

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

In the Matter of
Amendment of Part 11 of the Commission's Rules
Regarding the Emergency Alert System
PS Docket No. 15-94

REPORT AND ORDER

Adopted: September 29, 2022

Released: September 30, 2022

By the Commission: Chairwoman Rosenworcel and Commissioner Starks issuing separate statements.

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I. INTRODUCTION

1. In this Report and Order, we update our rules governing the Emergency Alert System (EAS) to make alert messages more informative and easier for the public to understand.

more listeners and viewers to respond to emergency situations by taking appropriate protective actions, such as evacuating or sheltering-in-place, depending on the nature of the emergency.

2. To improve the clarity and accessibility of alerts, we first facilitate the increased use of the IP-based Common Alerting Protocol (CAP) format for certain types of EAS alerts. CAP-based alerts typically provide more information than the corresponding alerts delivered in legacy format. Therefore, in this Report and Order, we direct EAS Participants (including radio broadcasters, television broadcasters, and operators of satellite, cable TV, and wireline video services) to check whether certain types of alerts are available in CAP format and, if so, to transmit the CAP version of the alert rather than the legacy-formatted version. The increased use of CAP-based alerts will produce higher-quality audio messages, improve the availability of multilingual alerts, and ensure that more of the alerts displayed on television screens contain all of the information provided by government agencies that initiate them.

3. Second, we revise the prescribed text that EAS Participants have historically been required to use to identify certain alerts regarding national emergencies and to announce EAS tests. The prior text specified by our rules incorporated technical terms that made it difficult for the public to understand the purpose of the message or who originated it. The new rules eliminate this technical jargon and replace it with plain language terms that will be more easily understood by the public. These rule changes will enable more viewers and listeners to understand EAS alert messages and take appropriate protective actions in response to emergency situations, and thus will enhance public safety.

II. BACKGROUND

4. The EAS is a national system for disseminating public warnings of impending emergencies over broadcast, cable, and satellite networks to consumers' radios, televisions, and other audio and video devices. The Commission and the Federal Emergency Management Agency (FEMA) jointly oversee both EAS and its counterpart, Wireless Emergency Alerts (WEA), which distributes alert messages over participating commercial mobile service providers' networks to consumers' mobile devices. All EAS Participants, including radio and television broadcasters, cable systems, and satellite service providers,¹ are required to transmit alert messages from the President or FEMA that are labeled with the Emergency Alert Notification (EAN) alert code used for national emergencies, also known as Presidential Alerts. They are also required to transmit nationwide EAS test messages using the National Periodic Test (NPT) code. EAS Participants transmit other types of alert messages on a voluntary basis, including messages from the National Weather Service (NWS) regarding hurricanes, floods, and other dangerous weather conditions, as well as messages regarding emergencies such as wildfires, nuclear accidents, and child abductions (AMBER alerts). The government agencies authorized to initiate EAS alerts include the President, FEMA, NWS, certain other federal agencies, and certain state, local, territorial, and Tribal emergency management and law enforcement agencies. These agencies are collectively referred to as alert originators.

5. Alert originators may transmit EAS messages to EAS Participants (for distribution to the public) either over FEMA's Internet-based platform known as the Integrated Public Alert and Warning

¹ See 47 CFR § 11.1(b) (defining "EAS Participants" as "[e]ntities required under the Commission's rules to comply with EAS rules, e.g., analog radio and television stations, and wired and wireless cable television systems, DBS, DTV, SDARS, digital cable and DAB, and wireline video systems."); 47 CFR § 11.11(a) ("The EAS is composed of analog radio broadcast stations including AM, FM, and Low-power FM (LPFM) stations; digital audio broadcasting (DAB) stations, including digital AM, FM, and Low-power FM stations; Class A television (CA) and Low-power TV (LPTV) stations; digital television (DTV) broadcast stations, including digital CA and digital LPTV stations; analog cable systems; digital cable systems which are defined for purposes of this part only as the portion of a cable system that delivers channels in digital format to subscribers at the input of a Unidirectional Digital Cable Product or other navigation device; wireline video systems; wireless cable systems which may consist of Broadband Radio Service (BRS), or Educational Broadband Service (EBS) stations; DBS services, as defined in § 25.701(a) of this chapter (including certain Ku-band Fixed-Satellite Service Direct to Home providers); and SDARS, as defined in § 25.201 of this chapter.").

System (IPAWS) using the CAP format, or over the so-called “legacy” EAS distribution system, a broadcast-based process in which messages are transmitted via audio channels and relayed from one EAS Participant to another throughout a geographic area.² EAS Participants typically receive legacy EAS messages by monitoring audio transmissions from other EAS Participants or other sources. EAS Participants receive IP-based messages transmitted over IPAWS by periodically checking an Internet-connected server (a process known as “polling”) for messages from alert originators in CAP format.³

6. Alert messages transmitted over the legacy EAS are encoded in the Specific Area Message Encoding (SAME) protocol format (developed by NWS for weather alerts) and consist of audible tones that convey header codes, a two-tone attention signal, an audio stream (typically no longer than two minutes of a person’s voice), and an end-of-message signal.⁴ The header codes identify the type of event covered by the alert, the originator of the message, and the relevant times, locations, and geographic areas. CAP-formatted alerts disseminated over the IPAWS platform can convey considerably more information than legacy EAS-based alerts in the SAME format. For example, CAP alert messages may include enhanced text with additional information, such as more detailed directions on how the public should respond to the specific emergency, information in languages other than English, picture and video files, and URLs that members of the public can follow to obtain additional textual, streaming audio, or video information. This additional information cannot be relayed when CAP alerts are converted into legacy alerts for further distribution over the legacy EAS;⁵ all data other than the header codes are lost in this conversion process.

7. To ensure that members of the public who are deaf or hard of hearing can access EAS alert messages, the Commission requires video service EAS Participants (*e.g.*, television stations, cable TV operators, and direct broadcast satellite networks) to display the messages in the form of visible, readable text on viewers’ television screens.⁶ However, the amount of information provided in text varies depending on whether the alert is transmitted in legacy or CAP format. For legacy EAS alerts, the visible text on the television screen only includes a message regarding the type and duration of the alert that the EAS Participant’s equipment automatically generates based on the alert’s header codes,⁷ and does not allow inclusion of additional information that alert originators may include in their audio messages, such as additional public safety guidance or other details. By contrast, a CAP-formatted alert can display all of

² In the legacy EAS, when an EAS Participant broadcasts an alert message, the message is received not only by that EAS Participant’s local audience but also by downstream EAS Participants that monitor the transmission, following a matrix of monitoring assignments set forth in State EAS Plans. The applicable State EAS Plan assigns each EAS Participant alert sources from which it is required to monitor alert messages that they may transmit. The EAS Participant uses specialized EAS equipment to decode the header codes in each alert message it receives and, if the alert is in a category and geographic location relevant to that entity, it will rebroadcast the alert. That rebroadcast, in turn, is received not only by that entity’s audience but also by additional downstream EAS Participants that monitor it. This process of checking and rebroadcasting the alert will be repeated until all affected EAS Participants in the relevant geographic area have received the alert and delivered it to the public.

³ See 47 CFR 11.52(e)(2); Federal Emergency Management Agency (FEMA), *EAS Participants*, <https://www.fema.gov/emergency-managers/practitioners/integrated-public-alert-warning-system/broadcasters-wireless/emergency-alert-system-participants> (last checked July 19, 2022).

⁴ See 47 CFR § 11.31.

⁵ For example, if enhanced text is included in a CAP alert, a video service EAS Participant (such as a TV broadcaster or cable system) that receives it will generate a visual message that includes not only the header code data (as is the case with legacy EAS alerts) but also that enhanced text, which might include remedial actions to avoid hazards potentially posed by the emergency event.

⁶ The messages appear as text that either “crawls” (*i.e.*, scrolls) across the top of viewers’ screens (or other device displays) or is overlaid as block text at the top of the screens.

⁷ For example, the text display for a tornado alert in legacy EAS format could appear as follows: “The National Weather Service has issued a Tornado Warning for Washington, DC, beginning at 5:30 pm and ending at 6:30 pm.”

the text provided by the alert originator without limitation. In addition, if the alert originator uses CAP formatting to send text without an audio message, EAS Participants can typically generate an identical audio message by using text-to-speech software installed in their EAS equipment.

8. On January 1, 2021, Congress adopted Section 9201 of the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021 (NDAA21), which directed the Commission to take steps intended to improve the effectiveness of EAS and WEA, improve the preparedness of the State Emergency Communications Committees (SECCs) responsible for State EAS Plans, and strengthen the FCC's oversight of the EAS and WEA systems.⁸ In June 2021, we issued a Report and Order and Further Notice of Proposed Rulemaking (referred to, respectively, as *NDAA Order* and *NDAA FNPRM*), adopting rules to implement the provisions of the NDAA21 and seeking comment on recommendations that had been made by FEMA to delete outdated references in our rules, rename certain EAS terms to make them easier for the public to understand, and update EAS capability to facilitate "persistent alerts" during certain extreme emergencies.⁹

9. In December 2021, we issued a Notice of Proposed Rulemaking and Notice of Inquiry (referred to, respectively, as *Accessibility NPRM* and *Accessibility NOI*) seeking comment on means to make emergency information clearer and easier to access by people who are deaf or hard of hearing and others who find it difficult to access audio messages.¹⁰ In particular, in the *Accessibility NPRM*, we proposed to require EAS Participants to poll the IPAWS feed when they receive a legacy state or local EAS alert message (including weather alerts) to determine whether a CAP version of the same alert is available, and if so, to process and transmit the CAP version rather than the legacy EAS version.¹¹ We also proposed to change the descriptive text prescribed for the nationwide EAS test code and to add a script to nationwide test code messages sent in legacy format that would more clearly inform recipients that the message was a test rather than an actual emergency alert.¹²

III. DISCUSSION

10. Today, we adopt changes to the EAS rules as proposed in the *NDAA FNPRM* and the *Accessibility NPRM*, with some modifications, to increase the clarity and accessibility of alerts and maintain public confidence in the EAS as a reliable source of emergency information.¹³ First, to increase

⁸ National Defense Authorization Act of 2021, Pub. L. 116-283, 134 Stat. 3388, § 9201(a) (NDAA21), *codified at* 47 U.S.C. § 1206. *See* Reliable Emergency Alert Distribution Improvement Act of 2019, H.R. Rep. No 116-582, at 2 (Nov. 16, 2020) (bill "would strengthen the [FCC's] oversight ... of communications systems transmitting emergency alerts"); Reliable Emergency Alert Distribution Improvement Act of 2019, Senate Committee Report on S. 2693, S. Rep. No. 116-240, at 1 (July 21, 2020) (bill intended "to improve [FCC] oversight ... of the wireless and broadcast emergency alert systems").

⁹ *See Amendment of the Commission's Rules Regarding the Emergency Alert System; Wireless Emergency Alerts*, PS Docket Nos. 15-91 and 15-94, 36 FCC Rcd 10694, Report and Order and Further Notice of Proposed Rulemaking (2021) (referred to, respectively, as *NDAA Order* and *NDAA FNPRM*).

¹⁰ *Amendment of the Commission's Rules Regarding the Emergency Alert System*, PS Docket No. 15-94, Notice of Proposed Rulemaking and Notice of Inquiry, FCC 21-125 (2021) (referred to, respectively, as *Accessibility NPRM* and *Accessibility NOI*).

¹¹ *Accessibility NPRM*, paras. 18-23.

¹² *Id.*, paras. 10-17, 23.

¹³ This Report and Order addresses each of the issues on which we sought comment in the *NDAA FNPRM* and the *Accessibility NPRM*. It does not address the issues raised in the *Accessibility NOI* or other accessibility recommendations submitted by commenting parties, including a coalition comprised of Telecommunications for the Deaf and Hard of Hearing, Inc. (TDI), the National Association of the Deaf (NAD), and 12 other organizations that advocate on behalf of persons with disabilities, including the deaf and hard of hearing communities (collectively, the "Accessibility Coalition"). *See, e.g.*, Accessibility Coalition Comments, *passim* (recommending several EAS

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the use of CAP-formatted alerts, we require EAS Participants to check for CAP-formatted messages when they receive state or local alert messages in legacy format, and if the same alert is available in CAP format, to relay the CAP version instead. Second, to improve message clarity, we adopt plain-language descriptions to be used in conjunction with three national alert codes: the EAN code used for Presidential messages regarding national emergencies, the NPT code used for nationwide EAS tests, and the PEP code used to specify the President or a federal agency as the alert originator. In addition, we delete the outdated National Information Center (NIC) alert code and make several conforming edits to our Part 11 rules for clarity. Finally, we decline to adopt FEMA’s “persistent alerting” proposal at this time.

A. Transmitting More Alert Messages in CAP Format

11. Our rules currently permit, but do not require, EAS Participants to check for CAP-format versions of state and local area alerts at the time they receive legacy EAS-format alerts and, if the same alert is available in both formats, to transmit the CAP version rather than the legacy EAS version.¹⁴ We are now requiring them to do so. As proposed in the *Accessibility NPRM*, we require EAS Participants, upon receiving a legacy EAS alert message, to check whether a CAP version of the same alert is available by polling the IPAWS feed for CAP-formatted EAS messages.¹⁵ If a CAP version is available, we require EAS Participants to transmit the CAP version rather than the legacy version.¹⁶ In addition, to allow sufficient time for a CAP version to appear without unduly delaying transmission of the alert, we require EAS Participants not to transmit an alert in legacy format until at least 10 seconds after receiving its header codes unless they confirm by polling the IPAWS feed that no matching CAP version of the message is available.

12. In the following sections, we discuss the benefits of the CAP polling and prioritization requirements we adopt today and explain why we disagree with parties that oppose such requirements. Next, we explain how the timing elements of the polling requirement will work and the reasons for our adoption of these provisions. Finally, we discuss how the new requirement will apply to specific types of alert codes and specific categories of EAS Participants.

1. Benefits of Requiring CAP Polling and Prioritizing CAP Messages

13. We require that, if an EAS Participant has received both a legacy EAS version and a CAP-formatted version of the same alert, it must transmit the CAP version, not the legacy EAS version. In other words, it must “prioritize” the CAP message. As we explained in the *Accessibility NPRM*, CAP-formatted alerts can relay much more data than legacy alerts, which can relay only an audio message and a limited amount of encoded data.¹⁷ EAS Participants may receive legacy and CAP alerts at different

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technical change requirements to improve alert accessibility). We intend to address those issues and recommendations in the future.

¹⁴ 47 CFR 11.52(d)(2); see *Amendment of Part 11 of the Commission’s Rules Regarding Emergency Alert System*, PS Docket No. 15-94, Report and Order, 32 FCC Rcd 10812, 10817, para. 11 (2017).

¹⁵ This requirement applies only to valid alert messages relating to event categories and locations for which the EAS Participant normally transmits such alerts pursuant to the State EAS Plan. As discussed in Section III.A.3 below, the requirement does not apply to national emergency messages (*i.e.*, alerts with the EAN event code), messages associated with national tests of the EAS (bearing the NPT code), or required weekly test messages (bearing the RWT code). See *infra* Section III.A.3.

¹⁶ *Accessibility NPRM*, paras. 18-22. See *supra* para. 4 for an explanation of this polling process.

¹⁷ See *Accessibility NPRM*, paras. 6-7; see also *supra* paras. 5-6. While a CAP message and a legacy message may differ in significant respects, we consider them to be alternative versions of the same alert – or “duplicate” alert messages – if the originator codes, event codes, and location codes in the headers of both messages are all identical, and the valid date-time codes in the headers of both messages cover approximately the same periods of time, with allowances for the different ways that messages in CAP and legacy EAS formats express valid time periods. See *infra* Appendix A (Final Rules), 47 CFR § 11.55(c)(2)(iii).

times, however, and EAS devices often process whichever version of the alert they receive first.¹⁸ Thus, under the current rules, if an EAS Participant receives the legacy version of an alert first, it might process that version and transmit it to the public even if a CAP version of the same alert arrives seconds later, leaving the potentially expanded content in the CAP version unused.

14. Requiring EAS Participants to check for CAP-formatted versions of alerts and use them, if available, will increase the proportion of alerts distributed to the public that include enhanced information. Several commenters support mandatory CAP polling and prioritization for this reason. The Accessibility Coalition, for example, comments that “[g]iven the greater capability of the CAP-based alerts, . . . a CAP-based alert should be checked for and utilized when possible. . . .”¹⁹ NCTA agrees that “[e]xpanding the use of triggered CAP polling as proposed is a positive step toward providing all Americans more reliable and accessible emergency alerts.”²⁰ Moreover, as Gary Timm points out, the requirement we are adopting would “make good on our promise to our emergency management partners” that CAP-formatted alerts will “improve the messaging available through the EAS.”²¹

15. We are not persuaded by the arguments of commenters that oppose mandated CAP polling. For example, Donald Walker argues that mandating CAP polling “would likely impose significant monetary and time costs for development on equipment manufacturers as well as . . . EAS Participants,” especially broadcasters, and that “the public safety benefits of having matching audio and text crawls [would not] outweigh[] the burden that would be placed on the industry.”²² However, Walker fails to provide any factual information to support his assertions regarding the costs or time to implement mandatory CAP polling and prioritization, and we discuss in Section III.E below our basis for finding the costs will likely be relatively low. Walker also ignores the significant public safety benefits that the increased clarity of the CAP-formatted visual crawl will provide for people who are deaf and hard of hearing (even if the text does not precisely match the audio version of an alert), and he fails to account for the benefits of more informative readable text on the screen for other viewers who may rely on both the visible scroll and the audible versions of alert messages to fully understand them.

16. Similarly, we are not persuaded by NAB and other parties who argue against mandatory CAP polling and prioritization based on the fact that NWS does not currently distribute alerts in CAP format over IPAWS due to concerns about issuing duplicative alerts for the same weather emergency.²³ NAB contends that “[a]lthough NAB appreciates the FCC’s forethought in seeking to increase the accessibility of EAS alert crawls, the fact that the proposed new process will not include weather-related alerts issued by NWS may frustrate the realization of this goal for the foreseeable future.”²⁴ However, the Communications Security, Reliability, and Interoperability Council (CSRIC), an FCC advisory committee, recently analyzed the concerns about duplicative alerts that, until now, have led NWS to refrain from distributing CAP-formatted alerts, and identified and evaluated several potential changes that

¹⁸ See *Accessibility NPRM*, para. 18 & n.46; Timm Accessibility Comments at 3; DAS Accessibility Comments at 13-14.

¹⁹ Accessibility Coalition Comments at 6.

²⁰ NCTA Accessibility Comments at 2; see also DAS Accessibility Comments at 14 (“The FCC’s proposal for prioritized usage of CAP would increase EAS accessibility for those individuals who cannot access the audio message, including those who are deaf and hard of hearing.”); Timm Accessibility Comments at 3; NAB Accessibility Comments at 5

²¹ Timm Accessibility Comments at 5.

²² Walker Accessibility Comments at 4.

²³ NAB Accessibility Comments at 7; Timm Accessibility Reply Comments at 3; Walker Accessibility Reply Comments at 2. We explain in more detail in Section III.C below why we reject NAB’s argument that the deadline for compliance should be tied to resolution of the current blockage of NWS CAP alerts on the IPAWS CAP EAS Feed. See *infra* Section III.C.

²⁴ NAB Accessibility Comments at 7.

could ameliorate or resolve those concerns.²⁵ The CSRIC recommendations could provide a basis for NWS to begin issuing CAP-formatted alerts over IPAWS in the foreseeable future, in which case the rule we adopt today would require EAS Participants to transmit them.

17. Even if NWS does not change its approach in the near term, there are thousands of state and local alert originators that distribute EAS alerts in CAP format, covering numerous non-weather emergencies that pose harm to human health and property. We do not see the logic of foreclosing the benefits to public safety of increased CAP usage for these state and local alerts just because NWS does not distribute CAP alerts at present. We also disagree with NAB's suggestion that mandatory polling might result in "unintended consequences" or "confusion caused by only a small percentage of EAS alerts including matching visual crawls and audio messages"²⁶ NAB fails to explain what types of unintended consequences it is referring to, and we find its assertions about potential confusion to be entirely speculative. On the contrary, we conclude that mandating CAP polling will reduce the potential for confusion and enhance public safety by ensuring a seamless transition at whatever point NWS decides to begin issuing CAP alerts over IPAWS.

