implement the EAS rules adopted in today's *Order* as well as to develop the next generation of alert and warning systems. We note that we sought specific comment concerning possible alternatives in our approach toward small entities in the context of making EAS accessible to persons with disabilities.[62]

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

30. None.

[62] *See supra Order*, at paras. 74-80.

STATEMENT OF
CHAIRMAN KEVIN J. MARTIN

Re: Review of the Emergency Alert System, First Report and Order and Further Notice of Proposed Rulemaking, EB Docket No. 04-296

Today, we take the important step of applying the emergency alert system (EAS) rules to digital media. We also continue our work to improve upon the current system.

Congress has charged the Commission with promoting the safety of life and property through the use of wire and radio communication. To fulfill this important directive, the Commission has developed EAS, a national warning system. While this system performs a critical function in ensuring public safety, it was developed in 1994 and relies on the delivery of alerts and warnings through analog radio and television broadcast stations and cable systems. Today, however, a large and growing percentage of television viewers and radio listeners receive their programming from digital media. In this *Order*, we update our rules to require the participation of digital television and radio, digital cable, and satellite television and radio in EAS. This will ensure that all television viewers and radio listeners have access to national and/or regional public alerts and warnings in the event of an emergency.

Equally, if not more, important, is our continued work to develop a more comprehensive and more robust alert system. Hurricane Katrina (and Hurricanes Rita and Wilma) have only served to emphasize the need for a comprehensive and robust alert system that allows officials at the national, state and local levels to reach affected citizens in the most effective and efficient manner possible. This system should have built-in redundancy features. Among other things, it should incorporate the internet, which was designed by the military to be robust and contains network redundancy functionalities. The system also should take advantage of advances in technology that enable officials to reach large numbers of people simultaneously through a variety of communications media. Our work in this area is of the utmost importance. I look forward to working with my fellow Commissioners to develop a public alert and warning system that is wide-reaching and furthers the Commission's core mission of promoting public safety through a robust communications system.

STATEMENT OF
COMMISSIONER KATHLEEN Q. ABERNATHY

Re: Review of Emergency Alert System (EB Docket No. 04-296)

In the world we live in today, telecommunications is the vital link that keeps us in touch with each other and with what is going on around us. Unfortunately, the world we live in today has come to be a very dangerous place. Therefore, it is critically important for telecommunications to serve as a reliable instant messenger of news and information that we and our families need to protect ourselves in sudden emergencies.

The Order and Further Notice we adopt today help assure that kind of reliability. By expanding the Commission's Emergency Alert System requirements to the new generation of digital communications services that American families increasingly rely on -- digital broadcast radio and TV, digital cable, and direct-to-home satellite TV and radio services -- the Order advances the goal of getting lifesaving information out to those who need it. And the Further Notice looks to added ways of guaranteeing that *no* American lacks access to emergency information, that *all* technologies are appropriately tasked to help safeguard our people, and that *any* state governor wishing to do so can activate EAS warnings for disasters impacting people in one or more states.

These are excellent outcomes, and I thank the Chairman and the staff who worked so diligently to develop this item and present it to us today. I also express thanks to those in the telecommunications industry who came forward proactively with proposals on how other technologies can contribute to a seamless digital emergency alert system. These issues are discussed in the Further Notice and I look forward to receiving public comment on them.

Given the complexity of telecom regulation, many of the items the Commission votes on have to be broken down and translated to understand the good things expected to come from them. This item isn't one of them: its benefits will be real and tangible, helping to protect our safety and well-being when we are most in peril. For this reason, I fully support it and vote to approve it.

STATEMENT OF
COMMISSIONER MICHAEL J. COPPS

Re: Review of the Emergency Alert System

This Order paves the way for bringing our warning system into the digital era. There is every reason to make this a priority, from the threat of more terrorism to the continuing ravages of nature that we have endured this summer. So I am pleased that we are moving to expand EAS into the new digital technologies that so many Americans are using.

Surely it is also time to explore a more comprehensive EAS system. People today use communications devices to receive information in so many ways -- wireline, wireless, radio and television broadcasting, satellite, cable, IP technologies, and others. To make our warning systems and information dissemination as effective as possible, we need to figure out how to integrate these diverse technologies.

While the Further Notice is rather brief, I hope everyone will realize the many questions that need to be addressed as we bring the EAS into the Twenty-first century. For example, we need to make sure that *all* Americans receive emergency information, including those with disabilities and those whose primary fluency is in a language other than English. In the recent hurricanes, tens of thousands of residents whose primary language is not English lacked access to the information and warnings that others were receiving. We need to solve this problem.

