6712-01

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 11

[EB Docket No. 04-296; FCC 14-93]

Review of the Emergency Alert System

AGENCY: Federal Communications Commission.

ACTION: Notice of proposed rulemaking.

SUMMARY: In this document, the Federal Communications Commission (Commission) seeks comment on proposed changes to its rules governing the Emergency Alert System (EAS) to establish a national location code for EAS alerts issued by the President amend the Commission's rules governing a national EAS test code for future nationwide tests require broadcasters, cable service providers, and other entities required to comply with the Commission's EAS rules (EAS Participants) to file test result data electronically and require EAS Participants to meet minimal standards to ensure that EAS alerts are accessible to all members of the public, including those with disabilities.

DATES: Comments are due on or before **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]** and reply comments are due on or before **[INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

ADDRESSES: Commenters may submit comments, identified by EB Docket No. 04-296 by any of the following methods:

• Federal eRulemaking Portal: http://www.regulations.gov. Follow the instructions for submitting comments.

• Federal Communications Commission's Web site: http://www.fcc.gov/cgb/ecfs/. Follow the instructions for submitting comments.

• Mail: 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 the Commission continues 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.

• People with Disabilities: Contact the Commission to request reasonable accommodations (accessible format documents, sign language interpreters, CART, *etc*.) by e-mail: FCC504@fcc.gov or phone: 202-418-0530 or TTY: 202-418-0432.

For detailed instructions for submitting comments and additional information on the rulemaking process, see the SUPPLEMENTARY INFORMATION section of this document.

FOR FURTHER INFORMATION CONTACT: Lisa Fowlkes, Deputy Bureau Chief, Public Safety and Homeland Security Bureau, at (202) 418-7452, or by email at Lisa.Fowlkes@fcc.gov. For additional information concerning the Paperwork Reduction Act information collection requirements contained in this document, contact Benish Shah at (202) 418-7866 or send an email to PRA@fcc.gov.

SUPPLEMENTARY INFORMATION: This is a summary of the Commission's Notice of Proposed Rulemaking (NPRM) in EB Docket No. 04-296, FCC 14-93, adopted on June 25, 2014, and released on June 26, 2014. The full text of this document is available for inspection and copying during normal business hours in the FCC Reference Center (Room CY-A257), 445 12th Street, SW, Washington, D.C. 20554. The complete text of this document also may be purchased from the Commission's copy contractor, Best Copy and Printing, Inc., 445 12th Street, SW, Room, CY-B402, Washington, D.C. 20554. The full text may also be downloaded at: www.fcc.gov.

Initial Paperwork Reduction Act of 1995 Analysis

This document contains proposed information collection requirements. It will be submitted to the Office of Management and Budget (OMB) for review under section 3507(d) of the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13, 109 Stat 163 (1995). The Commission, as part of its continuing effort to reduce paperwork burdens, invites the general public and OMB to comment on the information collection requirements contained in this document, as required by the PRA. Public and agency comments on the PRA proposed information collection requirements are due **[INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**. Comments should address: (a) Whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; (b) the accuracy of the Commission's burden estimates; (c) ways to enhance the quality, utility, and clarity of the

information collected; (d) ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology. In addition, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, see 44 U.S.C. 3506(c)(4), the Commission seeks specific comment on how it might "further reduce the information collection burden for small business concerns with fewer than 25 employees."

OMB Control Number: 3060-0207.

Title: Emergency Alert System Information Collection.

Form Number: Not applicable.

Type of Review: Revision of a currently approved collection.

Respondents: Business or other for–profit entities; Non-profit entities.

Number of Respondents: 27,468.

Estimated Time per Response: 3.28 hours.

Frequency of Response: Recordkeeping requirements; Reporting requirements; Third party disclosure requirement.

Obligation to Respond: Mandatory.

Total Annual Burden: 90,095 hours.

Total Annual Cost: $3,423,611.52.

Privacy Impact Assessment: No impact(s).

Nature and Extent of Confidentiality: The Commission will treat submissions pursuant to 47 CFR 11.61(a)(3) as confidential. See Review of the Emergency Alert System, EB Docket No. 04-296, Third Report and Order, 26 FCC Rcd 1460, 1485, paragraph 65 (2011).

Initial Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA), the Commission has prepared this present Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact of the proposals described in the attached NPRM on small entities. 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 in the NPRM. The Commission will send a copy of the

NPRM, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA). In addition, the NPRM and IRFA (or summaries thereof) will be published in the Federal Register.

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

2. The NPRM proposes rules to resolve problems with the EAS uncovered in the first nationwide Emergency Alert System (EAS) test conducted on November 9, 2011, and proposes further rules to evolve the paradigm for the future testing, exercise and use of the EAS to enhance the effectiveness of the EAS as an alerting tool for the public. In this NPRM, the Commission proposes that a national location code be adopted, that "six zeroes" should be that code; and that the National Periodic Test code be used to evaluate the readiness of the EAS for a live EAN. The Commission also proposes to establish a reporting requirement using an updated, online EAS test reporting system (ETRS). Finally, the Commission proposes to establish minimum standards for visual crawl speed, completeness and placement that will improve the accessibility of EAS alerts. These proposed rules will help to ensure that the EAS better protects the life and property of all Americans.

3. Specifically, the NPRM contains the following proposed rule changes, and seeks comment on each:

- Proposes to establish a national location code for EAS alerts issued by the President;
- Proposes to adopt the National Periodic Test (NPT) code that emulates the functionality of the EAN for future nationwide EAS tests;
- Proposes to require EAS Participants to file test result data electronically using a new EAS Test Reporting System (ETRS);
- Proposes to require EAS Participants to meet minimal accessibility and comprehensibility standards.

B. Legal Basis

- Authority for the actions proposed in this NPRM may be found in sections 1, 2, 4(i), 4(o), 301, 303(r), 303(v), 307, 309, 335, 403, 624(g),706, and 715 of the Communications Act of 1934, as

amended, 47 U.S.C. 151, 152, 154(i), 154(o), 301, 303(r), 303(v), 307, 309, 335, 403, 544(g), 606, and 615.

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

1. 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. The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction." In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act. 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").

2. Small Businesses, Small Organizations, and Small Governmental Jurisdictions. The rules proposed in the attached NPRM may, over time, affect small entities that are not easily categorized at present, beyond the list of representative entities listed in the subsequent paragraphs. The Commission therefore describes here, at the outset, three comprehensive, statutory small entity size standards. First, nationwide, there are a total of approximately 27.9 million small businesses, according to the SBA. In addition, a "small organization" is generally "any not-for-profit enterprise which is independently owned and operated and is not dominant in its field." Nationwide, as of 2007, there were approximately 1,621,315 small organizations. Finally, the term "small governmental jurisdiction" is defined generally as "governments of cities, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand." Census Bureau data for 2011 indicate that there were 89,476 local governmental jurisdictions in the United States. The Commission estimates that, of this total, as many as 88,506 entities may qualify as "small governmental jurisdictions." Thus, the Commission estimates that most governmental jurisdictions are small.

3. Television Broadcasting. The SBA has developed a small business sized standard for television broadcasting, which consists of all such firms having $13 million or less in annual receipts.

Business concerns included in this industry are those "primarily engaged in broadcasting images together with sound." 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. The Commission notes, however, that, in assessing whether a business concern qualifies as small under the above definition, business (control) affiliations must be included. The Commission's estimate, therefore, likely overstates the number of small entities that might be affected by the Commission's 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"). Given the local nature and power limits of this service, the Commission will presume that all LPTV licensees qualify as small entities under the SBA size standard.

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

5. 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. According to Census Bureau data for 1997, in this category there was a total of 1,311 firms that operated for the entire year. 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. 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.