2. Timing of Mandatory CAP Polling

18. In the *Accessibility NPRM*, we proposed requiring CAP polling upon receipt of a state or local legacy alert, but sought comment on whether "EAS Participants [should] be allowed some minimum time frame, for example, 5-15 seconds," to account for delays in the CAP message becoming available.²⁷ Based on concerns raised in the record about our proposal to require polling at the time the legacy alert is received, we modify our proposal to include a brief timing delay. Specifically, we require that, when an EAS Participant receives a legacy-format alert that (i) is valid, (ii) covers a type of event and a geographic area for which the EAS Participant normally transmits alerts to the public pursuant to its State EAS Plan (but excluding messages with the EAN, NPT, or RWT event codes),²⁸ and (iii) is not a duplicate of a CAP-formatted message it has already received,²⁹ the EAS Participant must poll the IPAWS feed for a CAP version of the legacy alert at least 10 seconds after detection of the legacy alert's initial header code.³⁰

19. The parties' comments persuade us that requiring CAP polling immediately upon detection of a legacy alert, as we originally proposed, would be counterproductive.³¹ When an alert

²⁵ See Communications Security, Reliability, and Interoperability Council (CSRIC) VII, Working Group 1, *Report on Recommendations to Resolve Duplicate National Weather Service Alerts* at 14-16 (March 2021) (CSRIC VII Report), <https://www.fcc.gov/file/20608/download> (describing causes of the problem); *id.* at 16-26 (describing and analyzing potential short-term improvements and long-term solutions).

²⁶ *Id.*

²⁷ See *Accessibility NPRM*, para. 20.

²⁸ See *infra* Section III.A.3 for a discussion of these exclusions.

²⁹ For this purpose, two EAS messages are considered "duplicates" or "versions" of the same alert if the originator codes, event codes, location codes, and date-time codes in the headers of both messages are all identical, and the valid time period codes in the headers cover approximately the same periods of time, with allowances for the way CAP and legacy messages express valid time periods differently.

³⁰ The 10-second waiting period for CAP polling does not apply if the EAS Participant has already acquired the CAP version through polling the IPAWS feed prior to the 10-second threshold. In such instances, the EAS Participant need not poll IPAWS again or wait 10 seconds to send the alert, which must be sent in CAP format.

³¹ See, e.g., Sage Accessibility Comments at 5-6 ("Some delay must be used to increase the likelihood that a matching CAP message will be found," particularly in light of systemic latencies affecting CAP availability, and an unduly "short window effectively negates the triggered polling while [an excessively] long window only further delays the dissemination of critical information."); Timm Accessibility Reply Comments at 4 ("The FCC likewise may want to set a minimum CAP Prioritization Seek Time of 5 or 10 seconds, lest an EAS Participant set the Seek Time to zero (0) and thus negate the FCC's mandated CAP Prioritization rule entirely."). Even Donald Walker, who

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originator sends an alert in both CAP and legacy formats, the record establishes that in many cases the CAP version will not appear on the IPAWS server until a few seconds after EAS Participants have received the legacy alert header code.³² Accordingly, a rule requiring immediate polling would fail to detect many CAP alerts by polling too early. By delaying the required polling until at least 10 seconds after receipt of the legacy alert's initial header code, we allow sufficient time for the CAP version of the alert to appear and be retrieved, and we significantly reduce the risk that an EAS Participant will send a legacy alert when a CAP version is available.

20. We agree with the Accessibility Coalition that, since “time is of the essence in emergencies,” the CAP polling rule should not cause significant delays in transmitting alert content to the public.³³ The record indicates that most EAS devices require at least 15 seconds to process and transmit a legacy alert after the legacy header code is first detected.³⁴ Thus, requiring EAS participants to wait 10 seconds before polling does not delay the normal time sequence for transmission of a legacy alert if no CAP version of the alert is available.³⁵

21. We recognize that setting a minimum waiting period of more than 10 seconds would further “increase the likelihood that a matching CAP message will be found.”³⁶ However, we are concerned that requiring a waiting period longer than 10 seconds risks unduly delaying the transmission of alerts. At the same time, our rule gives EAS Participants flexibility to wait longer than 10 seconds to poll for CAP messages if they believe their individual circumstances or usual polling cycle so warrants. We further clarify that if an EAS Participant has detected a CAP alert message concerning a time-sensitive emergency and is trying to retrieve it, but it is taking an unreasonably long time to finish downloading the full content of the message from the IPAWS server due to factors such as IP transport latency, the EAS Participant may proceed to transmit the received legacy version of the same alert right away.³⁷

22. We disagree with Sage and other parties who argue that the minimum waiting period for CAP polling should be an option left to each EAS participant.³⁸ As explained above, we conclude that all EAS participants should be subject to the 10-second minimum time limit to ensure that the vast majority of CAP messages will be detected and used. However, by allowing EAS participants to poll after more than 10 seconds, the rule provides flexibility to address Sage's concern that a uniform, “one-size-fits-all”

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generally opposes the proposed CAP polling and prioritization requirement, recognizes that an unduly “short window effectively negates the triggered polling” and would defeat our goal of prioritizing CAP-formatted messages over those in legacy EAS format. *See* Walker Accessibility Comments at 5.

³² Sage Accessibility Comments at 6.

³³ Accessibility Coalition Comments at 6.

³⁴ Sage August 1, 2022 *Ex Parte* at 3.

³⁵ With respect to Gary Timm's suggestion that we “set a minimum CAP Prioritization Seek Time of 5 or 10 seconds...,” we find 5 seconds to be unnecessarily short, given that most EAS devices require at least 15 seconds to process and transmit a legacy alert after the legacy header code is first detected, and could preclude detection of matching CAP messages in a number of cases when more time was available for the CAP alert to become available.

³⁶ *Id.* at 5-6. Sage indicates that “fifteen to thirty seconds may be needed in some cases to assure that 90% of the eventually available CAP messages are detected” in order to account for “problems with Internet connectivity ... that prevent the CAP version of an alert from being acquired.” *Id.* at 6 (quoting *Accessibility NPRM*, para. 20).

³⁷ We leave it to EAS Participants to decide what a reasonable amount of time is, given their familiarity with their IP connections and the time-sensitivity of the emergency event in issue. *Cf.* ECIG Implementation Guide § 3.5.1 (allowing use of text-to-speech or omission of audio content where streaming audio is not reasonably accessible).

³⁸ Sage Accessibility Comments at 5; *see also* Walker Comments at 5 (arguing that the proposed CAP polling requirement would thwart the “immediate” transmission of emergency alert messages in light of network latency, especially during a widespread emergency).

CAP polling and prioritization requirement would fail to account for unique factors affecting particular EAS Participants.³⁹ The CAP prioritization mandate we adopt only sets the earliest time at which polling could occur and lets EAS Participants, based on their familiarity with their IP transport links and other factors, adopt a longer CAP polling interval if that works best for their systems.

23. Our 10-second minimum also accounts for the concerns that equipment manufacturer DAS raises in its comments opposing any minimum delay time. DAS contends that, in the version of CAP polling and prioritization it has already implemented, “the polling [for] and processing [of CAP messages]... will not take longer” than the time required “to process the audio portion of a legacy EAS message that arrives first.”⁴⁰ Our rule accommodates this situation; it does not preclude EAS Participants from sending out a CAP message before the matching legacy message is ready to be transmitted. Similarly, our rule does not compel EAS Participants to transmit the CAP version (if one is available) any later than it would have transmitted the legacy version. Thus, the basic requirement to poll for the CAP version of a received legacy alert with the timing we adopt here will not materially delay or otherwise hamper the relay of the received legacy version to the public.

3. Application of the CAP Priority Mandate

24. Our rules requiring EAS Participants to poll for and prioritize CAP-formatted messages will apply to all EAS alert categories except for alerts with the EAN, NPT, or Required Weekly Test (RWT) event codes. As discussed below, with respect to these three codes, we conclude that requiring CAP polling and prioritization would be counterproductive.

25. We exclude National Emergency Messages using the EAN code (*i.e.*, Presidential alerts) because the expectation is that any Presidential alert announcing a national emergency would contain live audio, and the record confirms that IPAWS is not presently capable of reliably carrying live audio messages in CAP format in real-time.⁴¹ Moreover, the ECIG Implementation Guide contains no technical guidelines that would support such live transmissions over IPAWS.⁴² Because IPAWS cannot currently support live streaming of a Presidential alert, we conclude the CAP polling mandate should not apply to EAN messages at the present time.

26. With respect to national test messages issued using the NPT code, we do not require CAP polling or prioritization because it would undermine the objectives of testing. In some instances, the national EAS test conducted by FEMA is limited to testing EAS in the legacy format, *i.e.*, the purpose of the test is to assess EAS’s capacity to disseminate a legacy nationwide EAN alert. Because we do not require EAS Participants to poll for a CAP version of an actual nationwide legacy EAN alert, there is no reason to require CAP polling when testing the system’s capacity to transmit such an alert. Commenters concur that, for these reasons, requiring CAP polling of NPT alerts is unnecessary and potentially counterproductive.⁴³ The same principle applies to instances where FEMA uses the NPT code to conduct

³⁹ Sage Accessibility Comments at 4-6.

⁴⁰ DAS Accessibility Comments at 15.

⁴¹ See *Accessibility NPRM* at para. 20; Sage Comments at 5 (“Sage agrees that the NPT and EAN not use CAP prioritization. There is currently no mechanism in place to send EAN over CAP.”); DAS Comments at 14 (opposing a CAP polling mandate for the EAN on grounds that “there is no known plan for a CAP version of an EAN, nor is there any existing service to carry a live audio message (IP stream) in near-real-time,” and while a CAP alert could include “a reference to a live audio stream in the alert message[,] no specification for this capability has been provided to the industry.”); Donald Walker Reply Comments at 1-2.

⁴² See *Accessibility NPRM* at para. 20, note 47 (observing that neither the ECIG Implementation Guide nor the IPAWS standards currently specify complete operational parameters for processing streaming sessions – particularly with respect to streaming a “live” audio Presidential alert – thus, the capability to issue the Presidential EAN via IPAWS currently is not available).

⁴³ See Sage Comments at 5 (“Sage agrees that the NPT and EAN not use CAP prioritization. There is currently no mechanism in place to send EAN over CAP.”); DAS Comments at 14 (“The proposed CAP prioritization mandate at

a nationwide test of EAS in both legacy and CAP formats to compare the relative speed and propagation patterns for each format. In such instances, requiring EAS Participants to poll for and prioritize the CAP version of the message could skew the comparative test results by causing EAS Participants to rebroadcast (and further propagate over the daisy chain) the CAP version rather than the legacy version they received. Accordingly, we decline to require CAP priority polling for the NPT at this time.

27. Finally, we do not require polling for RWT alerts because they typically consist solely of tones, contain no audio or visual messages, and are used merely to ensure that the EAS equipment is functioning.⁴⁴ Under these circumstances, we agree with commenters that there is no appreciable benefit to requiring CAP polling for RWT messages.⁴⁵ With respect to the Required Monthly Test (RMT) alerts, however, we agree with commenting parties that the CAP polling requirement should apply.⁴⁶ Because RMT alerts, unlike RWT alerts, are audible (and readable as visible text) to the general public, CAP polling and prioritization will enable the public to benefit from the superior quality of the text of CAP messages for those alerts.

28. We decline to grant an exception from our CAP prioritization mandate for radio broadcasters, as advocated by NAB. NAB contends that “there seems to be no reason to force radio stations to upgrade equipment or otherwise change their current practices” since “the entire [*Accessibility NPRM*] is framed in terms of enhancing the accessibility of EAS alerts for persons who are deaf or hard of hearing through the dissemination of more alerts with matching visual crawls and audio messages.”⁴⁷ We disagree. While the *Accessibility NPRM* emphasized matching of visual with audio messages, there are ample reasons why radio broadcasters, like video service EAS Participants, should be required to distribute CAP messages rather than legacy-formatted messages wherever possible. First, some digital radio broadcasters transmit visual alerts to digital radio receivers.⁴⁸ Further, as discussed above, the audio generated from a CAP alert, whether from text-to-speech or from airing a CAP audio file, typically is superior in clarity and quality to that contained in a legacy alert.⁴⁹ Use of text-to-speech has been standardized in EAS equipment and systems for over 12 years,⁵⁰ and it is routinely used and supported today.⁵¹ Requiring radio broadcasters to prioritize CAP alerts over legacy alerts should result in

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this time should not extend to NPT event code, nor should it extend to the EAN event code for precisely the reason identified by the FCC: Requiring EAS Participants to check for a CAP version of a legacy-only nationwide EAS test alert would not mirror how the Presidential EAN traditionally has functioned within the EAS.”); Donald Walker Reply Comments at 1-2.

⁴⁴ See 47 CFR § 11.61(a)(2).

⁴⁵ Sage Accessibility Comments at 6 (“RWTs are never relayed, and don’t need CAP priority.”); DAS Accessibility Comments at 14 (“CAP prioritization is not needed for the [RWT] as this event code is typically originated by the EAS Participant directly, without any corresponding CAP message that would appear in IPAWS.”); Timm Accessibility Comments at 4 (“Since the RWT is a log-only event, requiring CAP prioritization doesn’t seem needed.”).

⁴⁶ DAS Accessibility Comments at 14; Sage Accessibility Comments at 5-6; Timm Accessibility Comments at 3.

⁴⁷ NAB Accessibility Comments at 9. See also Walker Accessibility Reply Comments at 2; REC Networks September 20, 2022 *Ex Parte* at 2-4.

⁴⁸ Xperi NDAA Comments at 8, 10.

⁴⁹ See 47 CFR §§ 11.51(a) and 11.56(a)(2); See also ECIG Implementation Guide § 3.5.1 – “Using or constructing EAS Audio during a CAP-to-EAS alert activation.” (incorporated by reference into the Commission’s EAS rules at 47 CFR §§ 11.51(p) and 11.56(d)).

⁵⁰ EAS-CAP Industry Group (ECIG) Implementation Guide, Version 1.0, Section 3.5.1 (May 17, 2010).

⁵¹ Donelan NDAA Comments at 3 (“Both IPAWS and NPWS support two-minute pre-recorded or text-to-speech audio messages...”); Donelan NDAA Comments at 11 (the visual text changes “would require cosmetic updates to software tables and configurations in EAS encoder/decoders used by EAS participants for... text-to-speech

(continued....)

optimizing the audio quality of the alert messages they broadcast, including rendering audio messages comprehensible that might otherwise be less intelligible had the legacy audio been broadcast instead. We find improving the audio quality of alerts to be an important public interest benefit, and we therefore decline to exempt radio broadcasters from the CAP prioritization requirements we adopt in this item.

29. Finally, we conclude that it would not serve the public interest to require all EAS Participants to transmit both the legacy version of an alert message and a subsequently-acquired CAP message, as the Accessibility Coalition suggests.⁵² Such a requirement would result in the airing of duplicate alerts, which have historically been prohibited in the EAS rules because they can cause congestion in the alerting process, create public confusion, and cause additional preemption of programming that might cause broadcasters to abandon carriage of state and local alerts. In any case, we expect the 10-second minimum polling requirement will be sufficient to capture any available CAP version of a received legacy alert in the vast majority of cases without causing significant delay in transmitting the alerts.

B. Revising the Alert Text for Certain National EAS Codes

30. Consistent with the proposals in the *NDAA NPRM* and the *Accessibility NPRM*, we amend our rules prescribing the language to be used in audible and viewable messages generated from three national EAS alert codes: EAN (Emergency Action Notification), NPT (National Periodic Test), and PEP (Primary Entry Point). In each case, we adopt simpler, more straightforward terms that will enable the public to understand the origin and purpose of these alerts more easily and, in particular, will enable people who are deaf or hard of hearing to receive and comprehend the critical informational elements of the alerts. The revised text set forth below will be used in the messages displayed as text on the screens of viewers' devices. In addition, for alerts issued in CAP format with no audio message included, the EAS equipment will generate audio messages that include the revised text. We also prescribe a scripted visual message that EAS Participants must display when FEMA conducts nationwide tests of the alert system in legacy EAS-only format. In conjunction with these changes, we adopt certain conforming edits to our implementing rules. We discuss these changes below.

1. Changes to Audible and Viewable Text for Three Alert Codes

31. We revise the prescribed text associated with two event codes (EAN and NPT) and one originator code (PEP) listed in our rules. We change the text for the EAN event code from "Emergency Action Notification" to "National Emergency Message;"⁵³ we change the text for the NPT event code from "National Periodic Test" to "Nationwide Test of the Emergency Alert System;"⁵⁴ and we change the text for the PEP originator code from "Primary Entry Code System" to "United States Government."⁵⁵ We agree with the Accessibility Coalition that these changes to the alert text displayed to the public for these three codes will make the EAS more accessible to people who are deaf or hard of hearing.⁵⁶ We

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translations..."); Bell Accessibility Comments at 4, 18; *see also Amendment of the Commission's Rules Regarding the Emergency Alert System*, Notice of Proposed Rulemaking, 36 FCC Rcd 6266, 6287, fn. 114 (2021) ("We observe, however, that if no audio message is provided, audio typically can be derived by EAS devices from the header codes using Text-to-Speech.").

⁵² Accessibility Coalition Comments at 6.

⁵³ 47 CFR 11.31(e). FEMA recommended this change, and we proposed to adopt it in our *NDAA FNPRM*, *see* 36 FCC Rcd at 10718, para. 49. For consistency, we also revise our Part 11 rules to use the term "National Emergency Messages" instead of "Emergency Action Notification" wherever that term appears. 47 CFR §§ 11.2(a), 11.21(a)(4), 11.31(e), 11.51(m)(2).

⁵⁴ 47 CFR § 11.31(e), with similar conforming edits to 47 CFR §§ 11.51(m)(2) and 11.52(e). *See Accessibility NPRM*, paras 6-8, 10.

⁵⁵ 47 CFR § 11.31(d).

⁵⁶ Accessibility Coalition Comments at 2.

also agree with FEMA, NWS, and many other commenters that these changes will make these national alerts easier for all members of the public to understand and will more effectively inform people of emergency situations.⁵⁷

32. The improvements brought about by these text changes are evident when comparing the alert header seen or heard by the public under the preexisting rules and under our new rules. Under the preexisting rules, an alert using the PEP and EAN codes would read, in relevant part, “The Primary Entry Point system has issued an Emergency Action Notification....” The new version of this alert will read, “The United States Government has issued a National Emergency Message....” Similarly, for nationwide test alert messages initiated by FEMA in CAP format, the existing header text reads “the Primary Entry Point system has issued a Nationwide Periodic Test.” Under our new rules, the header text will read “the United States Government has issued a Nationwide Test of the Emergency Alert System....”

33. We find that these changes will result in clearer and more comprehensible alert messages. We agree with the Accessibility Coalition that displaying clearer text for alerts will make these messages more accessible to people who are deaf or hard of hearing.⁵⁸ NCTA also asserts, and NWS, NAB, DAS, and Sage agree, that such changes “will provide the public with clearer, more uniform, and more readily understandable information....”⁵⁹ We conclude that changing the visual displays of alerts and related updates to improve clarity will mitigate the risk of reduced public response to emergency messages that the public misunderstands.⁶⁰ We also find that clearer description of NPT test alerts will “minimize the potential for consumer confusion and alerting fatigue” and is therefore in the public interest,⁶¹ even though the NPT is not warning the public of danger.⁶¹ Further, we agree with the Accessibility Coalition that clarifying visual alert displays will improve accessibility of the EAS for people with hearing-related disabilities.⁶² These changes will benefit the public by reducing confusion about what alert messages are communicating in times of emergency⁶³ and “clarif[y]ing] the critical informational elements included in nationwide EAS tests, particularly for members of the public that cannot access the audio message.”⁶⁴

34. There is also ample justification for the specific wording of the new labels that we are selecting for the EAN, PEP, and NPT codes. We agree with FEMA that “National Emergency Message” is a clearer and more accurate label for EAS alerts using the EAN code than “Emergency Action

⁵⁷ NWS Accessibility Comments at 1-2; FEMA May 17, 2021 Comments at 2; *see also, e.g.*, NAB NDAA Reply Comments at 5; DAS NDAA Comments at 4, 6; Sage NDAA Comments at 3; NCTA Accessibility Comments at 2; DAS Accessibility Comments at 2, 7; Sage Accessibility Comments at 3.

⁵⁸ Accessibility Coalition Comments at 2 (stating that the coalition fully support the Commission’s proposal to clarify the visual crawl and to reach the deaf and hard of hearing communities effectively during nationwide tests).

⁵⁹ NCTA Accessibility Comments at 2 (referring to text for NPT code). *See also* NWS Accessibility Comments at 1-3 (referring to NPT and PEP codes); NAB NDAA Reply Comments at 5-6 (EAN and PEP codes); DAS NDAA Comments at 4, 6 (same); Sage NDAA Reply Comments at 2 (same); NAB NDAA21 Reply Comments at 5; DAS NDAA21 Comments at 4, 6; Sage NDAA21 Comments at 3; NCTA Accessibility Comments at 2-4; ACA Accessibility Reply Comments at 3-4; DAS Accessibility Comments at 2, 4, 11-13; Sage Accessibility Comments at 2-3.