Secondly, we need to realize that although EAS is a national system, it also affords state and local authorities the capability to provide emergency information on everything from weather emergencies to Amber alerts that save abducted children. So we need to decide who exactly, and at what level, can activate this system. And does it make sense that employment of the system remains voluntary in most instances?

So there is a lot to do to complete this proceeding. And we do not have the luxury of time in these efforts—terrorists and hurricanes don't wait on us. These are critical questions that are integral to our public safety and homeland security efforts. I look forward to working on this with my colleagues and with our new Bureau which I hope will be up and running soon.

SEPARATE STATEMENT OF
COMMISSIONER JONATHAN S. ADELSTEIN

Re: In the Matter of Review of the Emergency Alert System, EB Docket No. 04-296.

Not only does Section One of the Communications Act of 1934 make the Commission responsible for promoting the "safety of life and property through the use of wire and radio communication," it also charges the Commission with making communications available "to all the people of the United States, without discrimination on the basis of race, color, religion, national origin, or sex." In this item, we take a few important steps toward satisfying these important statutory obligations, but there remains some heavy lifting to do very soon.

I am pleased to support this item, as it expands the obligation to transmit Presidential-level emergency messages from analog broadcast and cable to include new distribution platforms – digital broadcast and cable, and satellite radio and television. Equally important, this item encourages the voluntary transmission of multilingual emergency information in areas where a significant proportion of the population has its primary fluency in a language other than English. Until the Commission has had an opportunity to examine this issue more fully, I strongly encourage all EAS participants to provide this important public safety service.

We cannot overemphasize the importance of disseminating emergency information in multiple languages. In New Orleans alone, it is estimated that there were more than 50,000 Spanish-speaking residents, and the only Spanish language station in the area was off-air before Hurricane Katrina even reached city limits. It stayed off the air for the next seven days. While all Gulf Coast broadcasters performed admirably – with great personal sacrifice – to provide news coverage to millions of households, some non-English speaking households may have been left in complete darkness. As set forth in Section 1 of the Communications Act, we have an obligation to address this problem.

We must find ways to ensure that all households have access to emergency warnings and alerts in a language they understand and that EAS meets the needs of individuals with hearing and vision disabilities. All of us at the Commission should closely review and consider the comments of interested parties, and engage broadcasters, minority and disability groups in a constructive dialogue with the goal of achieving a sensible consensus on multilingual emergency alert information and disability access.

In the past four years, this nation has experienced several disasters – Hurricanes Katrina and Rita, the East Coast blackout and, of course, the September 11th terrorist attacks. Noticeably unused during all of these disasters was the activation of EAS — an alert system intended to deliver Presidential-level messages only.

While these recent disasters have focused attention on ways to improve our national system, clearly, we also need to focus attention on the ability of state governments to access EAS facilities to transmit emergency information, warnings and alerts. So it's critical that we're seeking comment on whether we should require EAS participants to transmit all EAS messages issued by the Governor of the state in which they provide services. Additionally, I am pleased we are seeking comment on how best to coordinate with state and local governments to help implement the expanded EAS rules we adopt today.

A final highlight is our request for comment on the integration of new technologies, primarily wireless devices such as cell phones, pagers, and PDA's, into our current emergency response system. We seek comment, for example, on the benefits and limitations of the delivery of emergency alert messages through text-based messaging delivered by SMS or cell broadcast. While these technologies would complement, rather than replace, the current EAS, we should pay careful attention to practical

implications for underserved and rural communities. We should also consider alternative wireless technologies such as a proposal to take advantage of an existing wireless public alert service provided by the National Oceanic and Atmospheric Administration (NOAA).

We are acting on this issue with the urgency it deserves. Just last week, the Senate Commerce Committee approved legislation – the Warning, Alert, and Response Network (WARN) Act – to create an enhanced emergency alert system. The WARN Act would finance the creation of an All Hazards Alert System to deliver emergency warnings and alerts across a variety of devices, including mobile phones and Blackberry devices. While the National Program Office would be established within NOAA, the FCC along with National Institute of Standards and Technology and the Federal Emergency Management Agency would form a working group to develop this new, enhanced alert system and to prepare guidelines for the technical capabilities of the system. The Act would also give governors access to broadcast a message in their respective States.

I am pleased to support our decision to expand EAS to require, not just analog broadcast and cable, but also digital broadcast and satellite radio and television, to transmit national emergency warnings and alerts. The heavy lifting will come when we consider multilingual emergency information dissemination, greater disability access, coordination with state and local governments, and the integration of new wireless technologies into EAS. I thank the Chairman for his leadership on this matter, and I look forward to working with him and all of my colleagues on these and other EAS-related issues as quickly as possible.