6. Cable System Operators (Rate Regulation Standard). The Commission has developed its own small business size standard for cable system operators, for purposes of rate regulation. Under the Commission's Rules, a "small cable company" is one serving 400,000 or fewer subscribers nationwide. The Commission has estimated that there were 1,065 cable operators who qualified as small cable system operators at the end of 2005. 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 fewer than 1,065 small entity cable system operators that may be affected by the rules and policies proposed herein.

7. Cable System Operator (Telecom Act Standard). The Communications Act of 1934, as amended, 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." The Commission has determined that an operator serving fewer than 677,000 subscribers shall be deemed a small operator, if its annual revenues, when combined with the total annual revenues of all its affiliates, do not exceed $250 million in the aggregate. Industry data indicate that, of 1,076 cable operators nationwide, all but ten are small under this size standard. The Commission notes that the Commission neither requests nor collects information on whether cable system operators are affiliated with entities whose gross annual revenues exceed $250 million, and therefore the Commission is unable to estimate more accurately the number of cable system operators that would qualify as small under this size standard.

8. Broadband Radio Service (BRS). The proposed rules apply to Broadband Radio Service (BRS), operated as part of a wireless cable system. The Commission has defined "small entity" for

purposes of the auction of BRS frequencies as an entity that, together with its affiliates, has average gross annual revenues that are not more than $40 million for the preceding three calendar years. This definition of small entity in the context of BRS auctions has been approved by the SBA. The Commission completed its BRS auction in March 1996 for authorizations in 493 basic trading areas. Of 67 winning bidders, 61 qualified as small entities. At this time, the Commission estimates that of the 61 small business BRS auction winners, 48 remain small business licensees.

9. Cable and Other Subscription Programming. This industry comprises establishments primarily engaged in operating studios and facilities for the broadcasting of programs on a subscription or fee basis. The broadcast programming is typically narrowcast in nature (e.g., limited format, such as news, sports, education, or youth-oriented). These establishments produce programming in their own facilities or acquire programming from. The programming material is usually delivered to a third party, such as cable systems or direct-to-home satellite systems, for transmission to viewers. The SBA size standard for this industry establishes as small any company in this category which receives annual receipts of $15 million or less. Based on U.S. Census data for 2007, in that year 659 establishments operated for the entire year. Of that 659,197 operated with annual receipts of $10 million a year or more. The remaining 462 establishments operated with annual receipts of less than $10 million. Based on this data, the Commission estimates that the majority of establishments operating in this industry are small.

10. The Educational Broadband Service (EBS). The proposed rules would also apply to The Educational Broadband Service (EBS) facilities operated as part of a wireless cable system. The SBA definition of small entities for pay television services also appears to apply to EBS. 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. However, the Commission does not collect annual revenue data for EBS licensees, and are not able to ascertain how many of the 100 non-educational licensees would be categorized as small under the SBA definition. Thus, the Commission tentatively concludes that at least 1,932 are small businesses and may be affected by the established rules.

11. Incumbent Local Exchange Carriers ("LECs"). The Commission has included small incumbent LECs in this present IRFA analysis. As noted above, a "small business" under the RFA is one that, inter alia, meets the pertinent small business size standard (e.g., a telephone communications business having 1,500 or fewer employees), and "is not dominant in its field of operation." 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. The Commission has therefore included small incumbent local exchange carriers in this RFA analysis, although the Commission emphasizes 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. According to Commission data, one-thousand three-hundred and three 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 the Commission's proposed rules.

12. 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. According to Commission data, 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 the Commission's proposed rules.

13. 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. 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. 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.

14. 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." 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

- This NPRM proposes that EAS Participants submit data concerning their compliance with the EAS rules via a mandatory electronic reporting system, the Electronic Test Reporting System (ETRS). The Commission proposes that any reporting under the ETRS would be identical that required of all EAS Participants, including small entities, in the November, 2011 Nationwide EAS Test, a collection that was approved by OMB. The impact on small entities of the ETRS is consistent with their past OMB-approved practice under the EAS, and thus would impose no undue burden.

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

15. The RFA requires an agency to describe any significant, specifically small business alternatives that it has considered in reaching its proposed 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 or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) and exemption from coverage of the rule, or any part thereof, for small entities."

16. The NPRM is technologically neutral in order to enable small entities flexibility to comply with the Commission's proposed rules using EAS equipment offered by a variety of vendors. Commenters are invited to propose steps that the Commission may take to minimize any significant economic impact on small entities. When considering proposals made by other parties, commenters are invited to propose significant alternatives that serve the goals of these proposals. The Commission expects that the record will develop to demonstrate significant alternatives. In particular, the Commission expects that the record will develop to indicate whether EAS Participants who otherwise would be required to replace their EAS equipment can comply with the rules the Commission proposes by deploying an intermediary device.

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

17. None.

Synopsis of the Notice of Proposed Rulemaking

A. Scope

1. Since the first nationwide EAS test in 2011, there have been technological advances and deployments of new systems in the alerting landscape. Most relevant to EAS has been the changeover to alerting that uses the Internet-based Common Alerting Protocol (CAP). In addition to CAP implementation, beginning in April 2012, FEMA, the Commission and the wireless industry deployed the

Wireless Emergency Alert (WEA) system, which allows the public to receive geographically-targeted alerts over WEA-capable cell phones and other mobile devices. Further, the Nation's communications networks are in the midst of technology transitions which will entail fundamental and comprehensive changes in how data and voice are communicated end to end (involving virtually all aspects of the routing and coding of such communications). Many stakeholders, realizing the impact that this transition will have on the way in which consumers will be able to receive timely and accurate emergency alerts, express the need and desire to routinely test and exercise not only the EAS, but also the WEA and the entire IPAWS to ensure that Americans continue to have access to an effective emergency alert system.

2. While the Commission agrees with this assessment and understands the desire for prompt testing of these systems, the Commission believes it is imperative first to establish at the national level overarching parameters for such testing. Such an alerting paradigm would allow alert originators at the federal, state and local levels, as well as other stakeholders, to ensure that these systems are an effective and viable tool for alerting the public. Consequently, with this NPRM, the Commission continues its dialogue with federal government partners, state and local governments, communications service providers and other alerting stakeholders to achieve this result.

3. As the Commission continues this discussion, it is crucial that it first take steps to address known vulnerabilities in the EAS. In this NPRM, the Commission seeks comment on proposed rule changes designed to address two of the problems identified by the 2011 Nationwide EAS Test, specifically the lack of a national location code, and the lack of minimum comprehensibility and accessibility guidelines to ensure that the public, including those with disabilities, can clearly understand alerts provided to them. The Commission also seeks comment on whether it should adopt an electronic EAS Test Reporting System (ETRS), and how the Commission should define use of the NPT code for future nationwide tests.

B. Proposed Rule Changes Affecting Header Code Elements

1. Use of a National Location Code

4. Section 11.31(c) of the Commission's rules requires, among other things, that all EAS alert messages include a geographic location code to indicate the affected area of an emergency. The EAS rules contain a list of location codes for the States, Territories and offshore Marine Areas that EAS equipment are required to recognize. The EAS rules do not contain a location code for the entire United States. In the Third Report and Order, the Commission declined to adopt a national location code for the first nationwide EAS test out of concern that to do so would require significant reprogramming of EAS equipment. Rather, for the first test, the Bureau and FEMA elected to use the Washington, D.C. location code. Use of this code resulted in inconsistent results across the country. As detailed in the EAS Nationwide Test Report, although many EAS Participants outside of Washington, D.C. were able to process the Washington, D.C. code, some EAS Participants reported that their EAS and other network equipment rejected the "out of area" alert, and terminated the test alert partway through the transmission. In the EAS Operational Issues Public Notice, the Bureau noted the difficulties arising from the use of the Washington D.C. location code and sought comment on whether the Commission should adopt a national location code for future testing, and if so, what that code should be.