⁶⁰ NDAA R&O, 36 FCC Rcd at 10700, para. 12.

⁶¹ *Amendments to Part 4 of the Commission’s Rules re Disruptions to Communications*, Notice of Proposed Rulemaking, 36 FCC Rcd 7860, 7903, para. 30 (2021).

⁶² Accessibility Coalition Comments at 2.

⁶³ NDAA FNPRM, 36 FCC Rcd at 10718-19, paras. 49-50

⁶⁴ *Accessibility NPRM*, 36 FCC Rcd, para. 10.

Notification,” which “has no meaning or significance to the public and may create confusion, delaying the public taking protective actions to mitigate the impact of the impending emergency event.”⁶⁵

35. Similarly, labelling alerts that use the PEP code as originated by the “Primary Entry Point system” is opaque to the general public and fails to provide any meaningful information about who originated the alert.⁶⁶ In the *NDAA NPRM*, we proposed to replace “Primary Entry Point system” with the term “National Authority.”⁶⁷ However, we conclude that the term “United States Government” more clearly communicates the source of such alerts than “National Authority,” and we therefore adopt “United States Government” as the label for alerts using the PEP code.

36. We also find that changing the NPT alert text from “National Periodic Test” to “Nationwide Test of the Emergency Alert System,” as well as the NPT legacy script change discussed below, will make it clearer to the public that these alerts are only tests. This will eliminate confusion and will increase the public’s overall trust in the alerting system, making it more likely that all members of the public will heed alert warnings and follow alert instructions in the future.⁶⁸

37. We decline to adopt any other changes to alert code descriptions or scripts beyond those we adopt today. We agree with NWS that other alert code descriptions received by the public are already sufficiently clear and convey the nature of the alert in a concise and easily understandable way.⁶⁹ We also decline suggestions to establish a new regional test code and require EAS Participants to display the word “regional” instead of “national” or “nationwide” when FEMA geotargets a test alert.⁷⁰ As we similarly concluded last year in the WEA context, we find that no confusion will result from using the term “national” or “nationwide” even if a regional test alert is sent.⁷¹ That conclusion is even more true in the EAS context, since NPT alerts are test messages that contain no emergency instructions to the public. In addition, the infrequency of regional NPT tests⁷² further persuades us that creating a separate new code for regional test alerts is unnecessary.⁷³

⁶⁵ *NDAA FNPRM*, 36 FCC Rcd at 10718, para 49 (quoting FEMA May 17, 2021 Comments at 2).

⁶⁶ *NDAA FNPRM*, 36 FCC Rcd at 10719, para 50.

⁶⁷ *NDAA FNPRM*, 36 FCC Rcd at 10719, para. 50.

⁶⁸ *Amendment of Part 11 of the Commission’s Rules Regarding the Emergency Alert System; Wireless Emergency Alerts*, PS Docket No. 15-94, Report and Order, 33 FCC Rcd 7086, 7100, para. 34 (2018) (*Alerting Reliability Order*) (a loss of public confidence in the EAS could “lead the public to require additional information before taking action in response to future alerts, potentially slowing evacuations and other public safety efforts.”).

⁶⁹ NWS Accessibility Comments at 4; *see also* Sage Accessibility Comments at 4; *but see* DAS Accessibility Comments at 11-13, 15 (arguing for additional scripts and code description changes). In regard to DAS’ concern, we note that today’s decision includes the RMT in mandatory CAP polling, which makes an alert script for the RMT unnecessary.

⁷⁰ DAS Accessibility Comments at 4, 7-8, 9.

⁷¹ *See NDAA Order*, 36 FCC Rcd at 10700, para 11 (“We disagree with some commenters who argue that the combined Presidential/FEMA administrator alert class should be renamed Federal Alerts to avoid potential confusion if the public receives an alert from FEMA that is regional or local in nature... If a National Alert is sent regionally, the message text will contain only relevant regional or local information, and will be geotargeted to those areas that need the emergency instruction.”).

⁷² DAS Accessibility Comments at 6, fn. 2 (the last regional NPT alert was in 2016).

⁷³ *Cf. NDAA Order*, 36 FCC Rcd at 10700, para 11 (rejecting suggestions to alter the language of WEA National Alerts to account for regional alerts).

38. In the *NDAA NPRM*, we proposed to change the three-letter EAN and PEP codes to match the proposed new text labels for these codes.⁷⁴ On review of the record, however, we see no need to change any of the existing three-letter codes. Unlike the text labels that are seen by the public, the three-letter codes are entirely functional and the public never sees or hears them.⁷⁵ Thus, there is no risk of public confusion from retaining the existing codes. In addition, as several commenters point out, changing these three-letter codes could be costly to implement and might create a risk of alert failure, which could seriously jeopardize public safety.⁷⁶ NWS contends that changes to the existing three-letter alert codes might cause NOAA Weather Radios to display inaccurate or partial visual messages on radio display screens.⁷⁷ No commenter supported changing the three-letter codes or identified any benefit to the public, EAS Participants, or alert originators of doing so. We conclude that changing only the text for these alert codes without modifying the codes themselves will fully achieve our public interest objective of more comprehensible alerts, while avoiding unnecessary costs or risks.

2. Standard Script Displayed for Nationwide Test Alerts in Legacy EAS Format

39. We adopt our proposal, discussed in the *Accessibility NPRM*, to modify the text display used in the visual crawl for EAS-based nationwide test alerts transmitted in legacy format.⁷⁸ Specifically, when a legacy nationwide test alert is generated from the PEP and NPT header codes and uses the “All-U.S.” geographic location code, we require video service EAS Participants to display the following scripted text: “This is a nationwide test of the Emergency Alert System, issued by the Federal Emergency Management Agency, covering the United States from [time] until [time]. This is only a test. No action is required by the public.”⁷⁹ This new text will be much easier to understand than the text displayed for such test alerts under the current rules (“the Primary Entry Point system has issued a National Periodic Test...”). We note that the revised text will be displayed only when FEMA issues a nationwide test alert in legacy EAS format and therefore cannot use the enhanced text capabilities of CAP to explain the alert visually in greater detail.⁸⁰ It is unnecessary to prescribe such a script for test alerts that FEMA issues in CAP format, since FEMA can add explanatory text to CAP-formatted messages and ensure that the audio message matches the visual crawl generated for the alert.

⁷⁴ *NDAA FNPRM*, 36 FCC Rcd at 10718-19, at paras. 49, 50 (proposing to change the EAN and PEP codes to match the newly adopted text for these codes). We did not propose an equivalent change for the NPT code.

⁷⁵ These codes are automated computer language that are received and processed with no human involvement. Even EAS Participants would rarely see them, if ever, once the text change for a code is programmed into EAS equipment with a one-time update. The only time any employee of an EAS Participant would see the codes is if a station engineer were present on site and looking at the EAS screen at the moment an alert was received. *See Sage Reply Comments at 1-2; NAB NDAA Reply Comments at 5.* We also find that no confusion will result from using codes that are not acronyms for the displayed text. This has long been the case for other codes currently in use without incident, like the “WXR” code for “National Weather Service.”

⁷⁶ NCTA NDAA Comments at 3-8; Sage NDAA Comments at 2-5; Sage NDAA Reply Comments at 1-2; ACA NDAA Comments at 5; DAS NDAA Comments at 3, 7; NAB NDAA Reply Comments at 5-6; Abbott NDAA Comments at 1; Donelan NDAA Comments at 10. As Sage explains, any EAS Participant that failed to update its encoders and other downstream equipment by the deadline in order to use any revised three-letter codes would be unable to transmit the national tests or national emergency messages at all. *See Sage NDAA Comments at 3; see also Donelan Comments at 10* (“Changing the descriptive phrase [but not the three-letter code] avoids making legacy EAS equipment and consumer equipment immediately incompatible until it is replaced during the normal consumer product life cycle. Old consumer equipment would still function but display the old phrase.”).

⁷⁷ NWS Accessibility Comments at 2.

⁷⁸ *Accessibility NPRM* at para. 10.

⁷⁹ *Accessibility NPRM* at para. 11. The “. . . from [time] until [time]” periods shall be derived from the alert’s valid time period.

⁸⁰ *Accessibility NPRM* at paras. 6-8.

40. We disagree with Sage’s and Timm’s arguments that addition of a script is a departure from processing of actual EAN alerts that would render the testing process less effective.⁸¹ As we have long acknowledged, the technical parameters of NPT test alerts need not be identical to those of EAN alerts announcing actual national emergencies to generate an effective test,⁸² especially if a slight difference will make the test alert message more comprehensible and accessible, including to people who are deaf or hard of hearing.⁸³ In this instance, a slight deviation between the use of a scripted message for legacy NPT test messages and the visual crawl that would be generated for an actual EAN alert will not significantly diminish the NPT’s usefulness. We agree with Sage, however, that there is no need to prohibit translations, and therefore we clarify that EAS equipment manufacturers may translate the NPT script we adopt today into additional languages, as some currently do for alert code text descriptions.⁸⁴

41. We also require radio broadcasters to change the text for the NPT event code from “National Periodic Test” to “Nationwide Test of the Emergency Alert System.” We disagree with NAB’s contention that “it seems inappropriate to impose the same obligation [to implement the new NPT text and NPT script] on audio-only EAS Participants, at least on the same terms as video service providers, as they do not contribute to the visual accessibility of EAS messages.”⁸⁵ Some digital radio broadcasters display visual alerts on the screens of digital radio receivers. Moreover, it is important for radio broadcasters’ NPT alerts to refer to “Nationwide Test of the Emergency Alert System” in instances when CAP-format text messages do not include any audio content and the audio alerts must be generated based on the CAP message header using text-to-speech functionality. Otherwise, if FEMA were to send an NPT alert in CAP format consisting exclusively of text without any audio component, or if a distribution failure resulted in a radio broadcaster receiving only the text but not the audio portion of the alert, a radio broadcaster that had not implemented the new NPT text would air the outdated “National Periodic Test” language that we have found to be confusing to the public.

42. While we require radio broadcasters to implement the new NPT header code text, we decline to require them to update their devices to accommodate the new prescribed script for legacy-format NPT messages. We conclude that imposing such a requirement on radio broadcasters would yield only minimal benefits, because the prescribed NPT script is to be used only in visual displays and would not affect audio messages. Although a few radio broadcasters might be able to display the new prescribed script on digital radio receiver screens, they would display the clearer NPT label that we adopt today (“Nationwide Test of the Emergency Alert Message”) even if we do not require them to display the more detailed NPT script; and imposing that requirement on the large majority of radio broadcasters would have no impact on alert clarity. Radio broadcasters are free to implement this updated script voluntarily,

⁸¹ Sage Accessibility Comments at 3; *see also* Timm Accessibility Reply Comments at 6; Walker Accessibility Reply Comments at 1.

⁸² *Review of the Emergency Alert System*, Sixth Report and Order, 30 FCC Rcd 6520, 6350-51, paras. 22-23 (2015) (find that the NPT script need not be identical to that for EAN to “sufficiently test the reliability of the EAS dissemination ecosystem, providing adequate data for the Commission and FEMA to fully assess the hierarchy and dissemination of EAS alerts throughout the EAS, via both legacy and CAP-enabled EAS devices.”).

⁸³ *Id.* at 6351, para 23 (the NPT should be “clearly marked as a test, preventing any public confusion”).

⁸⁴ Sage Accessibility Comments at 6 (“A strict reading of the proposed rules would appear to prohibit the use of Spanish for the scripted legacy message. Sage has provided Spanish translations of the event codes and the connecting phrases when constructing a legacy message. This type of translation would need to be specifically allowed for the script.”).

⁸⁵ NAB Accessibility Comments at 2. We also disagree with NAB’s suggestion that the only “purpose of the CAP related obligation is to promote the ability of EAS alerting to provide matching visual and audio messages, to increase the clarity of alerts for persons who are deaf and hard of hearing.” *Id.* While these are central reasons why we are adopting these requirements, they are not the only factors justifying these rule changes, as discussed above.

however, and we encourage them to do so if it will improve digital radio visual displays, or for the sake of consistency across deployed EAS decoder devices.⁸⁶

3. Eliminating National Information Center (NIC) Code

43. As we proposed in the *NDAA FNPRM*, we are deleting the National Information Center (NIC) event code because the federal National Information Center no longer exists, and there is thus no reason to maintain this event code in the rules.⁸⁷ Most commenting parties agree.⁸⁸ Deleting the NIC code will avoid confusion by preventing any accidental activation of this obsolete alert and will avert the risk of rogue alerts that might be caused by unauthorized parties' intentional misuse of the NIC code. Since deletion of the NIC code can be implemented by a simple software change that requires only an update to EAS encoders,⁸⁹ we require EAS Participants to implement this change in the same timeframe as the other EAS encoder device changes adopted in this order.⁹⁰ This should entail negligible costs since EAS Participants can implement all required encoder updates in a single package update. We also direct SECCs to remove this code from state EAS plans, and we advise FEMA to remove NIC from its list of codes that can be accepted from alert originators and issued via IPAWS.

44. We reject Sage's alternative proposals for preventing issuance of NIC-coded alerts without deleting the NIC code, such as directing parties to ignore the code and asking FEMA and alert originators not to use it.⁹¹ These approaches would be more complicated to implement than simply deleting the NIC code, and they would be far less effective at preventing potential misuse of a code that is otherwise obsolete and unnecessary. We also reject Donelan's suggestion that we retain and repurpose the NIC code.⁹² The Commission cannot do this except in concert with FEMA, which has asked us to delete the code.⁹³

4. Conforming Changes to Implementing Rules

45. Finally, to avoid potential confusion stemming from our associating the PEP originator code with the term "United States Government," we are replacing the term "Primary Entry Point System" in our Part 11 rules with the term "National Public Warning System."⁹⁴ We note that FEMA has ceased using "Primary Entry Point System" and has replaced it with the term "National Public Warning System" (NPWS), and we find that aligning our terminology with FEMA's is in the public interest.⁹⁵ While we did not specifically propose or mention this rule change in the *NDAA NPRM* or the *Accessibility NPRM*, we believe it is a logical outgrowth of our proposal to change the text associated with the PEP originator code. Furthermore, to the extent necessary, we invoke the exception in the Administrative Procedure Act that allows the Commission to proceed without notice and comment to revise rules where notice and

⁸⁶ See NAB Accessibility Comments at 4 ("some audio service EAS Participants may follow suit voluntarily...").

⁸⁷ *NDAA FNPRM*, 36 FCC Rcd at 10719, para. 48.

⁸⁸ See, e.g., NCTA NDAA Comments at 8; DAS NDAA Comments at 15-16; ACA Comments at 6; Donelan Comments at 8.

⁸⁹ See NCTA NDAA Comments at 8; DAS NDAA Comments at 15-16.

⁹⁰ See Section III.C, *infra*.

⁹¹ See Sage NDAA Comments at 2.

⁹² See Donelan NDAA Comments at 8.

⁹³ See FEMA May 17, 2021 Comments at 2-3.

⁹⁴ 47 CFR §§ 11.2(a), 11.18(a), 11.18(b), 11.21(a)(4), and 11.61(a)(3)(i).

⁹⁵ See, e.g., <https://www.fema.gov/emergency-managers/practitioners/integrated-public-alert-warning-system/broadcasters-wireless> (describing NPWS stations as "the primary source of initial broadcast for a national alert").

comment is unnecessary.⁹⁶ Here, we believe initiating another notice and comment proceeding to address this non-substantive conforming rule change is unnecessary and that adopting it without further notice and comment is in the public interest, because the change in terminology used to refer to certain entities in our rules will have no impact on any party's rights or obligations. We also make minor edits to Part 11 to update the contact information for the National Archives and Records Administration.⁹⁷ These updates to NARA's contact information do not alter the substance of parties' obligations, but merely the procedures they follow to obtain required standards from NARA, and we thus view them as procedural rule changes for which notice and comment is not required.⁹⁸

C. Compliance Time Frame

46. We require all EAS Participants to comply with the rules adopted in this order no later than one year from the effective date of the order (subject to the exceptions discussed below). We agree with commenting parties that all changes we adopt requiring software updates to EAS encoder equipment can be accomplished on a one-year schedule. Equipment suppliers DAS and Sage indicate that changes such as the revised EAN code text and removal of the NIC event code "can be accomplished via software updates" to EAS equipment in tandem with "regularly scheduled maintenance activities" involving minimal cost and effort on the part of EAS manufacturers and participants⁹⁹ and that "[t]he normal estimate of a year would apply."¹⁰⁰ These parties support the same implementation period for the new CAP polling and prioritization requirements: DAS says it has already installed "a feature called Triggered CAP Polling™" on EAS devices and "made [it] available on every software update since 2018,"¹⁰¹ while Sage states the feature "can be implemented by Sage and installed by users over a one-year period."¹⁰² This one-year implementation period is consistent with our past orders requiring EAS encoder software updates.¹⁰³ This deadline applies to all EAS participants, including radio broadcasters.¹⁰⁴

⁹⁶ See 5 U.S.C. § 553(b)(B) (allowing implementation of rule changes without notice and comment or publication in the Federal Register if agency finds, for good cause, that such procedures are unnecessary).

⁹⁷ 47 CFR §§ 11.51(p), 11.56(d).

⁹⁸ To the extent that these rules were instead seen as something other than procedural rules, we independently find good cause to forgo notice and comment as an alternative basis for our decision. We find notice and comment unnecessary because regulated entities' rights and obligations are not being altered.

⁹⁹ DAS NDAA Comments at 9, 16, 13; *accord*, Sage NDAA Comments at 3 (changing the EAN code text "could be added to a future update for EAS equipment").

¹⁰⁰ Sage Accessibility Comments at 3.

¹⁰¹ DAS Accessibility Comments at 13.

¹⁰² Sage Accessibility Comments at 9.

¹⁰³ See, e.g., *Amendment of Part 11 of the Commission's Rules Regarding Emergency Alert System*, PS Docket No. 15-94, Report and Order, 32 FCC Rcd 10822, 10824, para. 21 (2017) (*Blue Alerts Order*) ("[W]e allow a period of 12 months from the effective date of the rules to enable the delivery of Blue Alerts over EAS...").

¹⁰⁴ See NAB Accessibility Comments at 9 (requesting additional time for radio broadcasters). REC Networks requests that we extend the CAP polling implementation deadline to three years for analog radio broadcasters, contending that "[t]here are many smaller broadcast stations, including LPFM stations, smaller noncommercial educational (NCE) stations as well as small 'mom and pop' and other standalone commercial broadcasters, including those owned or controlled by minority groups[,] that do not have the budget or resources to implement CAP Polling within the proposed mandated one-year time frame," REC Networks September 20, 2022 *Ex Parte* at 1. We decline to do so. REC cites vendor costs of less than \$500 for the necessary software changes, *id.* at 2, and does not provide any evidence to suggest that this would be a financial hardship for small broadcasters, much less all analog broadcasters. Any individual entity may seek a waiver if it can demonstrate that "special circumstances" justify deviation from the generally applicable requirement. See 47 CFR § 1.3. We note that REC Networks generally disagrees with our decision to apply the CAP polling and prioritization requirements to analog radio

(continued...)

47. We disagree with NCTA's and ACA's argument that cable operators would need at least two years to conduct the downstream equipment testing and modifications needed to implement timed CAP polling and the changes to the PEP and NPT code texts and the NPT script.¹⁰⁵ The EAS changes we adopt in this Order are substantially similar to the NPT and national location code rule changes we adopted in 2015, when NCTA agreed that one year was enough time for even a complex downstream equipment testing process.¹⁰⁶ Neither NCTA nor ACA explains why the downstream equipment testing and modification process would take longer now than it did in the past. We find that one year is sufficient time (except in the circumstances described below) for all EAS Participants to implement the changes that we deem necessary to improve public safety by making alerts more comprehensible and accessible, as promptly as practicable.