5. Most commenters, including FEMA, support adoption of a national location code to facilitate national activations and testing of the EAS. In particular, commenters overwhelmingly support the adoption of "six zeroes" (000000) as the national location code. Commenters provide an array of justifications for their position. FEMA asserts that use of the "six zeroes" location code will further harmonize the Commission's EAS rules with CAP standards, which already recognize "six zeroes" as the national location code. Trilithic adds that the addition of the "six zeroes" code for general use is a prerequisite for geo-targeting of the EAN, as EAS equipment would otherwise ignore the location codes if the event code is an EAN. NCTA states that use of "six zeroes" as the national location code will ensure that the EAN is processed and retransmitted in the same format throughout the EAS ecosystem. Sage also supports the use of "six zeroes" as the national location code, but concedes that the "DC code may have a

smaller total system cost." Only DirecTV does not support the "six zeroes" location code, stating its belief that "[r]ather than embark upon an untested approach that would rely upon a new nationwide location code . . . the Commission would be better served by continuing to use the approach taken for the Nationwide EAS Test."

6. With regard to the steps that equipment manufacturers need to take to integrate a "six zeroes" location code into their equipment, Monroe and Trilithic note that most equipment is already capable of processing "six zeroes" as the national location code either because the code is resident in the equipment, or because the software in the equipment can be upgraded to accommodate the location code. Other manufacturers note that equipment that reaches the end of its lifecycle will need to be replaced because manufacturers no longer support such equipment and will not provide the type of software upgrade necessary to activate the "six zeroes" national location code. NCTA comments that, notwithstanding the fact that the software in most of its members' EAS equipment can be upgraded to accommodate the "six zeroes" national location code, cable and other multichannel video programming distributors (MVPD) will have to upgrade various "downstream" portions of their networks to accommodate the "six zeroes" code and accurately deliver alerts.

7. Based on the comments received in response to the Bureau's EAS Operational Issues Public Notice, the Commission proposes that EAS Participants be required to have the capability to receive and process a national location code, and that "six zeroes" be designated as that code. The Commission believes that the addition of this national location code will bring additional consistency to the operation of EAS equipment in both national and local activations. In addition, the equipment and network upgrades that will enable the use of a national location code, taken in conjunction with the Commission's rules requiring that EAS equipment recognize all header codes, will prevent EAS equipment from programmatically ignoring location header codes when used with an EAN event code, thus enabling FEMA to use other specific location codes for a geo-targeted EAN should the President wish to address a particular part of the country rather than the nation as a whole. The Commission also agrees with FEMA that adoption of "six zeroes" as the national location code has the additional long-term benefit of ensuring consistency between the Commission's EAS rules and industry CAP standards, which, in turn, will

facilitate the integration of the EAS into IP-based alerting systems such as IPAWS. The Commission seeks comment on this proposal and rationale.

2. Use of the National Periodic Test Code (NPT)

8. In the Third Report and Order, the Commission chose to use the EAN for the first nationwide EAS test primarily because an EAN-based test most closely mirrored an actual alert. At that time, the Commission also acknowledged that there was value to testing the national-level EAS without using a live code, and concluded that it would consider an alternative to live code testing such as the NPT in the future. For that first test, in order to minimize confusion from the use of the live EAN code and its attendant video text crawl announcing a national emergency, EAS Participant stakeholder organizations provided "This is only a Test" slides for broadcast and MVPD EAS Participants to display during the test. Not all cable service providers were able to display the slide, and as noted in the EAS Nationwide Test Report, while the use of the EAN had been successful, some deaf and hard of hearing people had reported confusion caused by the inability of some EAS Participants to visually display the "This is only a Test" slide. The EAS Nationwide Test Report noted that one way to avoid such confusion in the future would be to use the NPT, and that "use of the NPT would allow FEMA and the FCC to conduct nationwide EAS tests without the need for an extensive public outreach campaign such as that necessary for the first nationwide EAS test."

9. In the EAS Operational Issues Public Notice, the Bureau sought comment on whether it should consider amending its rules to facilitate use of the NPT code instead of the EAN for future testing. The Bureau also sought guidance on the technical feasibility and operational requirements of an NPT activation, and whether the Commission's rules should "require that EAS messages containing the NPT code be promulgated throughout the EAS just like an EAN." In its comments, FEMA expresses a desire to use the NPT code for the next nationwide test of the EAS component of IPAWS – a test that FEMA also notes that it wishes to conduct "in the near future – but acknowledges that the EAS rules do not provide enough guidance on how EAS equipment must process the NPT. Accordingly, FEMA requests that the Commission provide such guidance, and notes its preference that the NPT be "relayed and

forwarded in the same fashion and with the same immediacy as an EAN." Other commenters agree that the NPT should be used for most nationwide EAS tests, but also believe that the NPT does not need to fully emulate the EAN duration function to be an effective test code.

10. Commenters support the use of the NPT, but most agree that requiring the NPT to emulate the EAN's priority and duration qualities will entail significantly more substantial software and hardware upgrades for EAS Participants than those required for the national location code the Commission proposes. Commenters also state that use of an NPT that fully emulates the EAN will require testing, and updates to software and standards for downstream equipment such as cable set top boxes and Digital Network Control Systems (DNCS). NCTA, in particular, notes that requiring an NPT coded test to trigger automatically, immediately upon receipt, and to last longer than two minutes would require changes to the SCTE 18 2013 standard, as well as to corresponding product specifications and system design changes that would affect the entire MVPD industry. According to NCTA, this process would take as long as three years to complete, and would be significantly more expensive than requiring the "six zeroes" location code alone.

11. According to commenters, a less expensive and more rapidly deployable method of utilizing the NPT for a national EAS test would simply be to enable the NPT as it is currently programmed in most, if not all, EAS equipment. Specifically, Sage recommends that programming EAS equipment to treat the NPT as a "normal" EAS alert would be a simpler and equally effective way to test the integrity of the links in the EAS distribution hierarchy. As the Commission noted in the Third Report and Order, although such use of the NPT would be limited to two minutes, EAS Participants could ensure mandatory carriage of the NPT by manually reprogramming their EAS equipment to automatically respond to the NPT.

12. The Commission agrees with the majority of commenters that there should be a non-EAN option for future EAS testing, and that the NPT is the obvious alternative. The Commission is aware that it must balance the need for regular testing of the EAS with a clear standard by which such tests should be conducted, and that any EAS testing rules should offer FEMA maximum flexibility to test the EAS and

the other IPAWS elements that FEMA administers. At the same time, the Commission wants to ensure that its rules provide a benefit that fully justifies the costs that implementing any proposed rules would impose on EAS Participants. Accordingly, the Commission proposes to amend its rules to create an option to use the NPT for EAS testing. That being said, the Commission is cognizant that the NPT can be tailored in different ways, with different costs and benefits. The Commission therefore seeks comment on the manner in which the NPT should be deployed for any upcoming EAS tests.

13. The Commission first seeks comment on whether it should require that the NPT be activated like any other EAS alert. This option, according to commenters, offers almost all the benefits of full EAN emulation. However, it would not test the reset functionality of EAS equipment by lasting longer than two minutes, and it would not override all other EAS alerts. An NPT event code that does not exceed two minutes in length is consistent with the existing EAS rules, as the EAN is the only event code that does not limit the duration of the alert. The Bureau currently has the delegated authority to require that EAS Participants use the NPT for future national testing, and the Bureau may exercise this authority at any time to require the NPT to be used in a nationwide EAS test in a manner consistent with the current rules, i.e., that it be treated like any other event code. Treating the NPT like any other EAS activation also would satisfy FEMA's stated desire for a test in near future, and would do so in a manner that imposes minimal costs on EAS Participants. Thus, should FEMA decide to schedule a nationwide EAS test that does not exceed two minutes in length, the Bureau may, should this issue still be pending before the Commission, require that EAS Participants reprogram their EAS equipment to automatically process the NPT.

14. The Commission also seeks comment on whether it should revise its EAS rules to define the NPT as a test code that fully emulates the EAN in all of its characteristics – particularly its priority over any other message, and its indefinite length. The Commission notes that an NPT that fully emulates the EAN would create a test environment that closely approximates real emergency conditions, thereby maximizing the information that can be derived from testing the EAS with a non-EAN option. On the other hand, it would be a far more costly option for EAS Participants, and the extra time that it would take for EAS Participants to implement an EAN-emulating NPT would preclude FEMA's ability to use such

an NPT for a test conducted in the near future. Thus, would the benefits of full emulation outweigh the costs? The Commission also seeks comment on whether a test that lasts more than two minutes is necessary. Can the question of whether EAS equipment will reset after the first two minutes of an EAN alert (or an EAN-emulating NPT test) be answered in a test bed, or does such a test require that the entire "daisy chain" linkage be involved? If a test of more than two minutes is needed, could FEMA avoid the expense of such a test by using the EAN option instead? How would the cost of conducting another EAN-based nationwide test compare with the costs of conducting a test with an NPT that fully emulates the EAN? What were the costs to EAS Participants to participate in the first nationwide EAS test, including any efforts to conduct public outreach in advance of the test? Would the costs of a new EAN-based test differ from those of the first nationwide EAS test? How would such costs compare to a test using the NPT that operates within a two minute duration, the approach suggested by some commenters? Commenters should offer specific figures and data to support their comments and should include costs of any public outreach that would be required with each type of test. The Commission also seeks comment on whether the three-year time period for full implementation of an EAN-emulating NPT, suggested by some commenters, is reasonable or necessary. Can an EAN emulating NPT be deployed in a shorter period of time? Would deploying an NPT that fully emulates the EAN increase costs fourfold, as some commenters suggest? Parties should offer specific technical and cost-based support to their comments.

C. Updated EAS Test Reporting System (ETRS)

15. In the Third Report and Order, the Commission adopted a new § 11.61(a)(3)(iv) to require that EAS Participants submit nationwide test result data to the Commission within 45 days following the test (i.e., by December 27, 2011, for the first test). EAS Participants had the option of complying with the reporting requirements either with a paper filing or through an electronic reporting system.

16. As the Bureau reported in the EAS Nationwide Test Report, over 16,000 EAS Participants submitted test result data; the vast majority chose to file electronically rather than submit paper filings. The data available from the electronic reporting system allowed the Commission to generate reports that would not have been feasible with paper filings alone. As a result of the positive response to the

electronic filing system employed in the first nationwide EAS test, the EAS Nationwide Test Report recommended that the Commission develop a new electronic reporting system and related database to expedite filing of test result data by EAS Participants. Subsequently, at its March 20, 2014 meeting, the CSRIC also recommended that the Commission adopt a federal government database to contain EAS Participants' monitoring assignments.

1. Mandating ETRS

17. EAS Participants and other stakeholders support use of an electronic reporting system to facilitate filing of EAS test result data. NAB suggests improvements, primarily the addition of a filing receipt to provide verification that the EAS Participant has successfully and timely submitted its report.

18. Based on the preference shown for the electronic filing option prior to and during the first nationwide EAS test, and on the largely positive responses to a permanent electronic filing system in general, the Commission proposes to designate in the Commission's EAS rules the ETRS (as defined below) as the primary EAS reporting system, and to require that all EAS Participants submit nationwide EAS test result data electronically via the ETRS for any future national EAS tests. As the Commission discusses in further detail below, the Commission also proposes to require EAS Participants to file ETRS Form One, the self-identifying portion of the ETRS, within one year of the effective date of the rules the Commission ultimately adopts, and to update the information that EAS Participants are required to supply in Form One on a yearly basis, and as required by any updates or waivers to EAS State Plans.

19. The ETRS adopted for the 2011 Nationwide EAS Test is comprised of the following three web-based forms: Form One asked each EAS Participant for identifying and background information, including EAS designation, EAS monitoring assignments, facility location, equipment type, and contact information, and other relevant data. Form Two asked each EAS Participant whether it received the Nationwide EAS Test alert code and, if required to do so, whether the EAS Participant propagated the alert code downstream. Form Three asked each EAS Participant to submit detailed information regarding its receipt and propagation, if applicable, of the alert code, including an explanation of any complications in receiving or propagating the code. The Commission proposes that it adopt the identical format for the

permanent ETRS, subject to the revisions it proposes below regarding filing receipts and the pre-population of the forms with identifying data already in the Commission's possession. The Commission seeks comment on this proposal and the proposed forms.

20. Based on the Bureau's experience during the first nationwide EAS test, and on stakeholder comments, the Commission also agrees that the next iteration of the ETRS should give filers the capability to review filings prior to final submission and to retrieve previous filings to correct errors. The Commission seeks comment on this proposal.

21. We further propose that EAS Participants not be required to input into the ETRS data that EAS Participants may have previously provided to the Commission elsewhere. The Commission agrees with the recent CSRIC Report that pre-populating the ETRS with data such as transmitter location, call signs, etc., that are already in the possession of the Commission would lessen the burden of filing and make the reporting process more cost effective for EAS Participants. The Commission seeks comment on what data should be included in this category. The Commission further proposes that data drawn from other systems, such as a licensing database, not be editable in the ETRS by the filer. The Commission seeks comment on these proposals.

2. State Plan Data Tables

22. The Commission next proposes that it revise its rules to integrate the identifying information provided by Form One of the new ETRS into the EAS State Plans filed pursuant to § 11.21 of the Commission's EAS rules. This rule requires that EAS State Plans include "a data table, in computer readable form, clearly showing monitoring assignments and the specific primary and backup path for EAN messages that are formatted in the EAS Protocol (specified in § 11.31), from the PEP to each station in the plan." The rules further require that such tables be combined into an FCC Mapbook that "organizes all broadcast stations and cable systems according to their State, EAS Local Area, and EAS designation." The CSRIC endorses the use of a tabular matrix for the collection of test data from EAS Participants. To date, however, the State Emergency Communication Committees (SECCs) have not been able to supply the Commission with the data necessary to populate the data tables or Mapbook.

23. In the Commission's review of the data from the first nationwide EAS test, it noted that the data from Form One of the ETRS could be used to create the required data table and the FCC Mapbook, and that both could be maintained in a dynamic, consistently updated manner. The Commission believes that using the data from the ETRS in this fashion has great value, as it transforms the ETRS from a one-time burden into a permanently useful tool that will allow the Commission and authorized state authorities to see how an EAN (or any other EAS alert) is actually propagated through the EAS architecture, and see any vulnerabilities and single points of failure in the distribution architecture before such a failure could cause real harm. Accordingly, the Commission proposes that the ETRS be maintained on a permanent basis to act as a complement to the EAS State Plans that are filed with the Commission.

D. Visual Crawl and Audio Accessibility

1. Visual Crawl

24. It is the Commission's statutory obligation, as well as longstanding Federal government and Commission policy, to ensure that all members of the public, including those with disabilities, have access to emergency alerts. The Commission's EAS rules are designed to provide such accessibility by requiring that EAS Participants deliver EAS alerts in both audio and visual form. The visual form of an EAS alert generally takes the form of a text crawl that is displayed at the top of the screen.

25. According to several comments and other feedback the Commission received, the test message transmitted during the first nationwide test was inaccessible to many consumers. For example, stakeholders note that the visual message in some of the text crawls generated for the EAN scrolled across the screen too quickly, or its font was difficult to read. Others state that "the national EAS test message did not consistently present the alert in both audio and visual formats."