48. We recognize, however, that it may take more than one year for cable operators to implement the required change to the EAN text. Cable industry commenters note that the text associated with EAN-coded alerts (unlike text associated with other alert codes) is sometimes hard-wired into "downstream" equipment in cable operators' networks, including set-top boxes that are controlled by the cable operator and installed at customers' premises.¹⁰⁷ Thus, while cable operators can implement software upgrades in their EAS encoder/decoder equipment to transmit the new text for the EAN code, many downstream set-top boxes cannot be similarly reprogrammed through software modifications alone (a problem that is especially acute for some older, discontinued models for which manufacturers no longer provide software support). As a result, implementing the new EAN text will require these set-top boxes to be replaced.¹⁰⁸ In addition, NCTA points out that even where set-top boxes need not be replaced, implementing the EAN text change may require upgraded software on set-top boxes and headend equipment used to control set-top boxes.¹⁰⁹ NCTA argues that 18 months should be allowed for these software changes.¹¹⁰ Moreover, NCTA argues persuasively that wide-scale hardware replacement at customers' premises on a short timeframe would entail excessively high costs.¹¹¹ We will allow cable operators additional time to comply with the required change to the text associated with the EAN code only,¹¹² but we find that 15 months is more than adequate to account for these software-related complexities, including any unexpected difficulties.¹¹³

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broadcast stations, which we discuss above. *See supra* para. 28. Those general policy objections do not justify a special carve-out from the generally applicable compliance timeframe for an entire industry segment.

¹⁰⁵ NCTA Accessibility Comments at 3-4; ACA Accessibility Reply Comments at 3-4. These parties concede that cable operators could implement other changes that require only routine updates to software on upstream EAS equipment within one year. *See* ACA NDAA Comments at 6 (referring to revised text for PEP code); *see also* NCTA NDAA Comments at 8 (revised PEP code text and deletion of NIC code).

¹⁰⁶ *See Review of the Emergency Alert System*, Sixth Report and Order, 30 FCC Rcd 6520, 6545-46, paras. 54-55 (2015) (*Sixth Report and Order*) (summarizing NCTA's argument that "a six-month timeline would not provide EAS Participants with sufficient time to develop, test, and deploy the required system updates" and its argument "instead for a twelve-month implementation timeline").

¹⁰⁷ *See, e.g., Accessibility NPRM*, 36 FCC Rcd, para 15.

¹⁰⁸ *See* NCTA NDAA Comments at 4; DAS NDAA Comments at 6-8.

¹⁰⁹ NCTA September 21, 2022 Ex Parte at 1-2.

¹¹⁰ *Id.*

¹¹¹ *See* NCTA NDAA Comments at 3. Relatedly, NCTA explains that many "customer-owned devices and TVs" – such as cable-card devices and smart TVs not controlled by the cable operators or their vendors – would have to be updated independently by those manufacturers to comply with the EAN text display change." NCTA April 9, 2022 Ex Parte at 2.

¹¹² NCTA requests that we extend the timeline to 18 months for all software upgrades required by this order, including the upgrades to implement the new labels for the NPT and PEP codes. NCTA September 21, 2022 Ex

(continued....)

49. Specifically, we grant cable operators six years from the effective date of today's order to complete the transition to the new EAN text display of "National Emergency Message" to the extent that the change requires replacement of navigation equipment (*i.e.*, set-top boxes) that cannot be safely updated via software upgrades alone, and 15 months from the effective date of the order in other instances where implementing the EAN text change require upgraded software on set-top boxes and headend equipment used to control set-top boxes. We find these longer compliance time frames for implementing the EAN change in this limited context to be justified, due to the risk that improperly programmed equipment might fail to transmit EAN alerts properly, the need for testing such software changes to assure a smooth and effective rollout, and the excessive costs that immediate replacement of such equipment would impose. Similarly, to the extent such changes require replacement of set-top boxes or other navigation equipment at customer premises, we find that it would not be in the public interest to require replacement of all such equipment in cable networks with the EAN text change within one year. A six-year implementation period will avoid rushed compliance efforts without testing and verifying the proper functionality of such equipment, and will enable cable operators to gradually replace outdated set-top boxes to the extent necessary on a schedule closer to the average lifecycle of this equipment, resulting in costs that would not substantially exceed those they would incur in the ordinary course of business.

50. Our compliance timeline of six years is based on estimates of the average life span for replacement of cable set-top-boxes and similar devices that cable industry representatives have submitted to government agencies in the past. For example, NCTA represented in 2017 that the average set-top box lifespan is five to seven years¹¹⁴ and that the average deployment cycle for set-top boxes is six years.¹¹⁵ NCTA more recently stated that "its members estimate that set top boxes have "a lifecycle of roughly 10+ years,"¹¹⁶ but it has clarified that this estimate applies only to "newer set-top boxes [that] are designed to have longer lifespans," not to *all* deployed set-top boxes.¹¹⁷ The six-year replacement timeline we

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Parte at 2. We decline to do so. The additional time that we are allowing cable operators to implement the EAN text change is justified by the potentially more complex activities necessary to reprogram or replace some set-top boxes and set-top box controller equipment at cable headends. No such activities are needed to implement the other changes adopted in this order, such as the CAP polling and prioritization requirements or the new labels for the NPT and PEP codes. We are also not persuaded by NCTA's argument that establishing identical deadlines for all of these changes is needed to reduce the risk of complications or disruption to consumers. Like other EAS Participants, cable operators can implement changes other than the EAN change by relatively simple software upgrades on EAS encoder/decoder equipment that do not involve modifying software in set-top boxes or related equipment in cable headends and are not disruptive to the end user.

¹¹³ *Id.* at 2 ("the updates necessitated by the EAN code text change will take *at least* 11-13 months to implement, assuming a completely smooth rollout."). Given that our rules already do not become effective until 30 days after publication in the Federal Register, this time is adequate for EAN software updates.

¹¹⁴ Comments of NCTA *et. al.* before the California Energy Commission, Docket No. 17-AAER-11, p. 8 (June 16, 2017) ("The typical lifespan of a set-top box has been estimated at five to seven years, or even less when driven by customer demand.").

¹¹⁵ NCTA Petition for Waiver, CG Docket 10-213, p. 4 (June 1, 2012) ("The development, manufacturing, and deployment cycle for set-top boxes typically lasts approximately six years, consisting of approximately two to three years of development work plus approximately three years of manufacturing and deployment of the devices. For example, devices that cable operators will begin deploying to customers later this year have been in development since at least 2010, and likely will be deployed to customers until early 2016. Set-top box manufacturers and cable operators will soon turn to the task of developing the next generation of set-top boxes – devices that we can expect to see deployed sometime in mid-2016."); *see also Implementation of Sections 716 and 717 of the Communications Act of 1934, as Enacted by the Twenty-First Century Communications and Video Accessibility Act of 2010*, Report and Order, 27 FCC Rcd 12970, 12979, fn. 77 (CGB 2012) (*Set-Top Box Waiver Order*) (citing NCTA six-year estimate).

¹¹⁶ NCTA July 7, 2022 *Ex Parte* at 1.

¹¹⁷ NCTA September 21, 2022 *Ex Parte* at 2.

establish today primarily applies to older legacy set-top boxes that cannot be updated via software changes. Therefore, it is appropriate to rely on the earlier estimates for purposes of establishing this timeline. Finally, we do not adopt ACA Connects' proposal to exempt small cable operators from the set-top box replacement requirement or to extend the six-year timeline to ten years.¹¹⁸ While ACA Connects asserts that the requirement would be burdensome to small operators, it provides no evidence to support this assertion.¹¹⁹

51. We emphasize that cable operators must implement any necessary EAN software modifications to their upstream EAS decoder equipment by the generally applicable one-year deadline. This will enable at least those subscribers with updated or newly replaced set-top boxes to see the new "National Emergency Message" text for EAN code alerts as soon as reasonably possible. To ensure that cable operators continue to successfully deliver alerts that use the EAN event code to their subscribers as our rules currently mandate, we also require these software updates to be implemented in such a way that, for the interim period of time prior to the date six years after the effective date of this Order, any set-top box that cannot receive a software update will still process the EAN and will continue to display the old "Emergency Action Notification" text upon receiving the EAN. Commenting parties confirm that a change to the EAN text only (as opposed to a change to the three-letter EAN code) will allow non-updated downstream processing equipment to continue to display alert messages.¹²⁰

52. To ensure that people with disabilities are supported during the interim equipment replacement period, we further require that if a cable operator supplies or leases set-top boxes or similar navigation devices to its customers that cannot be updated to display the new text for EAN messages, the operator must, upon the request of any customer who is deaf or hard of hearing, replace that device with a new device capable of displaying the new EAN visual text. The cable operator must supply and, if necessary, install such a device within a reasonable time after receiving such a request, on the same terms and to the same extent as provided in section 79.108 of the Commission's rules.¹²¹ This rule, adopted as part of the Commission's implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010 (CVAA), involved a nearly identical weighing of equities requiring cable operators to provide compliant set-top boxes to subscribers with disabilities upon request and within a reasonable time¹²² to ensure accessibility without unduly burdening cable operators,¹²³ and is therefore an appropriate standard here. We agree with DeafLink that increased EAS accessibility for people who are

¹¹⁸ ACA Connects September 22, 2022 *Ex Parte* at 2

¹¹⁹ ACA Connects states that "the cable video business has become increasingly challenging in recent years, especially for the smallest operators," and argues that a mandate to replace set-top boxes "could prove highly burdensome for some operators and even encourage exit from the cable video business," ACA Connects September 22, 2022 *Ex Parte* at 2. However, ACA Connects provides no cost data or other evidence that would support a blanket exemption for all small operators. To the extent that individual cable operators can demonstrate unique hardship or other special circumstances, they may seek a waiver pursuant to the Commission's rules. *See* 47 CFR § 1.3.

¹²⁰ Sage NDAA Comments at 2; Sage NDAA Comments at 3, 5; *see also* Sage April 28, 2022 *Ex Parte* at 1; Donelan NDAA Comments at 10.

¹²¹ *Cf. Accessibility of User Interfaces, and Video Programming Guides and Menus; Accessible Emergency Information, and Apparatus Requirements for Emergency Information and Video Description: Implementation of the Twenty-First Century Communications and Video Accessibility Act of 2010*, Report and Order and Further Notice of Proposed Rulemaking, 28 FCC Rcd 17330, 17386, para. 88 (2013) (*CVAA Order*) ("When the covered entity is an MVPD that leases or sells navigation devices to subscribers, we conclude that such MVPD must permit blind or visually impaired subscribers to request compliant devices through any means that it generally makes available to other subscribers requesting navigation devices in order to satisfy its statutory obligation to provide such devices 'upon request'"); 47 CFR § 79.108(a)(5)-(7).

¹²² *CVAA Order*, 28 FCC Rcd at 17386-88, paras. 88-90.

¹²³ *CVAA Order*, 28 FCC Rcd at 17379-80, paras. 77-78 (compliance excused if technologically unachievable).

deaf or hard of hearing is long overdue, and “[t]he Deaf community has long awaited an accessible solution...”¹²⁴ While we are granting cable operators a six-year compliance window to avoid imposing excessive short-term costs, this does not excuse them from their obligation to promptly meet the needs of people who are deaf or hard of hearing for clear visual alerts. Moreover, since cable operators will need to implement equipment replacement plans to ensure that all set-top boxes on their networks can display the new EAN text by the end of the six-year period, we believe it is reasonable to require that such plans include a mechanism to supply compliant set-top boxes at an earlier date to people who are deaf or hard of hearing who request them. To ensure that individuals with hearing disabilities can benefit from earlier access to new or updated set-top boxes, we also require cable operators to post information on the availability of such devices on their official websites as soon as new or updated devices are available for distribution to customers and explain the means for making requests for such equipment, in the same manner as by rule 79.108(d)(2).¹²⁵

53. Finally, with respect to cable-card devices and smart TVs that are not controlled by cable operators,¹²⁶ the Commission encourages those third-party manufacturers to update their deployed devices to reflect the new EAN text where possible, and to ensure future manufactured models reflect the new EAN text.¹²⁷

D. Persistent Alerts

54. In the *NDAA FNPRM*, we discussed a proposal, originally suggested by FEMA, to update legacy EAS to facilitate “persistent alerts” – that is, to enable alerts concerning “emergencies that require immediate public protective actions to mitigate loss of life” to “persist on EAS until the alert time has expired or is cancelled by the alert originator.”¹²⁸ After review of the record, we decline to take further action on this proposal at this time. We are not persuaded that implementing this proposal in legacy EAS would be technically feasible, and we take note of the virtually unanimous opposition to the proposal by commenting parties, including alert originators, SECCs, EAS Participants, and equipment manufacturers.¹²⁹ As one commenter notes, legacy EAS does not enable alert originators to retract or alter an alert once they issue it,¹³⁰ and we are troubled by the possibility that a persistent alert could become outdated or even counter-productive if conditions change as emergency responders address an incident. For example, a persistent alert in legacy EAS would likely block out all subsequent alerts (except an EAN or NPT) until the valid time period for the original alert expired. During that time, the audio portion of the EAS alert would continuously play, which would drown out the audio of regular programming as well as any emergency news programming that might provide updated information related to the emergency

¹²⁴ DeafLink Comments at 1.

¹²⁵ 47 CFR § 108(d)(2). While we did not explicitly seek comment on such proposed requirements, we find that these requirements are a logical outgrowth of our proposal in the *NDAA FNPRM* to revise the text of the EAN alert (if not the three letter code itself), in tandem with the cable industry’s comments regarding the difficulty and time-consumer nature of doing so, as well the existing requirements that cable providers provide notice on their official websites about the availability of accessible navigation devices. See *NDAA FNPRM*, 36 FCC Rcd at 10719, para. 49; 47 CFR § 79.108(a)(5)-(7); NCTA *NDAA* Comments at 3-4.

¹²⁶ NCTA April 9, 2022 *Ex Parte* at 2.

¹²⁷ Cable operators are required to transmit the EAN message to their subscribers, and should therefore take appropriate steps to minimize the risk that updates to their own facilities will trigger a downstream failure in existing third-party customer premise devices. 47 CFR § 11.51(m).

¹²⁸ *NDAA FNPRM*, 36 FCC Rcd at 10720, para. 51 (citing FEMA Comments, May 17, 2021 at 4).

¹²⁹ State of Alaska and Alaska SECC *NDAA* Reply Comments at 1; Nevada SECC *NDAA* Comments at 2-3; NCTA *NDAA* Comments at 5-6; ACA *NDAA* Comments at 3; NAB *NDAA* Comments at 4; USTelecom *NDAA* Reply Comments at 2; DAS *NDAA* Comments at 13-14; Sage *NDAA* Comments at 6-7.

¹³⁰ Sage *NDAA* Comments at 6.

condition not covered in the original EAS alert audio message.¹³¹ Similarly, the original visual message would continuously scroll until the time period for the alert expired, thus blocking the display of potential updated information that the EAS Participant might be attempting to broadcast.¹³²

55. While we recognize that persistent alerts could be feasible and potentially beneficial in a different aging system architecture, we do not see how those benefits could be realized in legacy EAS's architecture, which is designed to provide brief warnings to the public. Moreover, legacy EAS already provides a mechanism for repeatedly reminding the public of an impending emergency: alert originators can repeat their alerts if they determine that such action is warranted. Based on these considerations, we are not adopting any new rules or policies to facilitate persistent alert messages in legacy EAS at this time.

E. Benefit-Cost Analysis

56. *Benefits.* As discussed above, we find that today's rule changes will result in substantial public interest benefits. Specifically, the rule changes we are adopting reduce confusion and make alerts easier to understand, making recipients more likely to trust alerts and respond to them, and will yield particular benefits by improving access to alert information for people with disabilities. The CAP polling rule change will lead to increased dissemination of CAP-formatted alerts, which provide more detailed alert information than legacy alerts to recipients,¹³³ including better instructions on protective measures that the public should take. Similarly, our new rules requiring clearer identification of the purposes and origin of alerts increase the likelihood that the public will pay attention to them. Eliminating confusion and building trust in EAS makes it more likely that the public will follow alert instructions in the future. The public's increased understanding and trust in alerts improves public safety outcomes by saving lives and better protecting property.¹³⁴

57. While it is difficult to quantify the precise dollar value of improvements to the public's safety, life, and health,¹³⁵ we nonetheless conclude that very substantial public safety benefits will result from the rules we adopt today. EAS alerts that convey more complete information and are easier to understand by the general public, especially those with hearing and vision disabilities, will enable more listeners and viewers to respond to emergency situations by taking appropriate protective actions, such as evacuating or sheltering-in-place, depending on the nature of the emergency. As a consequence, we anticipate that the rule changes we adopt today will yield substantial life-saving benefits in the event of such emergencies.¹³⁶ As discussed above, we agree with commenting parties that the CAP polling and prioritization requirement will result in greater display of alerts with clearer and more informative visual text to better inform the public,¹³⁷ and that changing the text of certain alert codes will improve the visual

¹³¹ Sage NDAA Comments at 6; DAS NDAA Comments at 11-12.

¹³² NCTA NDAA Comments at 5-6; ACA NDAA Comments at 3-4.

¹³³ NCTA Accessibility Comments at 2.

¹³⁴ *Amendment of Part 11 of the Commission's Rules Regarding the Emergency Alert System; Wireless Emergency Alerts*, PS Docket No. 15-94, Report and Order, 33 FCC Rcd 7086, 7100, para. 34 (2018) (*Alerting Reliability Order*) (a loss of public confidence in the EAS could "lead the public to require additional information before taking action in response to future alerts, potentially slowing evacuations and other public safety efforts.").

¹³⁵ *Resilient Networks*, Report and Order, PS Docket 21-346, FCC 22-50, para. 46 (2022) (*Resilient Networks Order*) ("it would be impossible to quantify the precise financial value of these health and safety benefits").

¹³⁶ *NDAA Order*, 36 FCC Rcd at 10701, para. 14 (improving the language describing alerts improves the public's response to alerts, which will result in the public taking action faster in times of emergency, thus saving lives).

¹³⁷ *See, e.g.*, Accessibility Coalition Comments at 6; NAB Accessibility Comments at 5; NCTA Accessibility Comments at 2; Timm Accessibility Reply Comments at 3; Walker Accessibility Reply Comments at 2; DAS Accessibility Comments at 15; Sage Accessibility Comments at 4-6; Timm Accessibility Reply Comments at 4;

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displays of alert messages.¹³⁸ The value of improved public safety in reducing the risk of avoidable deaths and injuries by better informing the public of pending emergencies is substantial.¹³⁹ While we cannot estimate the precise incremental dollar value of these changes,¹⁴⁰ improvements to the EAS that increase accessibility, enable people to access and understand alerts more easily and respond more quickly, and increase overall confidence in the EAS will produce large benefits to preservation of life and property.¹⁴¹

58. *Costs.* The measures we adopt today are the most cost-effective ways to achieve the benefits of making EAS more comprehensible, and therefore more effective, as described above. By declining to adopt our proposals to change the PEP code to NAT or the EAN code to NEM, we have avoided imposing additional and often excessive costs imposed by our new requirements will consist largely of on industry.¹⁴² By allowing six years for complete cable system EAN text change compliance, we have avoided excessive costs to the cable industry that would have resulted from a shorter compliance timeframe.¹⁴³ By exempting radio broadcasters from the legacy NPT script change, we are reducing the extent of decoder software updates made outside of the normal course of planned upgrades. Yet, because we are allowing sufficient time and flexibility to allow EAS Participants to make upgrades in tandem with general software upgrades installed during the regular course of business, the cost of the software changes needed due to the requirements adopted today will not significantly exceed the costs of software updates that most EAS Participants would need to implement whether or not these rule changes are adopted.

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NCTA Accessibility Comments at 4; ACA Accessibility Reply Comments at 3-4; DAS Accessibility Comments at 14; Sage Accessibility Comments at 5-6; Accessibility Coalition Comments at 6.

¹³⁸ See, e.g., Accessibility Coalition Comments at 2; NWS Accessibility Comments at 1-3; FEMA May 17, 2021 Comments at 2; NAB NDAA Reply Comments at 5; DAS NDAA Comments at 4, 6; Sage NDAA Comments at 3; NCTA Accessibility Comments at 2-4; ACA Accessibility Reply Comments at 3-4; DAS Accessibility Comments at 2, 4, 11-13; Sage Accessibility Comments at 2-3.

¹³⁹ See *Blue Alerts Order*, 32 FCC Rcd at 10825-26, para. 26 (discussing the value of improved public safety from alerting improvements).

¹⁴⁰ We note that some agencies estimate the benefits of preservation of life and property by considering the value of reduced mortality risk. See, e.g., U.S. Department of Transportation, *Departmental Guidance on Valuation of a Statistical Life in Economic Analysis* (Mar. 23, 2021), <https://www.transportation.gov/office-policy/transportation-policy/revised-departmental-guidance-on-valuation-of-a-statistical-life-in-economic-analysis>. If we were to estimate that the rule changes we adopt today would reduce mortality risk sufficiently as to lead to an expected reduction of one life lost per year – an expectation we find reasonable and conservative here – the benefits of that risk reduction would be worth \$59 million over the first five years after the rules take effect (i.e., 5 × \$11.8 million).