26. In the EAS Operational Issues Public Notice, the Bureau noted that although the EAS rules require that EAS alerts be presented visually, the rules do not specify font size or text crawl speed. The Bureau sought comment on whether and how the Commission should address this lack of guidance. Specifically, the Bureau asked whether the Commission should encourage the development of industry

best practices, amend its EAS rules to establish minimum specifications for the presentation of EAS text crawls, or propose other solutions. The Bureau invited suggestions for how specifications could be crafted for all text crawl elements.

27. Most commenters agree that EAS alert accessibility must be improved. Some commenters emphasize the importance of equal access to information, and assert that information provided visually also should be provided audibly, and vice versa. Despite this general agreement, no party provides detailed recommendations for achieving this goal. In addition, EAS Participants and other stakeholders argue that, rather than "one size fits all" rules, the Commission should address this issue by encouraging the development of voluntary best practices either through an initiative spearheaded by the CSRIC, or by encouraging consumer groups and industry organizations to engage in joint efforts themselves. Industry stakeholders argue that text crawls are generated in multiple fashions and by various pieces of equipment other than EAS encoder/decoders. As a result, these commenters argue, the process is too "decentralized" to be encompassed within the EAS rules. Commenters also claim – without supplying specific cost data – that any Commission "one size fits all" rules would lead to "astronomical" costs because such rules would necessitate replacement of much of the multi-use hardware involved in message display.

28. We are mindful of EAS Participants' concerns about cost and the desire for flexibility in managing their technical systems. However, all members of the public should be able to receive timely and accurate EAS alerts so that they can take quick action to protect their lives as well as those of family members. It is critical, therefore, that the EAS be accessible to all members of the public, including those with disabilities. Moreover, as noted above, FEMA expresses a desire to test the EAS again in the near future. Even more importantly, a national emergency requiring activation of the EAS by the President could come at any time. In light of this, the Commission believes it is imperative that the Commission consider the option of establishing minimum accessibility requirements. In so doing, the Commission's goal is to ensure that EAS alerts are delivered in a format that is readily understood by the public and therefore can accomplish their intended impact, i.e., to warn the public about impending threats to life and property. Accordingly, as discussed below, the Commission proposes to amend its EAS rules to require minimum standards for EAS visual crawls, specifically with respect to crawl speed, completeness and

placement. The Commission seeks comment on these proposals. In addition, the Commission encourages parties representing industry and consumers, including those with disabilities to work together to develop alternative recommendations and to submit them promptly in the record for the Commission's consideration in this proceeding.

29. Crawl Speed: The Commission believes that its Commission's closed captioning rules provide a useful guide in addressing the visual crawl speed issue. Those rules require that "captions be displayed on the screen at a speed that can be read by viewers." The Commission believes that such a standard should apply to EAS alerts and thus propose to revise § 11.51(d) of the Commission's EAS rules to require that an EAS text crawl be displayed on the screen at a speed that can be read by viewers. The Commission seeks comment on this proposal. In addition, the Commission seeks comment on what might constitute "a speed that can be read by viewers," and whether the Commission should include a specific crawl speed in the EAS rules. Is there research demonstrating whether text crawls of certain word or character lengths and speeds are more or less challenging to read or comprehend? The Commission also seeks comment on a standard for non-English alerts.

30. Completeness: Under the closed captioning rules, "completeness" requires that closed captions must run from the beginning to the end of the program, to the fullest extent possible. The Commission believes that a text crawl describing the nature of the EAS alert or test should continue throughout the duration of the EAS activation. Thus, the Commission proposes to revise § 11.51(d) of the Commission's EAS rules to require that an EAS text crawl must be displayed continuously throughout the duration of any EAS activation. The Commission seeks comment on this proposal.

31. Placement: Under the Commission's closed captioning rules, captions must be "well-placed." In other words, they "shall not block other important visual content on the screen," caption font should be sized appropriately for legibility, lines of captions should not overlap one another, and captions should be adequately positioned so that they do not run off the edge of the video screen. The Commission believes that the EAS rules already contain a portion of this requirement, stating that an EAS text crawl "shall be displayed at the top of the television screen or where it will not interfere with other

visual messages." The Commission believes that adding the remainder of the closed caption placement standard to its EAS rules would address the difficulties that certain members of the public had understanding the text crawls during the first nationwide EAS test, and would do so in a manner that provides EAS Participants and other EAS stakeholders with sufficient flexibility to accommodate various broadcast and MVPD ecosystems. Accordingly, the Commission proposes that it revise § 11.51(d) of the Commission's EAS rules to incorporate the language of the closed captioning rules with respect to text crawl placement. In other words, an EAS text crawl must be displayed in a manner that (1) does not block other important visual content on the screen, (2) utilizes a text font that is sized appropriately for legibility, (3) prevents overlap of lines of text with one another, and (4) positions the text crawl adequately so it does not run off the edge of the video screen. Similarly, the Commission proposes prohibiting MVPD EAS Participants from placing crawls or other information on the video screen in a manner that would interfere with the ability of the public to read EAS crawls. The Commission seeks comment on these proposals.

2. Audio Accessibility

32. At the outset, the Commission notes that FEMA has already addressed and corrected the primary audio quality problems experienced during the first nationwide EAS test, i.e., a technical malfunction that occurred at the National Primary level that affected the underlying quality of EAS audio nationwide. Thus, its primary concern in this Section is to seek comment on how the Commission may improve the accessibility of EAS audio by taking steps to ensure that the audio and visual elements of an EAS alert convey the identical, or at a minimum, comparable text. Currently, the visual element of an EAS alert (i.e., the text crawl) is generated from header codes (location, event, etc.) that are preprogrammed into EAS equipment, whereas the audio portion may be recorded by the alert originator (e.g., the National Weather Service). Because the audio and visual elements of an EAS alert are generated from two different sources, they can differ significantly in language and detail, notwithstanding that they are describing the same event. The Commission believes that for an EAS alert to be fully accessible, the audio and visual elements should convey the same message. What steps would need to be taken to achieve this goal? For example, how would the Commission ensure that the public is able to

receive the same, i.e., comparable, information, irrespective of whether they receive the alert in an audio or visual format? In furtherance of this goal, the Commission notes that the implementation of the CAP standard enables alert message originators to include enhanced text in their messages, and that the Commission's rules require EAS Participants to utilize enhanced text, when available, for the generation of text crawls. The Commission notes that the ECIG Implementation Guide states that "[i]t is a recommended practice that the recorded audio message match the alert text display message." Should the Commission take further steps to achieve this goal?

33. We also note that text to speech (TTS) may also offer a mechanism to provide audio-visual alert message parity. TTS refers to an artificial process of converting text into human speech. Although the Commission initially declined to allow EAS equipment to use TTS software to generate the visual crawl element of an EAS alert, in the Fifth Report and Order on Reconsideration, in response to a strong record of support for TTS solutions, the Commission revised its earlier position and allowed EAS Participants to deploy text-to-speech solutions to generate the audio portion of EAS alerts. To what extent are EAS Participants currently using TTS technology to generate EAS audio? Has it proven to be an effective manner of ensuring parity between the audio and visual elements of an EAS alert? The Commission seeks comment on whether text-to-speech is sufficiently technologically advanced to become a mandatory element of the Commission's EAS Rules.

E. Proposed Effective Dates

34. Based on the record, the Commission proposes that a reasonable, minimally burdensome time for all EAS Participants to replace unsupported equipment and to perform necessary firmware upgrades and required testing to implement the proposed rules regarding the national location code, the ETRS and the Commission's proposed accessibility rules would be six months from the effective date of any rules the it may adopt as a result of this NPRM. The Commission believes that the public safety benefits of the Commission's proposed rules, plus FEMA's stated desire to conduct a further test, militates for a more rapid implementation period than commenters request. As the record indicates, most equipment and systems already have the capability to implement the Commission's proposed rules. The Commission

believes that a six month period will allow EAS Participants and equipment manufacturers to schedule any required equipment replacement, software or certification upgrades and necessary testing, and that this schedule will have minimal impact on the costs discussed in this Section. The Commission seeks comment on this proposal. The Commission notes that the record indicates that an NPT that fully emulates an EAN cannot be implemented in six months and that, if FEMA wants to have a test in such a near term, a test of more than two minutes using an NPT would not be an option. The Commission seeks comment on this view, and also seeks comment on what would be a reasonable date for compliance with the Commission's proposed rule requiring the NPT fully to emulate the EAN. For example, would a three year period from the effective date of any rules adopted as a result of this NPRM be appropriate?

F. Cost Benefit Analysis

35. In this Section, the Commission compares the expected costs that would be imposed by the Commission's proposed rules to their expected benefits and seek comment on the accuracy of these estimates. The Commission believes that the significant public safety benefit of its proposed rules far outweighs the costs associated with those rules. In particular, the Commission believes that by proposing rules that require EAS equipment to distribute alerts consistently, accessibly, and in a manner that can be accurately measured, it ensures that the public is provided with the most effective alerting system currently possible. The Commission's cost estimates are based on industry figures submitted in response to questions raised in the EAS Operational Issues Public Notice. According to these figures, the Commission anticipates that the Commission's proposed requirements would impose costs on EAS Participants in three affected areas: (1) EAS national location code and NPT in lieu of EAN for tests, (2), Electronic Test Reporting System, and (3) visual and audio accessibility. As the Commission discusses in greater detail in below, the Commission seeks comment on estimates that put the total cost for EAS Providers to implement the proposed requirements between $7.0 million and $13.6 million. With regard to benefits, the Commission estimates that the minimum expected benefit common to all of the Commission's proposed changes is $9.1M. The Commission believes all three proposed changes are essential for the EAS to function properly and thus share the common benefit of saving human lives, reducing injuries, mitigating property damage, and minimizing the disruption of the national economy.

36. Our proposed rules pertaining to the national location code and NPT, as well as those pertaining to test reporting and accessibility, will establish the baseline for a rigorous program of EAS testing and use that will allow the Commission to continue to improve the EAS. Further, the Commission's proposed rules will allow the Commission to quantify the EAS's effectiveness as a lifesaving tool, as well as its progress towards CAP compatibility, an improvement that will enhance the overall efficacy of the EAS in the future. The Commission therefore requests comment that will enable it to weigh the costs and benefits associated with these proposed rules. The Commission requests that commenters provide specific data and information, such as actual or estimated dollar figures for each specific cost or benefit addressed, including a description of how the data or information was calculated or obtained and any documentation or other support.

37. Proposed National Location Code Rules. Commenters claim that the costs associated with implementing the Commission's proposed rules regarding the national location code will include both operational costs associated with the installation, configuration, and testing of necessary software updates in EAS and related equipment, as well as capital costs associated with hardware replacement, where necessary. According to Sage and Trilithic, operational costs for most broadcaster EAS Participants will be minimal. According to NCTA, cable provider EAS Participants face additional operational costs associated with programming middleware, set-top boxes and other downstream equipment to accept the new code. Commenters agree that the costs associated with implementing the Commission's proposed rules can be reduced by bundling all required upgrades into a regularly scheduled system update. Further, EAS Participants in both the cable and broadcast industries may need to replace older EAS equipment if they are using EAS equipment that has exceeded its useful life, is no longer supported by the manufacturer, and thus cannot be upgraded to comply with the Commission's proposed rules. The Commission seeks comment on the reasonableness of this analysis and its underlying assumptions.

38. NCTA asserts that implementing the Commission's proposed rules regarding the national location code will present cable service provider EAS Participants with approximately $1.1 million in aggregated capital and operational costs for the entire cable industry. The Commission seeks comment on this assessment, and whether such costs are outweighed by the benefits of adopting the proposed national

location code. While broadcasters would not experience the operational costs that cable providers would face, there are approximately three times as many broadcast-based EAS Participant facilities as there are cable EAS Participant facilities. Accordingly, the Commission seeks comment on whether a similar $1.1 million figure would apply to the broadcast industry, including the reasonableness of this analysis and its underlying assumptions.

39. Proposed NPT rules. The costs associated with implementation of the rules the Commission proposes regarding the NPT would vary, depending on whether the NPT is deployed as a "normal" EAS alert, or whether the Commission revises its rules to implement the NPT in a manner that fully emulates an EAN. In the case of the former, the Commission seeks comment on whether the costs would be de minimis. The NPT is already present in the EAS rules and programmed into EAS equipment. As Sage notes, costs would largely be limited to those incurred by EAS Participants having to manually reprogram their EAS equipment to automatically respond to the NPT, a cost which could further be mitigated by bundling any reprogramming with that required for the national location code. Should the Commission revise its rules to define the NPT as an event code that would fully emulate the EAN, NCTA asserts that such a requirement would add approximately $3.3 million to the cost, thus totaling $4.4 million to accommodate all rules changes, and would require approximately three years, as opposed to one year, to complete. According to NCTA, these additional costs would be necessary because requiring the NPT to emulate the EAN would require the underlying SCTE 18 standard to be revised, sub-standards rewritten, EAS and MVPD downstream equipment reprogrammed, and significant testing to be undertaken. Although broadcasters in general do not have as extensive downstream facilities as do cable facilities, they do possess such facilities, and this also will be affected by the necessary standards revision. Thus, the Commission seeks comment whether the same three year time frame would also be borne by the broadcast industry. Further, and as the Commission discusses above, the greater number of broadcasters may increase their overall cost to an amount that could approximate the $4.4 million dollar cost for cable. The Commission notes, however, that costs associated with use of the NPT could be offset by savings elsewhere. For example, as the Commission discusses in paragraph 15 above, EAS Participant stakeholder organizations provided "This is only a Test" slides for broadcast and MVPD EAS

Participants to display during the test, a requirement that would be obviated were the NPT to be used. Further, as noted in the EAS Nationwide Test Report, the various stakeholders engaged in significant outreach to avoid any public confusion associated with the use of the live code EAN. The Commission seeks comment on whether all parties would incur cost savings associated with not having to conduct such "live code" test outreach, and if so, what such cost savings might be. The Commission otherwise seeks comment on the reasonableness of this analysis and its underlying assumptions.

40. Proposed ETRS Rules. Regarding the Commission's proposed ETRS rules, the Commission seeks comment on whether any costs that arise from the adoption of the ETRS, either for test reporting purposes or for integration into Commission's EAS State Plan rules will be minimal. Most of the information that the Commission proposes EAS Participants submit to the ETRS has already been populated in other FCC databases, and thus compliance with this requirement may require little further action beyond a simple review for accuracy. For the few data fields that EAS Participants would need to supply, the Commission has already determined that compliance would entail a one-time cost of approximately $125.00 per EAS Participant, a figure that has already been reviewed and approved by the Office of Management and Budget. Accordingly, the cost associated with the Commission's proposed ETRS rules may be a one-time cost of $125.00 per EAS Participant, or approximately $3.4 million in the aggregate for all EAS Participants. The Commission seeks comment on the reasonableness of this analysis and its underlying assumptions.