¹⁴¹ *NDAA Order*, 36 FCC Rcd at 10701-02, para. 14; *Review of the Emergency Alert System*, Fifth Report and Order, 27 FCC Rcd 642, 726, para. 265 (2012) (adoption of CAP will help ensure accessibility and encourage alert originators to provide hearing-disabled accessible alerts); *Review of the Emergency Alert System*, Sixth Report and Order, 30 FCC Rcd 6520, 6542, para. 47 (2015); *Amendment of Part 11 of the Commission's Rules Regarding the Emergency Alert System; Wireless Emergency Alerts*, PS Docket No. 15-94, Report and Order, 33 FCC Rcd 7086, 7100, para. 34 (2018) (*Alerting Reliability Order*) (“[L]ack of confidence [in the EAS] can lead the public to require additional information before taking action in response to future alerts, potentially slowing evacuations and other public safety efforts.”).

¹⁴² Sage NDAA Reply Comments at 2 (“The negative effects of changing the [PEP] ORG code includes the requirement for coordination between the originator and ALL existing EAS participants..... Legacy equipment that is not being updated would no longer be able to be used...”); Sage NDAA Comments at 3 (“Transition to a new EEE code would cause a point in time, past which legacy equipment will be completely useless for the national alerting requirement. During the run-up to the switchover date, equipment will need to recognize both the old EAN code and the new code.”).

¹⁴³ NCTA April 8, 2022 *Ex Parte* at 2 (“legacy cable customer premises equipment could encounter issues that cannot be corrected with a software update due to hardware limitations, therefore requiring the operator to make costly replacements”).

Accordingly, most EAS Participants will avoid this cost.¹⁴⁴

59. In the *NDAA FNPRM* and the *Accessibility NPRM*, we asked for cost estimate submissions from parties subject to today's decision.¹⁴⁵ No party did so. We believe, however, that the cost of implementing the EAS decoder equipment changes adopted in this order will be roughly in line with the cost of changes adopted in the 2016 *Weather Alerts Order*¹⁴⁶ and the 2017 *Blue Alerts Order*,¹⁴⁷ which similarly entailed few costs beyond the reprogramming of EAS decoder equipment. In the *Blue Alerts Order*, for example, the Commission concluded that the only cost to EAS Participants for installing the new EAS software is the labor cost involved in downloading the software patches into their devices and associated clerical work.¹⁴⁸ We follow the procedure of estimating the labor costs of updating software used in the *Weather Alerts Order* and the *Blue Alerts Order*.

60. To form an upper bound of the cost, we assume that the software update takes 5 hours which we expect is substantially longer than the average time a software update would take.¹⁴⁹ The Office of Management and Budget approved an estimate of \$25 per hour of labor cost for an EAS Participant to fill out the Commission online report form for EAS National Tests in 2011.¹⁵⁰ We find that the real labor cost of software updates to implement all of today's changes would be similar and adjust the labor cost upward to \$35 to reflect inflation since 2011.¹⁵¹ Each device update would then entail \$175 of labor cost, and with 28,555 estimated broadcasters and cable headends to update, this implies a total cost of approximately \$5 million.¹⁵²

61. Indeed, we find that the software updating cost is likely to be well below \$5 million because, as noted above, most EAS Participants will have sufficient time to avoid this labor cost by

¹⁴⁴ Currently, EAS Participants include 17,521 radio broadcasters and 8,133 other participants (television broadcasters, cable operators, etc.). See Report: August 11, 2021 Nationwide EAS Test, Federal Communications Commission Public Safety and Homeland Security Bureau, p. 7 (December 2021).

¹⁴⁵ *NDAA FNPRM*, 36 FCC Rcd at 10719, 10721, paras. 49-50, 55; *Accessibility NPRM*, paras. 15-17, 19, 27, 29.

¹⁴⁶ *Amendment of Part 11 of the Commission's Rules Regarding Emergency Alert System*, PS Docket No. 15-94, Report and Order, 31 FCC Rcd 7915 (2016) (*Weather Alerts Order*).

¹⁴⁷ *Amendment of Part 11 of the Commission's Rules Regarding Emergency Alert System*, PS Docket No. 15-94, Report and Order, 32 FCC Rcd 10812 (2017) (*Blue Alerts Order*).

¹⁴⁸ *Blue Alerts Order*, 32 FCC Rcd at 10824, para. 25.

¹⁴⁹ *Blue Alerts Order*, 32 FCC Rcd at 10824, para. 25 and *Weather Alerts Order*, 31 FCC Rcd at 7924, para. 23.

¹⁵⁰ See Public Information Collections Approved by the Office of Management and Budget (OMB), 76 Fed. Reg. 68756-01 (Nov. 7, 2011).

¹⁵¹ The average hourly earnings of private employees increased 38% from November 2011 to June 2022, according to estimates provided by the Bureau of Labor Statistics. We therefore find a 40% increase in wages ($\$25 \times 1.4 = \35) to be an appropriate adjustment from the OMB-approved labor cost from November 2011. FRED, Federal Reserve Bank of St. Louis, *U.S. Bureau of Labor Statistics, Average Hourly Earnings of All Employees, Total Private [CES0500000003]*, retrieved from FRED, Federal Reserve Bank of St. Louis, <https://fred.stlouisfed.org/series/CES0500000003> (last visited Aug. 4, 2022).

¹⁵² The figure 28,555 is comprised of the sum of 21,149 broadcaster stations and 7,136 headends. DA 22-365, Broadcast Station Totals as of March 31, 2022, (Apr. 5, 2022) <https://www.fcc.gov/document/broadcast-station-totals-march-31-2022> (stating that there were 21,419 broadcaster stations in the United States as of March 2022, not including FM, VHF and UHF translators). Statista Research Department, The Number of Cable Headends in the United States, (2014), <http://www.statista.com/statistics/186996/number-of-cable-headends-in-the-united-tatessince-1998/> (stating that in 2011 there were 7,136 cable headends in the United States). According to the Statista data, cable headends were declining from 1998 to 2011, so 7,136 is likely a conservative over-estimate.

downloading the required software changes together with their general software upgrades.¹⁵³ We therefore estimate the cost of all decoder software updates¹⁵⁴ most of which can be bundled with “normally scheduled software releases” and performed at the same time,¹⁵⁵ will not exceed a total one-time cost of approximately \$5 million for all EAS participants.¹⁵⁶

62. According to cable industry commenters, four of the six changes (CAP polling, EAN text, NPT text, and NPT script) also require significant testing in cable operators’ networks.¹⁵⁷ As to those testing costs for the cable industry, we believe that industry will realize substantial cost savings from conducting coordinated testing for all of these changes and can do so on the same one-year schedule in tandem with other annual testing. We expect that this will result in additional testing cost that, together with the software downloads, will not cause total costs to exceed the \$5 million cost ceiling discussed above. As to the added equipment costs in the cable industry, we expect that cost to be minimal. The six-year timeframe we are allowing for the replacement of set-top boxes will enable operators in most cases to install new equipment in consumers’ premises in the ordinary course of business. We estimate that the additional amount that cable operators will incur for replacing set-top boxes to implement the new EAN requirement over the six-year period will not exceed \$4.4 million as a cost ceiling.¹⁵⁸

63. *Comparison of Costs and Benefits.* We conclude that the life-saving benefits to the public of increased comprehensibility and accessibility of emergency information from the actions adopted in this Order will far outweigh the implementation costs imposed on EAS participants. Without attempting to quantify the precise dollar value of improvements to the public’s safety, life, and health,¹⁵⁹

¹⁵³ *Amendment of Part 11 of the Commission’s Rules Regarding Emergency Alert System*, PS Docket No. 15-94, Report and Order, 32 FCC Rcd 10812 (2017) (*Blue Alerts Order*).

¹⁵⁴ Sage NDAA Reply Comments at 2; *see also* Sage Accessibility Comments at 5.

¹⁵⁵ DAS NDAA Comments at 5; *see also* DAS Accessibility Comments at 13; NCTA NDAA Comments at 8; NAB Accessibility comments at 2, 6; *Review of the Emergency Alert System*, Notice of Proposed Rulemaking, 29 FCC Rcd 8123, 8145, para. 44 (2014) (“Commenters agree that the costs associated with implementing our proposed rules can be reduced by bundling all required upgrades into a regularly scheduled system update.”) (*Operational Issues NPRM*); *Weather Alerts Order*, 31 FCC Rcd at 7915, para. 1 (The order required EAS equipment updates “to add three new EAS event codes, covering extreme wind and storm surges, as well as revise the territorial boundaries of the geographic location codes for two offshore marine areas.”).

¹⁵⁶ *Blue Alerts Order*, 32 FCC Rcd at 10824, para. 25 (“The NWS Report and Order used a worst-case cost figure of \$125.00 per device, allowing five hours of labor to be spent by each of the 28,058 broadcasters and cable companies, resulting in a cost ceiling of \$3.5 million. We adopt the Commission’s tentative conclusion in the Blue Alert NPRM, and find that a dedicated Blue Alert EAS event code would not exceed a one-time \$3.5 million implementation cost.”); *Weather Alerts Order*, 31 FCC Rcd at 7924, para. 23 (“[W]e anticipate that the only cost to EAS Participants who elect to install these new event codes and geographic location code revisions will be whatever labor cost is involved in downloading the software patches into their devices and associated clerical work. We further anticipate that such installation would not on average take more than one hour. However, even using a worst case cost figure of \$ 125.00 per device -- which figure represents the labor cost estimate approved by the Office of Management and Budget for an EAS Participant to fill out the Commission’s online reporting form for EAS National Tests at a total time expenditure of five hours -- the cost of implementing these codes are far exceeded by the benefits they provide. At a per-unit cost of \$125.00, even if all EAS Participants elected to implement these codes (an unlikely event in areas not prone to hurricanes), the aggregate cost of adopting these new codes would be approximately \$3.5 million.”).

¹⁵⁷ *See* NCTA Accessibility Comments at 3-4; NCTA April 9, 2022 *Ex Parte* at 2.

¹⁵⁸ *Sixth Report and Order*, 30 FCC Rcd at 6530, fn. 66 (NCTA stated “that an EAN-emulating NPT would cost \$4.4 million to implement.”); *Operational Issues NPRM*, 29 FCC Rcd at 8146, para. 46 (“According to NCTA,” the proposed NPT changes would “require the underlying SCTE 18 standard to be revised, sub-standards rewritten..., MVPD downstream equipment reprogrammed, and significant testing to be undertaken.”).

¹⁵⁹ *Resilient Networks*, Report and Order, PS Docket 21-346, FCC 22-50, para. 46 (2022) (*Resilient Networks Order*).

we observe that the value of the benefits of each of today's six changes would only have to exceed the worst-case estimated implementation costs to outweigh the cost of compliance.¹⁶⁰ In light of the record reflecting substantial public safety improvements from today's changes, we find that the changes will have a value that greatly exceeds the \$9.4 million overall cost ceiling for implementing these six changes. Based on the record, we further find that each change has a value that exceeds its incremental implementation cost.

IV. PROCEDURAL MATTERS

64. *Regulatory Flexibility Act.* The Regulatory Flexibility Act of 1980, as amended (RFA),¹⁶¹ requires that an agency prepare a regulatory flexibility analysis for notice and comment rulemakings, unless the agency certifies that "the rule will not, if promulgated, have a significant economic impact on a substantial number of small entities."¹⁶² Accordingly, the Commission has prepared a Final Regulatory Flexibility Analysis (FRFA) concerning the possible impact of the rule changes contained in this Report and Order on small entities. The FRFA is set forth in Appendix B.

65. *Congressional Review Act.* The Commission has determined, and the Administrator of the Office of Information and Regulatory Affairs, Office of Management and Budget, concurs, that this rule is "non-major" under the Congressional Review Act.¹⁶³ The Commission will send a copy of this Report and Order to Congress and the Government Accountability Office.¹⁶⁴

66. *Paperwork Reduction Act Analysis.* This document does not contain new or modified information collections subject to the Paperwork Reduction Act of 1995 (PRA).¹⁶⁵ In addition, therefore, it does not contain any new or modified information collection burden for small business concerns with fewer than 25 employees, pursuant to the Small Business Paperwork Relief Act of 2002.¹⁶⁶

67. *People with Disabilities:* 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 and Governmental Affairs Bureau at 202-418-0530 (voice).

68. *Further Information.* For further information, contact Chris Fedeli, Attorney Advisor, Policy and Licensing Division, Public Safety and Homeland Security Bureau, at (202) 418-1514 or Christopher.Fedeli@fcc.gov.

V. ORDERING CLAUSES

69. 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 713 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, 613, as well as by sections 602(a), (b), (c), (f), 603, 604 and 606 of the WARN Act, 47 U.S.C. §§ 1202(a), (b), (c), (f),

¹⁶⁰ See Office of Management and Budget, Office of Information and Regulatory Affairs (OIRA). See OIRA Regulatory Impact Analysis: A Primer, at https://www.reginfo.gov/public/jsp/Utilities/circular-a-4_regulatory-impact-analysis-a-primer.pdf (visited July 25, 2022) (in cases where precise quantification and monetization of benefits is not possible, urging agencies to ask, "[h]ow large would the value of the non-quantified benefits have to be for the rule to yield positive net benefits?").

¹⁶¹ 5 U.S.C. § 604. The RFA, 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).

¹⁶² 5 U.S.C. § 605(b).

¹⁶³ 5 U.S.C. § 804(2).

¹⁶⁴ *Id.* § 801(a)(1)(A).

¹⁶⁵ 44 U.S.C. §§ 3501-3521.

¹⁶⁶ *Id.* § 3506(c)(4).

1203, 1204 and 1206, and the National Defense Authorization Act for Fiscal Year 2021, Pub. L. 116-283, 134 Stat. 3388, § 9201, 47 U.S.C. §§ 1201, 1206, that the foregoing Report and Order IS ADOPTED, and the Commission's rules are hereby amended, as set forth in Appendix A.

70. IT IS FURTHER ORDERED that that Part 11 of the Commission's rules IS AMENDED, as set forth in Appendix A, and that this Report and Order, including the amended rules, SHALL BE EFFECTIVE 30 days after publication in the Federal Register.

71. IT IS FURTHER ORDERED that the Office of the Managing Director, Performance Evaluation and Records Management, SHALL SEND a copy of this Report & Order in a report to be sent to Congress and the Government Accountability Office pursuant to the Congressional Review Act, 5 U.S.C. § 801(a)(1)(A).

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

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

APPENDIX A

Final Rules

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

PART 11 – EMERGENCY ALERT SYSTEM (EAS)

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

Authority: 47 U.S.C. 151, 154(i) and (o), 303(r), 544(g), 606, 1201, 1206.

2. Amend section 11.2 by revising paragraph (a) to read as follows:

§ 11.2 Definitions.

* * * * *

- (a) **National Emergency Message (EAN).** The National Emergency Message (formerly called the Emergency Action Notification or Presidential alert message) is the notice to all EAS Participants and to the general public that the EAS has been activated for a national emergency. EAN messages that are formatted in the EAS Protocol (specified in § 11.31) are sent from a government origination point to broadcast stations and other entities participating in the National Public Warning System, and are subsequently disseminated via EAS Participants. Dissemination arrangements for EAN messages that are formatted in the EAS Protocol (specified in § 11.31) at the State and local levels are specified in the State and Local Area plans (defined at § 11.21). A national activation of the EAS for a Presidential National Emergency Message with the Event code EAN as specified in § 11.31 must take priority over any other message and preempt it if it is in progress.

* * * * *

3. Amend section 11.16 by deleting paragraph (c) and revising paragraph (a) to read as follows:

§ 11.16 National Control Point Procedures.

* * * * *

- (a) **National Level EAS Activation.** This section contains the activation and termination instructions for the National Emergency Message.

* * * * *

4. Amend section 11.18 to read as follows:

§ 11.18 EAS Designations.

- (a) A Primary Entry Point (PEP) is a private or commercial radio broadcast station that cooperatively participates with FEMA to provide EAS alerts to the public. PEPs are the primary source of initial broadcast for a Presidential Alert. A PEP is equipped with back-up communications equipment and power generators designed to enable it to continue broadcasting information to the public during and after disasters of national significance. The National Public Warning System (formerly called the Primary Entry Point System) is a nationwide network of broadcast stations and satellite operators used to distribute EAS alerts formatted in the EAS Protocol. FEMA is responsible for designating broadcast stations as PEPs.

- (b) A National Primary (NP) is an entity tasked with the primary responsibility of receiving the National Emergency Message from a PEP and delivering it to an individual state or portion of a state. In states without a PEP, the NP is responsible for receiving the National Emergency Message from an out-of-state PEP and transmitting it to the public and other EAS Participants in the state. Multiple entities may be charged with primary responsibility for delivering the National Emergency Message.
- (c) A State Primary (SP) is an entity tasked with initiating the delivery of EAS alerts other than the National Emergency Message.
- (d) A State Relay (SR) is an entity not otherwise designated that is charged with retransmitting EAS alerts for the purpose of being monitored by a Local Primary or Participating National. SRs must monitor or deliver EAS alerts as required by the State EAS Plan.
- (e) A State Relay Network (SRN) is a network composed of State Relay (SR) sources, leased common carrier communications facilities, or any other available communication facilities. The network distributes State EAS messages originated by the Governor or designated official. In addition to EAS monitoring, satellites, microwave, FM subcarrier, or any other communications technology may be used to distribute State emergency messages.
- (f) A Local Primary (LP) is an entity that serves as a monitoring assignment for other EAS Participants within the state. LP sources may be assigned numbers (e.g., LP-1, 2, 3) and are relied on as monitoring sources by other EAS Participants in the Local Area. An LP may monitor any other station, including another LP, as set forth in the State EAS Plan, so long as doing so avoids creating a single point of failure in the alert distribution hierarchy.
- (g) A Participating National (PN) is an EAS Participant that transmits national, state, or Local Area EAS messages, and is not otherwise designated within the State EAS Plan. PNs monitor LPs or other sources as set forth in the State EAS Plan.

5. Amend section 11.21 by revising paragraphs (a)(2), (a)(4), and (a)(7) to read as follows:

§ 11.21 State and Local Area plans and FCC Mapbook.

* * * * *

(a) * * *

* * * * *

- (2) Procedures for state emergency management officials, the National Weather Service, and EAS Participant personnel to transmit emergency information to the public during an emergency via the EAS, including the extent to which the state’s dissemination strategy for state and local emergency alerts differs from its strategy for the National Emergency Message;

* * * * *

- (4) A monitoring assignment matrix, in computer readable form, clearly showing monitoring assignments and the specific primary and backup path for the National Emergency Message (EAN) from the NPWS to all key EAS sources (using the uniform designations specified in § 11.18) and to each station in the plan, organized by operational areas within the state. 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;

* * * * *

- (7) The SECC governance structure utilized by the state in order to organize state and local resources to ensure the efficient and effective delivery of a National Emergency Message, including the

duties of the SECC, the membership selection process utilized by the SECC, and the administrative structure of the SECC.

* * * * *

6. Amend section 11.31 by revising paragraph (d) and the “National codes (required)” portion of the table following paragraph (e) to read as follows:

§ 11.31 EAS protocol.

* * * * *

(d)(1) The only originator codes are:

Originator	ORG code
EAS Participant	EAS
Civil authorities	CIV
National Weather Service	WXR
United States Government	PEP

(2) Use of the previously authorized NIC originator code (National Information Center) must be discontinued by no later than [INSERT DATE ONE YEAR AND 30 DAYS AFTER THE DATE OF PUBLICATION IN THE FEDERAL REGISTER].

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

Nature of Activation	Event codes
National codes (required):	
National Emergency Message	EAN
Nationwide Test of the Emergency Alert System	NPT
Required Monthly Test	RMT
Required Weekly Test	RWT
State and Local Codes (Optional):	
* * *	* * *

* * * * *

7. Amend section 11.51 by revising paragraphs (d), (g)(3), (h)(3), (j)(2), (m) (introductory text), (m)(2), and (p), to read as follows:

§ 11.51 EAS code and Attention Signal Transmission requirements.

* * * * *

(d) Analog and digital television broadcast stations, analog cable systems, digital cable systems, wireless cable systems, wireline video systems, and DBS providers shall transmit a visual message containing the Originator, Event, and Location and the valid time period of an EAS message. 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 § 3.6 of the “ECIG Recommendations for a CAP EAS Implementation Guide, Version 1.0” (May 17, 2010).