41. Accessibility Rules. Finally, regarding the accessibility standards that the Commission proposes, the Commission breaks these down into their two constituent elements: the visual text crawl element and the audio element. With regard to the visual text crawl element, one approach to estimating its cost would be the methodology adopted by the Commission in its Closed Captioning Order. Using this approach, the Commission calculates that text crawls might be necessary for approximately 50 hours of alerts. Thus, at a cost of $500 an hour, if the Commission were requiring EAS closed captions, the aggregate costs of the Commission's proposed visual crawl rules for all EAS Participants under this methodology could be as much as $25,000. However, EAS text crawls are not closed captions. They are largely generated automatically and employ the same or similar language for the extreme weather and

child abduction incidents that comprise the vast majority of EAS alerts, and thereby require far less time to produce. Thus, the costs associated with that proposed rule change may be de minimis, potentially far less than $25,000. The Commission seeks comment on this analysis.

42. Regarding the Commission's proposed audio accessibility rules, as the Commission discusses above, it believes that an effective way to ensure that the audio and text portions of an EAS alert are equivalent is to use CAP-based text to speech functionalities. Thus, the Commission's cost estimate for the Commission's proposed audio equivalency rule is based on the aggregate cost for all EAS Participants to employ TTS. The Commission believes that the number of EAS Participants that would need to employ hardware and/or software TTS upgrades is approximately 2,750. Given that the TTS upgrade will cost, on average, $500, the aggregate one-time cost for EAS Participants to comply with the Commission's proposed audio equivalency rules could be no more than approximately $1.4 million (i.e., 2,750 x $500 = $1,375,000). The Commission seeks comment on this analysis.

43. Comparison of total costs and benefits. The EAS must remain a resilient public alert and warning tool if it is to save lives and protect property during times of national, state, regional, and local emergencies. The Commission seeks comment on whether its proposals are the most cost-effective methods to accomplish the goal of ensuring that the EAS is sufficiently robust to perform its life saving task, or whether there are more effective means available. By aggregating the three cost components discussed above, the Commission estimates that the total cost of the Commission's proposed rules would at most be $13.6 million. One measure against which this cost can be balanced is the Department of Transportation model, which estimates the value of risk reduction, measured in terms of an expected life saved, to be $9.1 million. Under this yardstick, even two lives saved could more than offset the costs of the system upgrades imposed by the Commission's proposals. The Commission seeks comment on whether the DOT statistic is the most appropriate yardstick to measure the benefits the Commission's proposals. The Commission seeks comment on whether there is a better measure for the Commission's NPT and ETRS proposals, and if so, commenters should specify what specific measure should be used. The Commission does note, however, that none of the commenters' responding to the EAS Operational Issues Public Notice objected on the grounds that the cost of the Commission's proposed rules would be

prohibitive, or even burdensome. The Commission encourages EAS Participants and equipment manufacturers to include with their comments any data relevant to the Commission's analysis of the costs and timing involved with the implementation of its proposals.

G. OTHER ISSUES

44. The EAS Nationwide Test Report indicated that EAS equipment manufacturers had made inconsistent assumptions about whether the requirement in the EAS rules that the EAS header code must not be amended, extended or abridged without FCC authorization pertained to an EAN, and whether the "time of release" element in the header code had any impact on the requirement in the rules that an EAN be transmitted immediately upon receipt. In the EAS Operational Issues Public Notice, the Bureau sought comment on whether the unique nature of the EAN as a mandatory nationwide live alert code somehow obviated the above stated requirements. As the Commission discusses in more detail below, it finds no basis to propose rule revisions nor does it seek comment on these issues, as the rules are clear on their face and it sees no reason for changing them.

1. Acknowledgement of all EAS Header Codes

45. Section 11.31 of the Commission's EAS rules establishes the EAS protocol, a four-part message that contains the header code elements of an EAS alert. Header codes contain basic identifying information about the alert, including the identity of the message originator, the event code, the location code, the valid time period for the message, the Time of Release code, and the identification of the entity transmitting or retransmitting the message. Section 11.31(c) states that "[t]he EAS protocol, including any codes, must not be amended, extended or abridged without FCC authorization." There is no exception for EANs, and, indeed, the definition of "Emergency Action Notification (EAN)" clearly envisions that EANs can be formatted in the EAS protocol as defined in § 11.31.

46. Despite this rule, some EAS manufacturers apparently programmed their EAS equipment to ignore some of the header codes by processing those codes as "wildcards." This action resulted in a lack of uniformity in EAS message dissemination across the nation. In the EAS Operational Issues Public Notice, the Bureau sought comment on this practice, asking whether the unique nature of the EAN as a

mandatory, nationwide, live alert obviated the need for EAS equipment to acknowledge header code elements such as the location code.

47. Based on its review, the Commission finds that § 11.31 prohibits any amendment, extension or abridgement of any part of the EAS protocol, except in cases where the FCC has authorized such action. As wildcards and other shortcuts serve to "abridge" the EAS protocol, they are prohibited by the FCC rules. While the Commission recognizes that these shortcuts may have been taken to address gaps associated with the EAN (e.g., lack of a national location code), there is nothing in the rules that allows for a different result in the case of an EAN or any other type of EAS alert. Indeed, use of such programming shortcuts, in the absence of FCC authorization, undermines the effectiveness of the EAS. As several commenters note, the presence of EAS header codes enhances the reliability of the EAS ecosystem and is necessary for header validity checking, and duplicate detection. According to commenters, even in equipment that uses wildcards, if any header code element is missing from an alert, equipment currently deployed in the field will discard otherwise valid messages. Finally, the use of wildcards and other programming shortcuts also undermines EAS testing in that such actions can preclude the Commission, FEMA and other stakeholders from gaining an accurate picture of whether the EAS works in the manner contemplated by FCC rules and other standards.

2. Retransmission of EAN Immediately Upon Receipt

48. The Commission's rules require that an EAN must be broadcast "immediately" upon receipt. As the Bureau noted in its report, although FEMA initiated the alert at 2:00 p.m. EST, some EAS equipment apparently held the test alert for release until 2:03 EST, apparently because FEMA erroneously included a Time of Release code indicating 2:03 pm EST, three minutes after the scheduled start time of the test. As the EAS Nationwide Test Report indicated, this caused further delay to EAS message propagation.

49. Several of the Commission's rules make clear that the EAN must be transmitted upon receipt. No rule provides for the transmission based on the Time of Release. Simply put, under the Commission's rules, EAS equipment must transmit the EAN immediately upon receipt, regardless of the Time of Release provided by the alert originator. The Commission notes that most EAS manufacturers understand

this reading of the rule. Indeed, one commenter notes that equipment manufacturers have integrated the "transmission upon immediate release" requirement into current EAS technical standards which apply to broadcast as well as CAP-based EAS.

50. Requiring transmission of EANs immediately upon receipt is consistent with the Commission's goal of ensuring that the public has access to timely and accurate EAS alerts. As some commenters argue, any delay in processing an EAN undermines its value as a tool for the President of the United States to communicate with the American people in an emergency. Moreover, retransmitting an EAN alert immediately upon receipt is the only possible method to transmit alerts uniformly and consistently within an EAS ecosystem that is not time synchronized. Any divergence from the immediate release would have a ripple effect throughout the system that could affect the receipt of the EAN by other EAS Participants and the public.

H. PROCEDURAL MATTERS

1. Ex Parte Rules

51. The proceeding initiated by this NPRM shall be treated as "permit-but-disclose" proceedings in accordance with the Commission's ex parte rules. Persons making ex parte presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral ex parte presentations are reminded that memoranda summarizing the presentation must: (1) list all persons attending or otherwise participating in the meeting at which the ex parte presentation was made; and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter's written comments, memoranda, or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during ex parte meetings are deemed to be written ex parte presentations and must be filed consistent

with rule § 1.1206(b). In proceedings governed by rule § 1.49(f) or for which the Commission has made available a method of electronic filing, written ex parte presentations and memoranda summarizing oral ex parte presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding, and must be filed in their native format (e.g., .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission's ex parte rules.

2. Comment Filing Procedures

52. Pursuant to §§ 1.415 and 1.419 of the Commission's rules, 47 CFR 1.415, 1.419, interested parties may file comments and reply comments in response to this NPRM on or before the dates indicated on the first page of this document. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS). 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://fjallfoss.fcc.gov/ecfs2/.
- Paper Filers: Parties that choose to file by paper must file an original and one copy 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. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

  1. All hand-delivered or messenger-delivered paper filings for the Commission's Secretary must be delivered to FCC Headquarters at 445 12th St., SW, Room TW-A325, Washington, DC 20554. The filing hours are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes and boxes must be disposed of before entering the building.

2. 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.

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

3. Accessible Formats

53. 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).

4. Regulatory Flexibility Analysis

54. As required by the Regulatory Flexibility Act of 1980, see 5 U.S.C. 604, 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 A. Written public comments are requested in the IRFA. These comments must be filed in accordance with the same filing deadlines as comments filed in response to this NPRM as set forth on the first page of this document, and have a separate and distinct heading designating them as responses to the IRFA.

5. Paperwork Reduction Analysis

55. This NPRM contains proposed new or modified information collection requirements. The Commission, as part of its continuing effort to reduce paperwork burdens, invites the general public and OMB to comment on the information collection requirements contained in this document, as required by PRA. In addition, pursuant to the Small Business Paperwork Relief Act of 2002, the Commission seeks specific comment on how it might "further reduce the information collection burden for small business concerns with fewer than 25 employees."

ORDERING CLAUSES

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

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

List of subjects in 47 CFR part 11

Emergency alerting, Radio, Television.

FEDERAL COMMUNICATIONS COMMISSION.

Marlene H. Dortch,
Secretary.

For the reasons discussed in the preamble, the Federal Communications Commission proposes to amend 47 CFR part 11 to read as follows:

PART 11 – EMERGENCY ALERT SYSTEM (EAS)

1. The authority citation for 47 CFR part 11 continues to read as follows:

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

2. Amend § 11.21 by revising paragraphs (a) and (c) to read as follows:

§ 11.21 State and local area plans and FCC Mapbook.

* * * * *

(a) The State EAS Plan contains procedures for State emergency management and other State officials, the NWS, and EAS Participants' personnel to transmit emergency information to the public during a State emergency using the EAS. EAS State Plans should include a data table, in computer readable form, clearly showing monitoring assignments and the specific primary and backup path for emergency action notification ("EAN") messages that are formatted in the EAS Protocol (specified in § 11.31), from the PEP to each station in the plan. If a state's emergency alert system is capable of initiating EAS messages formatted in the Common Alerting Protocol (CAP), its EAS State Plan must include specific and detailed information describing how such messages will be aggregated and distributed to EAS Participants within the state, including the monitoring requirements associated with distributing such messages. Consistent with the requirements of paragraph (a)(3)(iv) § 11.61of this part, EAS Participants shall provide the identifying information required by Form One of the EAS Test Reporting System (ETRS) no later than 60 days after the effective date of this Subsection, and shall renew the Form One information on a yearly basis or as required by any revision of the EAS Participant's State EAS Plan filed pursuant to § 11.21.

* * * * *

(c) The FCC Mapbook is based on the consolidation of the data table required in each State EAS plan with the identifying data contained in Form One of the ETRS. The Mapbook organizes all EAS Participants according to their State, EAS Local Area, and EAS designation.

3. Amend § 11.31 by revising paragraph (f) to read as follows:

§ 11.31 EAS protocol.

* * * * *

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

	FIPS#
All U.S.	00
State:	
AL	01
AK	02
AZ	04
AR	05
CA	06
CO	08
CT	09
DE	10
DC	11
FL	12
GA	13
HI	15
ID	16
IL	17
IN	18
IA	19
KS	20
KY	21
LA	22
ME	23
MD	24
MA	25
MI	26
MN	27
MS	28
MO	29
MT	30
NE	31
NV	32
NH	33
NJ	34
NM	35
NY	36
NC	37
ND	38
OH	39
OK	40
OR	41
PA	42
RI	44

SC	45
SD	46
TN	47
TX	48
UT	49
VT	50
VA	51
WA	53
WV	54
WI	55
WY	56
Terr.:	
AS	60
FM	64
GU	66
MH	68
MH	68
PR	72
PW	70
UM	74
VI	78
Offshore Marine Areas[1]:	
Eastern North Pacific Ocean, and along U.S. West Coast from Canadian border to Mexican border	57
North Pacific Ocean near Alaska, and along Alaska coastline, including the Bering Sea and the Gulf of Alaska	58
Central Pacific Ocean, including Hawaiian waters	59
South Central Pacific Ocean, including American Samoa waters	61
Western Pacific Ocean, including Mariana Island waters	65
Western North Atlantic Ocean, and along U.S. East Coast, from Canadian border south to Currituck Beach Light, N.C	73
Western North Atlantic Ocean, and along U.S. East Coast, south of Currituck Beach Light, N.C., following the coastline into Gulf of Mexico to Bonita Beach, FL., including the Caribbean	75
Gulf of Mexico, and along the U.S. Gulf Coast from the Mexican border to Bonita Beach, FL	77
Lake Superior	91
Lake Michigan	92
Lake Huron	93
Lake St. Clair	94
Lake Erie	96
Lake Ontario	97
St. Lawrence River above St. Regis	98

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

of receiving and transmitting these marine area location codes. EAS Participants that install or replace their EAS equipment after February 1, 2004, must install equipment that is capable of receiving and transmitting these location codes.

4. Amend § 11.51 by revising paragraph (d) to read as follows:

§ 11.51 EAS code and attention signal transmission requirements.

* * * * *

(d) Analog and digital television broadcast stations shall transmit a visual message containing the Originator, Event, Location and the valid time period of an EAS message. Effective June 30, 2012, visual messages derived from CAP-formatted EAS messages shall contain the Originator, Event, Location and the valid time period of the message and shall be constructed in accordance with section 3.6 of the "ECIG Recommendations for a CAP EAS Implementation Guide, Version 1.0" (May 17, 2010), except that if the EAS Participant has deployed an Intermediary Device to meet its CAP-related obligations, this requirement shall be effective June 30, 2015, and until such date shall be subject to the general requirement to transmit a visual message containing the Originator, Event, Location and the valid time period of the EAS message. If the message is a video crawl, it shall be displayed:

(1) At the top of the television screen or where it will not interfere with other visual messages or otherwise block other important visual content on the screen,

(2) At a speed that can be read by viewers,

(3) Continuously throughout the duration of any EAS activation,

(4) In a font sized appropriately for legibility,

(5) In a manner where lines of any video crawl not overlap with one another, and are adequately positioned so they do not run off the edge of the video screen.

* * * * *

6. Amend § 11.61 by revising paragraph (a)(3)(iv) to read as follows:

§ 11.61 Tests of EAS procedures.

* * * * *

(a) * * *

(3) * * *

(iv) Test results as required by the Commission shall be logged by all EAS Participants into the EAS Test Reporting System (ETRS) as follows.

(A) EAS Participants shall provide the identifying information required by Form One initially no later than 60 days after the effective date of this Subsection, and shall renew the Form One information on a yearly basis or as required by any revision of the EAS Participant's State EAS Plan filed pursuant to § 11.21.

(B) "Day of test" data as required by Form Two shall be filed in the ETRS within 24 hours of any nationwide test or as otherwise required by the Public Safety and Homeland Security Bureau.

(C) Detailed post-test data as required by Form Three shall be filed in the ETRS within forty five (45) days following any nationwide test or as otherwise required by the Public Safety and Homeland Security Bureau.

* * * * *

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