- (1) The visual message portion of an EAS alert, whether video crawl or block text, must be displayed:
 - (i) At the top of the television screen or where it will not interfere with other visual messages
 - (ii) In a manner (i.e., font size, color, contrast, location, and speed) that is readily readable and understandable,
 - (iii) In a manner that does not contain overlapping lines of EAS text or extend beyond the viewable display (except for video crawls that intentionally scroll on and off of the screen), and
 - (iv) In full at least once during any EAS message.
- (2) The audio portion of an EAS message must play in full at least once during any EAS message.
- (3) On and after [INSERT DATE ONE YEAR AND THIRTY DAYS AFTER THE DATE OF PUBLICATION IN THE FEDERAL REGISTER],
 - (i) The portion of the required visual message corresponding with the Originator Code shall use the term in the first column in the table in § 11.31(d) corresponding to the ORG code in the second column of that table.
 - (ii) The portion of the required visual message corresponding with the Event Code shall use the term in the first column in the table in § 11.31(e) corresponding to the Event code in the second column of that table, except as set forth in paragraphs (d)(3)(iii) and (d)(5) of this section.
 - (iii) Notwithstanding paragraphs (d)(3)(i) and (ii) of this section, if the header codes of the received EAS message specify the NPT Event code and the “All U.S.” location code, and if the received EAS message is formatted in the EAS protocol, then the required visual message shall consist of the following text instead of replicating the terms of the Originator, Event, and Location codes: “This is a nationwide test of the Emergency Alert System, issued by the Federal Emergency Management Agency, covering the United States from [time] until [time]. This is only a test. No action is required by the public.” The “from [time] until [time]” portion of the text required in the preceding sentence shall be determined from the alert’s release date/time and valid time period header codes specified at § 11.31(c).
- (4) Prior to [INSERT DATE ONE YEAR AND THIRTY DAYS AFTER THE DATE OF PUBLICATION IN THE FEDERAL REGISTER], the required visual message shall either conform to paragraph (d)(3) or, in the alternative, shall display—
 - (i) The term “Emergency Action Notification” as the portion of the visual message corresponding to the EAN Event code if the header codes of the received EAS message specify the EAN Event code.
 - (ii) The term “National Periodic Test” as the portion of the visual message corresponding to the NPT Event code if the header codes of the received EAS message specify the NPT Event code.
 - (iii) The term “Primary Entry Point” as the portion of the visual message corresponding to the PEP Originator code if the header codes of the received EAS message specify the PEP Originator code.
- (5) If the EAS Participant is an analog or digital cable system subject to paragraphs (g) or (h) of this section, then—
 - (i) If, with respect to a particular subscriber, the portion of the required visual message corresponding to the EAN event code can be altered by means of software upgrades or other changes that do not require replacement of the subscriber’s navigation device, then, prior to [INSERT DATE ONE YEAR AND THREE MONTHS AND THIRTY DAYS AFTER THE DATE OF PUBLICATION IN THE FEDERAL REGISTER], the portion of the required visual message displayed to the subscriber corresponding to the EAN Event code shall comply with either paragraph (d)(3)(ii) or (d)(4)(i) of this section; after that date, the portion of the required

visual message displayed to the subscriber corresponding to the EAN Event code shall comply with paragraph (d)(3)(ii) of this section.

(ii) If, with respect to a particular subscriber, no alterations to the portion of the required visual message corresponding to the EAN event code can be implemented unless the subscriber’s navigation device is replaced with a device that is capable of displaying the visual message corresponding to the EAN event code as set forth in paragraph (d)(3)(ii) of this section, then, prior to [INSERT DATE SIX YEARS AND THIRTY DAYS AFTER THE DATE OF PUBLICATION IN THE FEDERAL REGISTER] or the date when the subscriber’s navigation device is replaced, whichever occurs earliest,—

(A) The portion of the required visual message displayed to the subscriber corresponding to the EAN Event code shall comply with either paragraph (d)(3)(ii) or paragraph (d)(4)(i) of this section; thereafter, the portion of the required visual message displayed to the subscriber corresponding to the EAN Event code shall comply with paragraph (d)(3)(ii) of this section.

(B) If the operator of the cable system makes the navigation device available to the subscriber as “associated equipment” in connection with a cable service, as the term “associated equipment” is used in part 76, subpart N of this chapter, and a subscriber who is deaf or hard of hearing requests that the cable system operator provide a navigation device that is capable of displaying a visual message that complies with paragraph (d)(1) of this section, to replace a navigation device that lacks such capability, then the cable system operator shall provide and, if necessary, install such replacement navigation device within a reasonable period of time, to the same extent required and on the same terms and conditions as set forth at § 79.108 of this chapter. This paragraph (d)(5)(ii)(B) applies only to subscribers who state that they are deaf or hard of hearing or a household member who is deaf or hard of hearing.

(iii) Prior to [INSERT DATE SIX YEARS AND 30 DAYS AFTER THE DATE OF PUBLICATION IN THE FEDERAL REGISTER], the cable system operator must prominently display on its website information regarding the availability of replacement navigation devices to eligible subscribers as set forth in paragraph (d)(5)(ii)(B) of this section, in the same manner as provided at § 79.108(d)(2) of this chapter.

(iv) For purposes of this paragraph (d)(5), the term “navigation device” means equipment that is located at a subscriber’s premises and satisfies the definition of “navigation device” in § 76.1200(c) of this chapter.

* * * * *

(g) * * *

* * * * *

(3) Shall transmit a visual EAS message on at least one channel. The visual message shall comply with the requirements in paragraph (d) of this section.

* * * * *

(h) * * *

* * * * *

(3) Shall transmit the EAS visual message on all downstream channels. The visual message shall comply with the requirements in paragraph (d) of this section.

* * * * *

(j) * * *

(2) The visual message shall comply with the requirements in paragraph (d) of this section.

* * * * *

(m) EAS Participants are required to transmit all received EAS messages in which the header code contains the Event code for National Emergency Message (EAN), Nationwide Test of the Emergency Alert System (NPT), or 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 any of the Event codes listed in this paragraph, it must include the location codes for the State(s) 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.

* * * * *

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

* * * * *

(p) The standard required in this section is incorporated by reference into this section with the approval of the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR part 51. To enforce any edition other than that specified in this section, the Federal Communications Commission must publish notice of change in the Federal Register and the material must be available to the public. All approved material is available for inspection at the Federal Communications Commission, located at the address indicated in § 0.401(a) of this chapter (Reference Information Center), and is available from the source indicated in this paragraph (p). It is also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email fr.inspection@nara.gov or go to <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

8. Amend section 11.52 by revising paragraphs (d)(2) and (e) to read as follows:

§ 11.52 EAS code and Attention Signal Monitoring requirements.

* * * * *

(d) * * *

* * * * *

(2) With respect to monitoring EAS messages formatted in accordance with the specifications set forth in § 11.56(a)(2), EAS Participants' EAS equipment must regularly poll the Federal Emergency Management Agency's Integrated Public Alert and Warning System (IPAWS) EAS alert distribution channel to detect and acquire Common Alert Protocol (CAP)-formatted alert messages from the IPAWS system to EAS Participants' EAS equipment.

* * * * *

(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 National Emergency Message (EAN), the Nationwide Test of the Emergency Alert System (NPT), or the Required Monthly Test (RMT) for their State or State/county location.

* * * * *

9. In section 11.55, revise paragraphs (c) (introductory text), (c)(1), and (c)(2); delete existing paragraph (c)(3); redesignate existing paragraph (c)(4) as (c)(3) and revise it; redesignate existing paragraphs (c)(5)-(8) as paragraphs (c)(4)-(7), respectively; and revise paragraphs (d) (introductory text) and (d)(2), to read as follows:

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

* * * * *

- (c) An EAS Participant that participates in the State or Local Area EAS, upon receipt of a State or Local Area EAS message that has been formatted in the EAS Protocol and that has event and location header codes indicating that it is a type of message that the EAS Participant normally relays, consistent with the procedures in the State or Local Area EAS Plan, must do the following:
- (1) Prior to [INSERT DATE ONE YEAR AND 30 DAYS AFTER THE DATE OF PUBLICATION IN THE FEDERAL REGISTER], the EAS Participant shall follow the procedures set forth in the State EAS Plan and paragraphs (c)(3)-(7) of this section.
 - (2) On and after [INSERT DATE ONE YEAR AND 30 DAYS AFTER THE DATE OF PUBLICATION IN THE FEDERAL REGISTER],—
 - (i) *CAP Prioritization.* If a message formatted in the Common Alerting Protocol is available that is a duplicate of the received message formatted in the EAS Protocol, then the EAS Participant shall not transmit the received message formatted in the EAS Protocol but shall follow the procedures in paragraph (d) of this section to transmit the message formatted in the Common Alerting Protocol.
 - (ii) *Polling.* At least ten (10) seconds after detecting the initial header code of a received message formatted in the EAS protocol, if the EAS Participant has not by that time determined that a duplicate message formatted in the Common Alerting Protocol is available, it shall poll the Federal Emergency Management Agency’s Integrated Public Alert and Warning System (IPAWS) at least once to determine whether a duplicate CAP-formatted alert message is available.
 - (A) If a duplicate CAP-formatted alert message is available, the EAS Participant shall proceed according to paragraphs (c)(2)(i) and (d) of this section.
 - (B) If no duplicate CAP-formatted alert message is available, or if the alert contents, including the audio message, cannot be acquired within a reasonable timeframe, the EAS Participant shall proceed according to paragraphs (c)(3)-(7) of this section.
 - (iii) For purposes of this paragraph (c)(2), two EAS messages are “duplicates” if the originator codes, event codes, location codes, and date-time codes in the validated headers of both messages are all identical, and the valid time-period codes in the headers of both messages cover approximately the same periods of time, with allowances for the different manners in which messages in CAP and legacy EAS formats express valid time periods.
 - (3) EAS Participants participating in the State or Local Area EAS must discontinue normal programming and follow the procedures in their State and Local Area Plans. Analog and digital television broadcast stations must transmit all EAS announcements visually and aurally as specified in § 11.51(a) through (e) and 73.1250(h) of this chapter, as applicable; analog cable systems, digital cable systems, wireless cable systems, and wireline video systems must transmit all EAS announcements visually and aurally as specified in § 11.51(d), (g), and (h); and DBS providers must transmit all EAS announcements visually and aurally as specified in § 11.51(d) and (j). EAS Participants providing foreign language programming should transmit all EAS announcements in the same language as the primary language of the EAS Participant.

* * * * *

(d) An EAS Participant that participates in the State or Local Area EAS, upon receipt of a State or Local Area EAS message that has been formatted in the Common Alerting Protocol and that has event and location header codes indicating that it is a type of message that the EAS Participant normally relays, must do the following:

* * * * *

(2) Analog and digital television broadcast stations must transmit all EAS announcements visually and aurally as specified in § 11.51(a) through (e) and 73.1250(h) of this chapter, as applicable; analog cable systems, digital cable systems, wireless cable systems, and wireline video systems must transmit all EAS announcements visually and aurally as specified in § 11.51(d), (g), and (h); and DBS providers must transmit all EAS announcements visually and aurally as specified in § 11.51(d) and (j). EAS Participants providing foreign language programming should transmit all EAS announcements in the same language as the primary language of the EAS Participant.

* * * * *

10. Amend section 11.56 by revising paragraph (d) to read as follows:

§ 11.56 Obligation to process CAP-formatted EAS messages.

* * * * *

(d) The standards required in this section are incorporated by reference into this section with the approval of the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR part 51. To enforce any edition other than that specified in this section, the Federal Communications Commission must publish notice of change in the Federal Register and the material must be available to the public. All approved material is available for inspection at the Federal Communications Commission, located at the address indicated in § 0.401(a) of this chapter (Reference Information Center), and is available from the sources indicated in this paragraph (d). It is also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email fr.inspection@nara.gov or go to <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

* * * * *

11. Amend section 11.61 by adding new paragraph (a)(1)(iv) after existing paragraph (a)(1)(iii) and revising paragraph (a)(3) (introductory text), to read as follows:

§ 11.61 Tests of EAS procedures.

* * * * *

(a) * * *

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

* * * * *

(iv) Upon receipt of an EAS message in the EAS Protocol format with the Required Monthly Test (RMT) event code, an EAS Participant shall follow the steps set forth in § 11.55(c)(1)-(3).

* * * * *

(3) Nationwide Tests of the Emergency Alert System (NPT) (national tests)

* * * * *

APPENDIX B

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 Further Notice of Proposed Rulemaking released in June 2021, and the Notice of Proposed Rulemaking released in December 2021 (*Notices*).² The Commission sought written public comment on the proposals in the *Notices*, including comment on the IRFAs. The two comments were filed addressing the IRFAs are discussed below in Section B. This present Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.³

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

2. In today's Report and Order (*Order*), the Commission adopts rules to improve the comprehensibility and accessibility of emergency alerts the public receives via broadcast, cable, and satellite radio and television via the Emergency Alert System (EAS). The EAS ensures that the public is quickly informed about emergency alerts issued by federal, state, local, Tribal, and territorial governments and delivered over radio and television. These announcements keep the public safe and informed and have increased in importance in the wake of the emergencies and disasters experienced by Americans in the past few years. The Commission has determined that these EAS rule changes are necessary to improve the comprehensibility and accessibility of EAS alerts, and to ensure equal accessibility to emergency alert information for people with hearing disabilities. Consistent with the congressional directives in the Communications Act, the Commission amends its rules to ensure that more people will receive better emergency alert information from the EAS.

3. Specifically, the Commission requires EAS Participants, upon receiving an alert in legacy format, to poll the Federal Emergency Management Agency's (FEMA) Integrated Public Alert Warning System (IPAWS) for a version of the alert in the Common Alerting Protocol (CAP) and, if available, to distribute the CAP version of the alert instead. The Commission also amends its rules to change the visual text displayed to the public for three alert codes: the Emergency Action Notification (EAN), the Primary Entry Point system (PEP), and the National Periodic Test (NPT), and to add a fourth new visual display for when the NPT is sent in legacy-only format. Finally, the Commission removes the outdated National Information Center (NIC) code from the EAS.

4. The rules adopted in the *Order* are intended to improve the clarity and comprehensibility of visual alert information for all Americans, and to ensure alerts are accessible to people who are deaf or hard of hearing. They will benefit the public by improving the quality of emergency information received, and they will ensure that the superior visual "enhanced text" capabilities of CAP alerts are more frequently distributed to the public. These actions will have the result of minimizing confusion and disruption caused by confusing visual alerts, will increase the public's trust in the EAS system, will promote accessibility to emergency information for people who are deaf or hard of hearing, and therefore will improve the system for distributing vital alert information for all Americans.

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 *Amendment of the Commission's Rules Regarding the Emergency Alert System; Wireless Emergency Alerts*, PS Docket Nos. 15-91 and 15-94, 36 FCC Rcd 10694, Report and Order and Further Notice of Proposed Rulemaking (2021) and *Amendment of the Commission's Rules Regarding the Emergency Alert System*, PS Docket No. 15-94, Notice of Proposed Rulemaking and Notice of Inquiry, FCC 21-125 (2021) (jointly referred to herein as *Notices*).

³ See 5 U.S.C. § 604.

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

5. Brett Silverman and Jack Underhill filed comments that specifically addressed the analysis presented in the IRFAs. Silverman states that the Commission's 2012 order requiring all EAS Participants to make significant upgrades to their EAS equipment to support CAP alerting "means that many of the smaller business entities have already paid to update their EAS systems," and therefore the proposed rules "will not put a significant effect on smaller broadcast companies who it may have been a burden for."⁴ Underhill states that the Commission should minimize costs for small entity broadcasters by "grant[ing] governmental subsidies to fund the software upgrades," or by "providing a general subsidy for organizations to fund any kind of equipment."⁵

6. The Commission agrees with Silverman's assessment that the rules we adopt today are, in large part, extensions of the equipment upgrades for the transition to CAP alerting which began in 2012, and therefore the costs will not significantly impact small entities. With respect to Underhill's comments, the Commission does not currently have a statutory funding mechanism in place to make grants to smaller broadcasters for the purpose of seeking to comply with the Commission's EAS rules or as a general fund. The Commission encourages small entities needing funds to seek grants that may be available from other funding sources, including the U.S. Department of Commerce's National Telecommunications and Information Administration or the Corporation for Public Broadcasting.

C. Response to Comments by the Chief Counsel for Advocacy of the Small Business Administration

7. Pursuant to the Small Business Jobs Act of 2010, which amended the RFA, the Commission is required to respond to any comments filed by the Chief Counsel for Advocacy of the Small Business Administration (SBA), and to provide a detailed statement of any change made to the proposed rules as a result of those comments.⁶

8. The Chief Counsel did not file any comments in response to the proposed rules in this proceeding.

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

9. 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.⁷ The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."⁸ In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.⁹ 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 SBA.¹⁰

⁴ Silverman Accessibility Comments at 1.

⁵ Underhill Accessibility Comments at 2.

⁶ 5 U.S.C. § 604(a)(3).

⁷ 5 U.S.C. § 604(a)(4).

⁸ 5 U.S.C. § 601(6).

⁹ 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."

¹⁰ 15 U.S.C. § 632.

10. Small entities are among the current EAS Participants which include 17,521 radio broadcasters and 8,133 other participants, including television broadcasters, cable operators, satellite operators, and other businesses in the industry segments discussed below, that are impacted by the changes adopted in today's *Order*.¹¹

11. *Small Businesses, Small Organizations, and Small Governmental Jurisdictions*. Our actions may, over time, affect small entities that are not easily categorized at present. We therefore describe here, at the outset, three broad groups of small entities that could be directly affected herein.¹² First, while there are industry specific size standards for small businesses that are used in the regulatory flexibility analysis, according to data from the SBA's Office of Advocacy, in general a small business is an independent business having fewer than 500 employees.¹³ These types of small businesses represent 99.9% of all businesses in the United States which translates to 32.5 million businesses.¹⁴

12. Next, the type of small entity described as a "small organization" is generally "any not-for-profit enterprise which is independently owned and operated and is not dominant in its field."¹⁵ Internal Revenue Service (IRS) uses a revenue benchmark of \$50,000 or less to delineate its annual electronic filing requirements for small exempt organizations.¹⁶ Nationwide, for tax year 2020, there were approximately 447,689 small exempt organizations in the U.S. reporting revenues of \$50,000 or less according to the registration and tax data for exempt organizations available from the IRS.¹⁷

13. Finally, the small entity described as a "small governmental jurisdiction" is defined generally as "governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand."¹⁸ U.S. Census Bureau data from the 2017 Census of Governments¹⁹ indicate that there were 90,075 local governmental jurisdictions consisting of general

¹¹ See Report: August 11, 2021 Nationwide EAS Test, Federal Communications Commission Public Safety and Homeland Security Bureau, p. 7 (December 2021).

¹² See 5 U.S.C. § 601(3)-(6).

¹³ See SBA, Office of Advocacy, Frequently Asked Questions, "What is a small business?," <https://cdn.advocacy.sba.gov/wp-content/uploads/2021/11/03093005/Small-Business-FAQ-2021.pdf>. (Nov 2021).

¹⁴ *Id.*

¹⁵ 5 U.S.C. § 601(4).

¹⁶ The IRS benchmark is similar to the population of less than 50,000 benchmark in 5 U.S.C § 601(5) that is used to define a small governmental jurisdiction. Therefore, the IRS benchmark has been used to estimate the number small organizations in this small entity description. See Annual Electronic Filing Requirement for Small Exempt Organizations — Form 990-N (e-Postcard), "Who must file," <https://www.irs.gov/charities-non-profits/annual-electronic-filing-requirement-for-small-exempt-organizations-form-990-n-e-postcard>. We note that the IRS data does not provide information on whether a small exempt organization is independently owned and operated or dominant in its field.

¹⁷ See Exempt Organizations Business Master File Extract (EO BMF), "CSV Files by Region," <https://www.irs.gov/charities-non-profits/exempt-organizations-business-master-file-extract-eo-bmf>. The IRS Exempt Organization Business Master File (EO BMF) Extract provides information on all registered tax-exempt/non-profit organizations. The data utilized for purposes of this description was extracted from the IRS EO BMF data for businesses for the tax year 2020 with revenue less than or equal to \$50,000, for Region 1-Northeast Area (58,577), Region 2-Mid-Atlantic and Great Lakes Areas (175,272), and Region 3-Gulf Coast and Pacific Coast Areas (213,840) which includes the continental U.S., Alaska, and Hawaii. This data does not include information for Puerto Rico.

¹⁸ 5 U.S.C. § 601(5).

¹⁹ See 13 U.S.C. § 161. The Census of Governments survey is conducted every five (5) years compiling data for years ending with "2" and "7". See also Census of Governments, <https://www.census.gov/programs-surveys/cog/about.html>.

purpose governments and special purpose governments in the United States.²⁰ Of this number there were 36,931 General purpose governments (county²¹, municipal and town or township²²) with populations of less than 50,000 and 12,040 special purpose governments – independent school districts²³ with enrollment of less than 50,000.²⁴ Accordingly, based on the 2017 U.S. Census of Governments data, we estimate that at least 48,971 entities fall into the category of “small governmental jurisdictions.”²⁵

14. *Radio Stations.* This industry is comprised of “establishments primarily engaged in broadcasting aural programs by radio to the public.”²⁶ Programming may originate in their own studio, from an affiliated network, or from external sources.²⁷ The SBA small business size standard for this industry classifies firms having \$41.5 million or less in annual receipts as small.²⁸ U.S. Census Bureau data for 2017 show that 2,963 firms operated in this industry during that year.²⁹ Of this number, 1,879 firms operated with revenue of less than \$25 million per year.³⁰ Based on this data and the SBA’s small business size standard, we estimate a majority of such entities are small entities.

²⁰ See U.S. Census Bureau, 2017 Census of Governments—Organization, Table 2. Local Governments by Type and State: 2017 [CG1700ORG02], <https://www.census.gov/data/tables/2017/econ/gus/2017-governments.html>. Local governmental jurisdictions are made up of general purpose governments (county, municipal and town or township) and special purpose governments (special districts and independent school districts). See also Table 2. CG1700ORG02 Table Notes_Local Governments by Type and State_2017.

²¹ See *id* at Table 5, County Governments by Population-Size Group and State: 2017 [CG1700ORG05], <https://www.census.gov/data/tables/2017/econ/gus/2017-governments.html>. There were 2,105 county governments with populations less than 50,000. This category does not include subcounty (municipal and township)

²² See *id* at Table 6, Subcounty General-Purpose Governments by Population-Size Group and State: 2017 [CG1700ORG06], <https://www.census.gov/data/tables/2017/econ/gus/2017-governments.html>. There were 18,729 municipal and 16,097 town and township governments with populations less than 50,000.

²³ See *id* at Table 10, Elementary and Secondary School Systems by Enrollment-Size Group and State: 2017 [CG1700ORG10], <https://www.census.gov/data/tables/2017/econ/gus/2017-governments.html>. There were 12,040 independent school districts with enrollment populations less than 50,000. See also Table 4. Special-Purpose Local Governments by State Census Years 1942 to 2017 [CG1700ORG04], CG1700ORG04 Table Notes Special Purpose Local Governments by State Census Years 1942 to 2017.

²⁴ While the special purpose governments category also includes local special district governments, the 2017 Census of Governments data does not provide data aggregated based on population size for the special purpose governments category. Therefore, only data from independent school districts is included in the special purpose governments category.

²⁵ This total is derived from the sum of the number of general purpose governments (county, municipal and town or township) with populations of less than 50,000 (36,931) and the number of special purpose governments - independent school districts with enrollment populations of less than 50,000 (12,040), from the 2017 Census of Governments - Organizations Tables 5, 6 & 10.

²⁶ See U.S. Census Bureau, 2017 NAICS Definition, “515112 Radio Stations,” <https://www.census.gov/naics/?input=515112&year=2017&details=515112>.

²⁷ *Id.*

²⁸ See 13 CFR § 121.201, NAICS Code 515112.

²⁹ See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Sales, Value of Shipments, or Revenue Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEREVFIRM, NAICS Code 515112, <https://data.census.gov/cedsci/table?y=2017&n=515112&tid=ECNSIZE2017.EC1700SIZEREVFIRM&hidePreview=false>. We note that the US Census Bureau withheld publication of the number of firms that operated for the entire year.

³⁰ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We note that the U.S. Census Bureau withheld publication of the number of firms that operated with sales/value of shipments/revenue in the individual categories for less than \$100,000, and \$100,000 to \$249,999 to avoid disclosing data for individual companies (see Cell Notes for the sales/value of shipments/revenue

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15. The Commission estimates that as of March 31, 2022, there were 4,508 licensed commercial AM radio stations and 6,763 licensed commercial FM radio stations, for a combined total of 11,271 commercial radio stations.³¹ Of this total, 11,269 stations (or 99.98 %) had revenues of \$41.5 million or less in 2021, according to Commission staff review of the BIA Kelsey Inc. Media Access Pro Database (BIA) on June 1, 2022, and therefore these licensees qualify as small entities under the SBA definition. In addition, the Commission estimates that as of March 2022, there were 4,119 licensed noncommercial (NCE) FM radio stations, 2,049 low power FM (LPFM) stations, and 8,919 FM translators and boosters.³² The Commission however does not compile, and otherwise does not have access to financial information for these radio stations that would permit it to determine how many of these stations qualify as small entities under the SBA small business size standard. Nevertheless, given the SBA's large annual receipts threshold for this industry and the nature of radio station licensees, we presume that all of these entities qualify as small entities under the above SBA small business size standard.

16. We note, however, that in assessing whether a business concern qualifies as “small” under the above definition, business (control) affiliations³³ must be included. Our estimate, therefore, likely overstates the number of small entities that might be affected by our action, because the revenue figure on which it is based does not include or aggregate revenues from affiliated companies. In addition, another element of the definition of “small business” requires that an entity not be dominant in its field of operation. We are unable at this time to define or quantify the criteria that would establish whether a specific radio or television broadcast station is dominant in its field of operation. Accordingly, the estimate of small businesses to which the rules may apply does not exclude any radio or television station from the definition of a small business on this basis and is therefore possibly over-inclusive. An additional element of the definition of “small business” is that the entity must be independently owned and operated. Because it is difficult to assess these criteria in the context of media entities, the estimate of small businesses to which the rules may apply does not exclude any radio or television station from the definition of a small business on this basis and similarly may be over-inclusive.

17. *FM Translator Stations and Low Power FM Stations.* FM translators and Low Power FM Stations are classified in the industry for Radio Stations.³⁴ The Radio Stations industry comprises establishments primarily engaged in broadcasting aural programs by radio to the public.³⁵ Programming may originate in their own studio, from an affiliated network, or from external sources.³⁶ The SBA small business size standard for this industry classifies firms having \$41.5 million or less in annual receipts as small.³⁷ U.S. Census Bureau data for 2017 show that 2,963 firms operated during that year.³⁸ Of that

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in these categories). Therefore, the number of firms with revenue that meet the SBA size standard would be higher than noted herein. We also note that according to the U.S. Census Bureau glossary, the terms receipts and revenues are used interchangeably, see https://www.census.gov/glossary/#term_ReceiptsRevenueServices.

³¹ *Broadcast Station Totals as of March 31, 2022*, Public Notice, DA 22-365 (rel. April 5, 2022) (*March 2022 Broadcast Station Totals PN*), <https://www.fcc.gov/document/broadcast-station-totals-march-31-2022>.

³² *Id.*

³³ “[Business concerns] are affiliates of each other when one concern controls or has the power to control the other or a third party or parties controls or has the power to control both.” 13 CFR § 21.103(a)(1).

³⁴ See U.S. Census Bureau, *2017 NAICS Definition, “515112 Radio Stations,”* <https://www.census.gov/naics/?input=515112&year=2017&details=515112>.

³⁵ *Id.*

³⁶ *Id.*

³⁷ See 13 CFR § 121.201, NAICS Code 515112.

³⁸ See U.S. Census Bureau, *2017 Economic Census of the United States, Selected Sectors: Sales, Value of Shipments, or Revenue Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEREVFIRM, NAICS Code 515112,

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number, 1,879 firms operated with revenue of less than \$25 million per year.³⁹ Therefore, based on the SBA's size standard we conclude that the majority of FM Translator stations and Low Power FM Stations are small. Additionally, according to Commission data, as of March 31, 2022, there were 8,919 FM Translator Stations and 2,049 Low Power FM licensed broadcast stations.⁴⁰ The Commission however does not compile and otherwise does not have access to information on the revenue of these stations that would permit it to determine how many of the stations would qualify as small entities. For purposes of this regulatory flexibility analysis, we presume the majority of these stations are small entities.

18. *Television Broadcasting.* This industry is comprised of “establishments primarily engaged in broadcasting images together with sound.”⁴¹ These establishments operate television broadcast studios and facilities for the programming and transmission of programs to the public.⁴² 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 studio, from an affiliated network, or from external sources. The SBA small business size standard for this industry classifies businesses having \$41.5 million or less in annual receipts as small.⁴³ 2017 U.S. Census Bureau data indicate that 744 firms in this industry operated for the entire year.⁴⁴ Of that number, 657 firms had revenue of less than \$25,000,000.⁴⁵ Based on this data we estimate that the majority of television broadcasters are small entities under the SBA small business size standard.

19. The Commission estimates that as of March 31, 2022, there were 1,373 licensed commercial television stations.⁴⁶ Of this total, 1,280 stations (or 93.2%) had revenues of \$41.5 million or less in 2021, according to Commission staff review of the BIA Kelsey Inc. Media Access Pro Television Database (BIA) on June 1, 2022, and therefore these licensees qualify as small entities under the SBA

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<https://data.census.gov/cedsci/table?y=2017&n=515112&tid=ECNSIZE2017.EC1700SIZEREVFIRM&hidePreview=false>. We note that the US Census Bureau withheld publication of the number of firms that operated for the entire year.

³⁹ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We note that the U.S. Census Bureau withheld publication of the number of firms that operated with sales/value of shipments/revenue in the individual categories for less than \$100,000, and \$100,000 to \$249,999 to avoid disclosing data for individual companies (see Cell Notes for the sales/value of shipments/revenue in these categories). Therefore, the number of firms with annual receipts that meet the SBA size standard would be higher than noted herein. We also note that according to the U.S. Census Bureau glossary, the terms receipts and revenues are used interchangeably, see https://www.census.gov/glossary/#term_ReceiptsRevenueServices.

⁴⁰ Broadcast Station Totals as of *March 31, 2022*, Public Notice, DA 22-365 (rel. April 5, 2022) (*March 2022 Broadcast Station Totals PN*), <https://www.fcc.gov/document/broadcast-station-totals-march-31-2022>.

⁴¹ See U.S. Census Bureau, *2017 NAICS Definition*, “515120 Television Broadcasting,” <https://www.census.gov/naics/?input=515120&year=2017&details=515120>.

⁴² *Id.*

⁴³ See 13 CFR § 121.201, NAICS Code 515120.

⁴⁴ See U.S. Census Bureau, *2017 Economic Census of the United States, Selected Sectors: Sales, Value of Shipments, or Revenue Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEREVFIRM, NAICS Code 515120, <https://data.census.gov/cedsci/table?y=2017&n=515120&tid=ECNSIZE2017.EC1700SIZEREVFIRM&hidePreview=false>.

⁴⁵ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We also note that according to the U.S. Census Bureau glossary, the terms receipts and revenues are used interchangeably, see https://www.census.gov/glossary/#term_ReceiptsRevenueServices.

⁴⁶ Broadcast Station Totals as of *March 31, 2022*, Public Notice, DA 22-365 (rel. April 5, 2022) (*March 2022 Broadcast Station Totals PN*), <https://www.fcc.gov/document/broadcast-station-totals-march-31-2022>.

definition. In addition, the Commission estimates as of March 31, 2022, there were 384 licensed noncommercial educational (NCE) television stations, 383 Class A TV stations, 1,840 LPTV stations and 3,231 TV translator stations.⁴⁷ The Commission however does not compile, and otherwise does not have access to financial information for these television broadcast stations that would permit it to determine how many of these stations qualify as small entities under the SBA small business size standard. Nevertheless, given the SBA's large annual receipts threshold for this industry and the nature of television station licensees, we presume that all of these entities qualify as small entities under the above SBA small business size standard.

20. *Cable and Other Subscription Programming.* The U.S. Census Bureau defines this industry as establishments primarily engaged in operating studios and facilities for the broadcasting of programs on a subscription or fee basis.⁴⁸ 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 external sources.⁴⁹ The programming material is usually delivered to a third party, such as cable systems or direct-to-home satellite systems, for transmission to viewers.⁵⁰ The SBA small business size standard for this industry classifies firms with annual receipts less than \$41.5 million as small.⁵¹ Based on U.S. Census Bureau data for 2017, 378 firms operated in this industry during that year.⁵² Of that number, 149 firms operated with revenue of less than \$25 million a year and 44 firms operated with revenue of \$25 million or more.⁵³ Based on this data, the Commission estimates that a majority of firms in this industry are small.

21. *Cable System Operators (Telecom Act Standard).* The Communications Act of 1934, as amended, contains a size standard for small cable system operators, which classifies "a cable operator that, directly or through an affiliate, serves in the aggregate fewer than one 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," as small.⁵⁴ For purposes of the Telecom Act Standard, the Commission determined that a cable system operator that serves fewer than 677,000 subscribers, either directly or through affiliates, will meet the definition of a small cable operator based on the cable subscriber count established in a 2001 Public Notice.⁵⁵ Based on industry data, only six cable system operators have more

⁴⁷ *Id.*

⁴⁸ See U.S. Census Bureau, *2017 NAICS Definition, "515210 Cable and Other Subscription Programming,"* <https://www.census.gov/naics/?input=515210&year=2017&details=515210>.

⁴⁹ *Id.*

⁵⁰ *Id.*

⁵¹ See 13 CFR § 121.201, NAICS Code 515210.

⁵² See U.S. Census Bureau, *2017 Economic Census of the United States, Selected Sectors: Sales, Value of Shipments, or Revenue Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEREVFIRM, NAICS Code 515210, <https://data.census.gov/cedsci/table?y=2017&n=515210&tid=ECNSIZE2017.EC1700SIZEREVFIRM&hidePreview=false>. The US Census Bureau withheld publication of the number of firms that operated for the entire year to avoid disclosing data for individual companies (see Cell Notes for this category).

⁵³ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We note that the U.S. Census Bureau withheld publication of the number of firms that operated with sales/value of shipments/revenue in all categories of revenue less than \$500,000 to avoid disclosing data for individual companies (see Cell Notes for the sales/value of shipments/revenue in these categories). Therefore, the number of firms with revenue that meet the SBA size standard would be higher than noted herein. We also note that according to the U.S. Census Bureau glossary, the terms receipts and revenues are used interchangeably, see https://www.census.gov/glossary/#term_ReceiptsRevenueServices.

⁵⁴ 47 U.S.C. § 543(m)(2); see also 47 CFR § 76.901(e).

⁵⁵ *FCC Announces New Subscriber Count for the Definition of Small Cable Operator*, Public Notice, 16 FCC Rcd 2225 (CSB 2001) (2001 Subscriber Count PN). In this Public Notice, the Commission determined that there were

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than 677,000 subscribers.⁵⁶ Accordingly, the Commission estimates that the majority of cable system operators are small under this size standard. We note however, that the Commission neither requests nor collects information on whether cable system operators are affiliated with entities whose gross annual revenues exceed \$250 million.⁵⁷ Therefore, we are unable at this time to estimate with greater precision the number of cable system operators that would qualify as small cable operators under the definition in the Communications Act.

22. *Cable Companies and Systems (Rate Regulation)*. The Commission has developed its own small business size standard for the purpose of cable rate regulation. Under the Commission's rules, a "small cable company" is one serving 400,000 or fewer subscribers nationwide.⁵⁸ Based on industry data, there are about 420 cable companies in the U.S.⁵⁹ Of these, only seven have more than 400,000 subscribers.⁶⁰ In addition, under the Commission's rules, a "small system" is a cable system serving 15,000 or fewer subscribers.⁶¹ Based on industry data, there are about 4,139 cable systems (headends) in the U.S.⁶² Of these, about 639 have more than 15,000 subscribers.⁶³ Accordingly, the Commission estimates that the majority of cable operators are small.

23. *Satellite Telecommunications*. This industry comprises firms "primarily engaged in providing telecommunications services to other establishments in the telecommunications and broadcasting industries by forwarding and receiving communications signals via a system of satellites or reselling satellite telecommunications."⁶⁴ Satellite telecommunications service providers include satellite and earth station operators. The SBA small business size standard for this industry classifies a business with \$35 million or less in annual receipts as small.⁶⁵ U.S. Census Bureau data for 2017 show that 275

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approximately 67.7 million cable subscribers in the United States at that time using the most reliable source publicly available. *Id.* We recognize that the number of cable subscribers changed since then and that the Commission has recently estimated the number of cable subscribers to be approximately 58.1 million. *See Communications Marketplace Report*, GN Docket No. 20-60, 2020 Communications Marketplace Report, 36 FCC Rcd 2945, 3049, para. 156 (2020) (2020 *Communications Marketplace Report*). However, because the Commission has not issued a public notice subsequent to the 2001 *Subscriber Count PN*, the Commission still relies on the subscriber count threshold established by the 2001 *Subscriber Count PN* for purposes of this rule. *See* 47 CFR § 76.901(e)(1).

⁵⁶ S&P Global Market Intelligence, S&P Capital IQ Pro, *Top Cable MSOs 12/21Q* (last visited May 26, 2022); S&P Global Market Intelligence, *Multichannel Video Subscriptions, Top 10* (April 2022).

⁵⁷ The Commission does receive such information on a case-by-case basis if a cable operator appeals a local franchise authority's finding that the operator does not qualify as a small cable operator pursuant to § 76.901(e) of the Commission's rules. *See* 47 CFR § 76.910(b).

⁵⁸ 47 CFR § 76.901(d).

⁵⁹ S&P Global Market Intelligence, S&P Capital IQ Pro, U.S. MediaCensus, *Operator Subscribers by Geography* (last visited May 26, 2022).

⁶⁰ S&P Global Market Intelligence, S&P Capital IQ Pro, *Top Cable MSOs 12/21Q* (last visited May 26, 2022); S&P Global Market Intelligence, *Multichannel Video Subscriptions, Top 10* (April 2022).

⁶¹ 47 CFR § 76.901(c).

⁶² S&P Global Market Intelligence, S&P Capital IQ Pro, U.S. MediaCensus, *Operator Subscribers by Geography* (last visited May 26, 2022).

⁶³ S&P Global Market Intelligence, S&P Capital IQ Pro, *Top Cable MSOs 12/21Q* (last visited May 26, 2022).

⁶⁴ *See* U.S. Census Bureau, 2017 NAICS Definition, "517410 Satellite Telecommunications," <https://www.census.gov/naics/?input=517410&year=2017&details=517410>.

⁶⁵ *See* 13 CFR § 121.201, NAICS Code 517410.

firms in this industry operated for the entire year.⁶⁶ Of this number, 242 firms had revenue of less than \$25 million.⁶⁷ Additionally, based on Commission data in the 2021 Universal Service Monitoring Report, as of December 31, 2020, there were 71 providers that reported they were engaged in the provision of satellite telecommunications services.⁶⁸ Of these providers, the Commission estimates that approximately 48 providers have 1,500 or fewer employees.⁶⁹ Consequently using the SBA's small business size standard, a little more than 80 percent of these providers can be considered small entities.

24. *All Other Telecommunications.* This industry is comprised of establishments primarily engaged in providing specialized telecommunications services, such as satellite tracking, communications telemetry, and radar station operation.⁷⁰ This industry also includes establishments primarily engaged in providing satellite terminal stations and associated facilities connected with one or more terrestrial systems and capable of transmitting telecommunications to, and receiving telecommunications from, satellite systems.⁷¹ Providers of Internet services (e.g. dial-up ISPs) or voice over Internet protocol (VoIP) services, via client-supplied telecommunications connections are also included in this industry.⁷² The SBA small business size standard for this industry classifies firms with annual receipts of \$35 million or less as small.⁷³ U.S. Census Bureau data for 2017 show that there were 1,079 firms in this industry that operated for the entire year.⁷⁴ Of those firms, 1,039 had revenue of less than \$25 million.⁷⁵ Based on this data, the Commission estimates that the majority of "All Other Telecommunications" firms can be considered small.

25. *Broadband Radio Service and Educational Broadband Service.* Broadband Radio Service systems, previously referred to as Multipoint Distribution Service (MDS) and Multichannel Multipoint Distribution Service (MMDS) systems, and "wireless cable,"⁷⁶ transmit video programming to subscribers and provide two-way high speed data operations using the microwave frequencies of the Broadband Radio Service (BRS) and Educational Broadband Service (EBS) (previously referred to as the

⁶⁶ See U.S. Census Bureau, *2017 Economic Census of the United States, Selected Sectors: Sales, Value of Shipments, or Revenue Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEREVFIRM, NAICS Code 517410, <https://data.census.gov/cedsci/table?y=2017&n=517410&tid=ECNSIZE2017.EC1700SIZEREVFIRM&hidePreview=false>.

⁶⁷ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We also note that according to the U.S. Census Bureau glossary, the terms receipts and revenues are used interchangeably, see https://www.census.gov/glossary/#term_ReceiptsRevenueServices.

⁶⁸ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2021), <https://docs.fcc.gov/pubId.lic/attachments/DOC-379181A1.pdf>.

⁶⁹ *Id.*

⁷⁰ See U.S. Census Bureau, *2017 NAICS Definition*, "517919 All Other Telecommunications," <https://www.census.gov/naics/?input=517919&year=2017&details=517919>.

⁷¹ *Id.*

⁷² *Id.*

⁷³ See 13 CFR § 121.201, NAICS Code 517919.

⁷⁴ See U.S. Census Bureau, *2017 Economic Census of the United States, Selected Sectors: Sales, Value of Shipments, or Revenue Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEREVFIRM, NAICS Code 517919, <https://data.census.gov/cedsci/table?y=2017&n=517919&tid=ECNSIZE2017.EC1700SIZEREVFIRM&hidePreview=false>.

⁷⁵ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We also note that according to the U.S. Census Bureau glossary, the terms receipts and revenues are used interchangeably, see https://www.census.gov/glossary/#term_ReceiptsRevenueServices.

⁷⁶ The use of the term "wireless cable" does not imply that it constitutes cable television for statutory or regulatory purposes.

Instructional Television Fixed Service (ITFS)).⁷⁷ Wireless cable operators that use spectrum in the BRS often supplemented with leased channels from the EBS, provide a competitive alternative to wired cable and other multichannel video programming distributors. Wireless cable programming to subscribers resembles cable television, but instead of coaxial cable, wireless cable uses microwave channels.⁷⁸

26. In light of the use of wireless frequencies by BRS and EBS services, the closest industry with a SBA small business size standard applicable to these services is Wireless Telecommunications Carriers (*except* Satellite).⁷⁹ The SBA small business size standard for this industry classifies a business as small if it has 1,500 or fewer employees.⁸⁰ U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year.⁸¹ Of this number, 2,837 firms employed fewer than 250 employees.⁸² Thus under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

27. According to Commission data as December 2021, there were approximately 5,869 active BRS and EBS licenses.⁸³ The Commission's small business size standards with respect to BRS involves eligibility for bidding credits and installment payments in the auction of licenses for these services. For the auction of BRS licenses, the Commission adopted criteria for three groups of small businesses. A very small business is an entity that, together with its affiliates and controlling interests, has average annual gross revenues exceed \$3 million and did not exceed \$15 million for the preceding three years, a small business is an entity that, together with its affiliates and controlling interests, has average gross revenues exceed \$15 million and did not exceed \$40 million for the preceding three years, and an entrepreneur is an entity that, together with its affiliates and controlling interests, has average gross revenues not exceeding \$3 million for the preceding three years.⁸⁴ Of the ten winning bidders for BRS licenses, two bidders claiming the small business status won 4 licenses, one bidder claiming the very

⁷⁷ See 47 CFR § 27.4; see also 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, Report and Order, 10 FCC Rcd 9589, 9593, para. 7 (1995).

⁷⁸ Generally, a wireless cable system may be described as a microwave station transmitting on a combination of BRS and EBS channels to numerous receivers with antennas, such as single-family residences, apartment complexes, hotels, educational institutions, business entities and governmental offices. The range of the transmission depends upon the transmitter power, the type of receiving antenna and the existence of a line-of-sight path between the transmitter or signal booster and the receiving antenna.

⁷⁹ See U.S. Census Bureau, *2017 NAICS Definition*, "517312 Wireless Telecommunications Carriers (*except* Satellite)," <https://www.census.gov/naics/?input=517312&year=2017&details=517312>.

⁸⁰ See 13 CFR § 121.201, NAICS Code 517312.

⁸¹ See U.S. Census Bureau, *2017 Economic Census of the United States, Employment Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEEMPFIEM, NAICS Code 517312, <https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFIEM&hidePreview=false>.

⁸² *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

⁸³ Based on a FCC Universal Licensing System search on December 10, 2021, <https://wireless2.fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp>. Search parameters: Service Group = All, "Match only the following radio service(s)", Radio Service = BR, ED; Authorization Type = All; Status = Active. We note that the number of active licenses does not equate to the number of licensees. A licensee can have one or more licenses.

⁸⁴ See 47 CFR § 27.1218(a).

small business status won three licenses and two bidders claiming entrepreneur status won six licenses.⁸⁵ One of the winning bidders claiming a small business status classification in the BRS license auction has an active licenses as of December 2021.⁸⁶

28. The Commission's small business size standards for EBS define a small business as an entity that, together with its affiliates, its controlling interests and the affiliates of its controlling interests, has average gross revenues that are not more than \$55 million for the preceding five (5) years, and a very small business is an entity that, together with its affiliates, its controlling interests and the affiliates of its controlling interests, has average gross revenues that are not more than \$20 million for the preceding five (5) years.⁸⁷ In frequency bands where licenses were subject to auction, the Commission notes 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. Further, the Commission does not generally track subsequent business size unless, in the context of assignments or transfers, unjust enrichment issues are implicated. Additionally, since the Commission does not collect data on the number of employees for licensees providing these services, at this time we are not able to estimate the number of licensees with active licenses that would qualify as small under the SBA's small business size standard.

29. *Direct Broadcast Satellite ("DBS") Service.* DBS service is a nationally distributed subscription service that delivers video and audio programming via satellite to a small parabolic "dish" antenna at the subscriber's location. DBS is included in the Wired Telecommunications Carriers industry which comprises establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired telecommunications networks.⁸⁸ Transmission facilities may be based on a single technology or combination of technologies.⁸⁹ Establishments in this industry use the wired telecommunications network facilities that they operate to provide a variety of services, such as wired telephony services, including VoIP services, wired (cable) audio and video programming distribution; and wired broadband internet services.⁹⁰ By exception, establishments providing satellite television distribution services using facilities and infrastructure that they operate are included in this industry.⁹¹

30. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small.⁹² U.S. Census Bureau data for 2017 show that 3,054

⁸⁵ See Federal Communications Commission, Economics and Analytics, Auctions, Auction 86: Broadband Radio Service, Summary, Reports, All Bidders, <https://www.fcc.gov/sites/default/files/wireless/auctions/86/charts/86bidder.xls>.

⁸⁶ Based on a FCC Universal Licensing System search on December 10, 2021, <https://wireless2.fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp>. Search parameters: Service Group = All, "Match only the following radio service(s)", Radio Service =BR; Authorization Type = All; Status = Active. We note that the number of active licenses does not equate to the number of licensees. A licensee can have one or more licenses.

⁸⁷ See 47 CFR § 27.1219(a).

⁸⁸ See U.S. Census Bureau, *2017 NAICS Definition*, "517311 Wired Telecommunications Carriers," <https://www.census.gov/naics/?input=517311&year=2017&details=517311>.

⁸⁹ *Id.*

⁹⁰ See *id.* Included in this industry are: broadband Internet service providers (e.g., cable, DSL); local telephone carriers (wired); cable television distribution services; long-distance telephone carriers (wired); closed-circuit television (CCTV) services; VoIP service providers, using own operated wired telecommunications infrastructure; direct-to-home satellite system (DTH) services; telecommunications carriers (wired); satellite television distribution systems; and multichannel multipoint distribution services (MMDS).

⁹¹ *Id.*

⁹² See 13 CFR § 121.201, NAICS Code 517311.

firms operated in this industry for the entire year.⁹³ Of this number, 2,964 firms operated with fewer than 250 employees.⁹⁴ Based on this data, the majority of firms in this industry can be considered small under the SBA small business size standard. According to Commission data however, only two entities provide DBS service - DIRECTV (owned by AT&T) and DISH Network, which require a great deal of capital for operation.⁹⁵ DIRECTV and DISH Network both exceed the SBA size standard for classification as a small business. Therefore, we must conclude based on internally developed Commission data, in general DBS service is provided only by large firms.

31. *Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing.* This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment.⁹⁶ Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.⁹⁷ The SBA small business size standard for this industry classifies businesses having 1,250 employees or less as small.⁹⁸ U.S. Census Bureau data for 2017 show that there were 656 firms in this industry that operated for the entire year.⁹⁹ Of this number, 624 firms had fewer than 250 employees.¹⁰⁰ Thus, under the SBA size standard, the majority of firms in this industry can be considered small.

E. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements for Small Entities

32. The Order does not impose new and/or additional reporting or record keeping requirements, however as proposed in the *Notices*, the *Order* imposes additional compliance obligations on certain small, as well as other, entities that distribute EAS alerts and manufacture EAS equipment that process such alerts.

33. Specifically, the Commission adopts a mandatory CAP polling rule that requires EAS Participants, when they receive a state or local legacy EAS alert, to poll the IPAWS CAP EAS server to confirm whether there is a CAP version of that alert and use the CAP version. EAS Participants must poll the IPAWS CAP EAS Feed for a CAP version of the received legacy alert at least 10 seconds after detection of the legacy alert's initial header code for a legacy state or local alert that, (i) is valid, (ii)

⁹³ See U.S. Census Bureau, *2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEEMPFIEM, NAICS Code 517311, <https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIEM&hidePreview=false>.

⁹⁴ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

⁹⁵ See *Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, Eighteenth Report*, Table III.A.5, 32 FCC Rcd 568, 595 (Jan. 17, 2017).

⁹⁶ See U.S. Census Bureau, *2017 NAICS Definition*, “334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing,” <https://www.census.gov/naics/?input=334220&year=2017&details=334220>.

⁹⁷ *Id.*

⁹⁸ See 13 CFR § 121.201, NAICS Code 334220.

⁹⁹ See U.S. Census Bureau, *2017 Economic Census of the United States, Employment Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEEMPFIEM, NAICS Code 334220, <https://data.census.gov/cedsci/table?y=2017&n=334220&tid=ECNSIZE2017.EC1700SIZEEMPFIEM&hidePreview=false>.

¹⁰⁰ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

covers a type of event and a geographic area for which the EAS Participant normally transmits alerts to the public and (iii) is not a duplicate of a CAP-formatted message it has already received.

34. The Commission also adopts changes to three EAS code text descriptions that EAS Participants must implement within one-year of the effective date of the *Order*. These changes impact for PEP code, EAN code, and NPT codes, but do not change the three-letter codes themselves. The *Order* changes the PEP code description from “Primary Entry Point” to “United States Government,” and changes the EAN code description from “Emergency Action Notification” to “National Emergency Message,” and the NPT event code description from “National Periodic Test” to “Nationwide Test of the Emergency Alert System.” Additionally, the Commission and requires a separate, longer prepared visual script for the NPT during legacy-based nationwide EAS test alerts. and deletes the NIC code from the EAS.

35. All of these changes require EAS equipment manufacturers to develop software updates in deployed EAS equipment and EAS equipment in production. Separately, the CAP polling change, the NPT code description change, and the NPT script addition will each also require EAS participants, particularly cable operators, to conduct testing and make modifications to downstream equipment used to process alerts, such as set-top boxes. The EAN code description change will also require EAS participants, particularly cable operators, to replace certain downstream equipment used to process the EAN, such as set-top boxes. In addition, since some deployed EAS encoder equipment might not be capable of being updated to reflect the new requirements, those devices will have to be replaced.¹⁰¹

36. The primary costs associated with the rules we adopt in the *Order* involve creating and installing software into EAS encoder devices, testing and modifying downstream network processing equipment, and replacing certain downstream processing equipment. In the *Notices*, the Commission requested cost estimates from the parties on the proposals adopted in today’s proceeding but did not receive any. Therefore, the Commission cannot quantify the cost of compliance for small entities. The Commission assesses that small entities will need to have their EAS decoder equipment updated by manufacturers to implement the requirements adopted in the *Order*. However, based on past EAS equipment updates where we adopted changes adding new EAS event codes, we believe the cost of compliance with the rule changes adopted in the *Order* for most affected industries, will not significantly exceed the costs of software updates that most EAS Participants would need to implement whether or not these rule changes are adopted. Moreover, we further believe that the cost of implementing the required EAS decoder equipment changes will be roughly in line with the cost of changes adopted in the *2016 Weather Alerts Order*¹⁰² and the *2017 Blue Alerts Order*,¹⁰³ which similarly entailed few costs beyond the reprogramming of EAS decoder equipment. Consequently, we estimate the costs of all decoder software updates needed to implement the rule changes adopted in the *Order*,¹⁰⁴ most of which according to commenters in the proceeding can be bundled with “normally scheduled software releases” and performed at the same time,¹⁰⁵ will cost a total of \$5 million for the industry. Additionally, small entities

¹⁰¹ We note that any EAS device requiring replacement to enable such a code change may already be out of compliance with the Commission’s part 11 rules, and any such devices should be replaced regardless of this potential action.

¹⁰² *Amendment of Part 11 of the Commission’s Rules Regarding Emergency Alert System*, PS Docket No. 15-94, Report and Order, 31 FCC Rcd 7915 (2016) (*Weather Alerts Order*).

¹⁰³ *Amendment of Part 11 of the Commission’s Rules Regarding Emergency Alert System*, PS Docket No. 15-94, Report and Order, 32 FCC Rcd 10812 (2017) (*Blue Alerts Order*).

¹⁰⁴ Sage NDAA Reply Comments at 2; *see also* Sage Accessibility Comments at 5.

¹⁰⁵ DAS NDAA Comments at 5; *see also* DAS Accessibility Comments at 13; NCTA NDAA Comments at 8; NAB Accessibility comments at 2, 6; *Review of the Emergency Alert System*, Notice of Proposed Rulemaking, 29 FCC Rcd 8123, 8145, para. 44 (2014) (“Commenters agree that the costs associated with implementing our proposed rules can be reduced by bundling all required upgrades into a regularly scheduled system update.”) (*Operational Issues NPRM*); *Weather Alerts Order*, 31 FCC Rcd at 7915, para. 1 (The order required EAS equipment updates “to

(continued....)

that have complied with previous EAS code changes have the experience, and should have the processes and procedures in place to facilitate compliance resulting in minimal incremental costs to comply with the changes in the *Order*.

37. With regard to four of the six changes cable operators have identified (CAP polling, EAN text, NPT text, and NPT script) as requiring testing, modification, and/or replacement of downstream equipment in cable operators' networks,¹⁰⁶ we believe small and other cable operators will realize significant cost savings from conducting testing and downstream equipment modification in a coordinated fashion for all of these changes on the same one-year schedule, and these costs are included in the \$5 million cost ceiling. Further, since we have allowed cable operators the additional time to replace set-top boxes with new equipment that no longer have the EAN label hard-wired into them which should make it possible for operators to incorporate such a specification into the new devices that will be installed in consumers' premises in the ordinary course of business irrespective of our adoption of this requirement, in most instances, we estimate the additional costs that small and other cable operators will incur to replace set-top boxes to implement this requirement over the extended six-year period following the effective date of this order should not exceed \$4.4 million.¹⁰⁷

38. The Commission believes these changes adopted in the *Order* impose minor costs for small and other entities, when compared to the substantial public safety improvements reflected in the record. While as a general matter, it is impossible to quantify the precise dollar value of improvements to the public's safety, life, and health,¹⁰⁸ the value of these changes are likely to substantially exceeds the overall cost of their implementation. Thus, we further believe that the value of improved public safety in reducing risk of avoidable deaths and injuries by better informing the public of pending emergencies is substantial, and outweighs the costs of the EAS changes we adopt in the *Order*.

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

39. The RFA requires an agency to provide, a description of the steps the agency has taken to minimize the significant economic impact on small entities...including a statement of the factual, policy, and legal reasons for selecting the alternative adopted in the final rule and why each one of the other significant alternatives to the rule considered by the agency which affect the impact on small entities was rejected.¹⁰⁹

40. The actions taken by the Commission in the *Order* are intended to be minimally costly and minimally burdensome for small and other entities impacted by the rules. As such, the Commission does not expect the adopted requirements to have a significant economic impact on small entities. Below we discuss actions we take in the *Order* to minimize any significant economic impact on small entities and some alternatives that were considered.

41. *Adopting A Mandatory Cap Polling and CAP Message Prioritizing Requirement.* We considered but declined to adopt proposals by commenters not to implement a CAP polling

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add three new EAS event codes, covering extreme wind and storm surges, as well as revise the territorial boundaries of the geographic location codes for two offshore marine areas.”).

¹⁰⁶ See NCTA Accessibility Comments at 3-4; NCTA April 9, 2022 *Ex Parte* at 2.

¹⁰⁷ *Sixth Report and Order*, 30 FCC Rcd at 6530, fn. 66 (NCTA stated “that an EAN-emulating NPT would cost \$ 4.4 million to implement.”); *Operational Issues NPRM*, 29 FCC Rcd at 8146, para. 46 (“According to NCTA,” the proposed NPT changes would “require the underlying SCTE 18 standard to be revised, sub-standards rewritten..., MVPD downstream equipment reprogrammed, and significant testing to be undertaken.”).

¹⁰⁸ *Resilient Networks*, Report and Order, PS Docket 21-346, FCC 22-50, para. 46 (2022) (*Resilient Networks Order*) (“it would be impossible to quantify the precise financial value of these health and safety benefits”).

¹⁰⁹ 5 U.S.C. § 604(a)(6).

requirement¹¹⁰ and to make CAP message prioritizing optional within the discretion of each EAS Participant.¹¹¹ These alternatives were not supported by any factual information,¹¹² were not justifiable because of the current unavailability of National Weather Service (NWS) alerts in CAP format¹¹³ and were premised on an erroneous assumption that the Commission would adopt a uniform polling requirement for all EAS Participants.¹¹⁴ We concluded that the potential benefits to public safety of increased CAP usage for non-weather related state and local emergency alerts should not be foreclosed because NWS alerts are not included. Moreover, we have included sufficient flexibility in our requirements to account for unique factors affecting EAS Participants.

42. We also considered but declined to grant radio broadcasters an exception from our CAP prioritization mandate.¹¹⁵ There are various reasons why radio broadcasters, like video service EAS Participants, should be required to distribute CAP messages rather than legacy-formatted messages wherever possible. Indeed, we identify various reasons why radio broadcasters, like video service EAS Participants, should be required to distribute CAP messages rather than legacy-formatted messages wherever possible, including but not limited to the fact that there are digital radio broadcasters that produce visual alerts to digital radio receivers; the use of text-to-speech has been standardized in EAS equipment and systems for over 12 years and it is routinely used and supported today and the audio generated from a CAP alert, whether from text-to-speech or from airing a CAP audio file, typically is superior in clarity and quality to that contained in a legacy alert.

43. *Changing the Three-Letter EAS Codes.* The Commission has declined to adopt its *Notice* proposals to change the three-letter codes for PEP to NAT and for EAN to NEM, which would have created both increased decoder costs and substantial downstream network equipment replacement costs for small entities and other EAS Participants. Similarly, the three-letter event code for the NPT will remain the same, which the Commission believes will also minimize the compliance burdens borne by EAS Participants. Changing only the definitions of these codes, as the *Order* does, achieves the public benefit of more comprehensible alerts, whereas changing the three-letter codes themselves does not further the goal of averting public confusion because the public does not see the three-letter codes on their screens or hear them pronounced in audio, and similarly the three-letter codes are not seen by EAS participants. Rather, the three-letter code acronyms are computer code designed to transmit specific instructions for different alerts and to instruct EAS equipment to generate different outputs based on the codes. By leaving the codes as-is, the *Order* avoids substantial compliance costs that small entities would have otherwise faced.

44. *Timing of Compliance.* The Commission has adopted a consolidated compliance schedule allowing a full year from the effective date of the *Order* (subject to exceptions discussed below), for entities to comply with all regulatory changes adopted in the *Order*, instead of requiring multiple compliance timeframes (with one exception discussed in the following paragraph). This approach is

¹¹⁰ Walker Accessibility Comments at 4.

¹¹¹ NAB Accessibility Comments at 7; Timm Accessibility Reply Comments at 3; Walker Accessibility Reply Comments at 2.

¹¹² Walker Accessibility Comments at 4.

¹¹³ NAB Accessibility Comments at 7; Timm Accessibility Reply Comments at 3; Walker Accessibility Reply Comments at 2.

¹¹⁴ Sage Accessibility Comments at 5.

¹¹⁵ See NAB Accessibility Comments at 9. NAB contends that “there seems to be no reason to force radio stations to upgrade equipment or otherwise change their current practices” since “the entire [*Accessibility NPRM*] is framed in terms of enhancing the accessibility of EAS alerts for persons who deaf or hard of hearing through the dissemination of more alerts with matching visual crawls and audio messages.”; See also Walker Accessibility Reply Comments at 2.

consistent with our past orders requiring EAS encoder software updates and will save small entities significant costs, as production and labor to make the necessary EAS encoder equipment changes can be done with a single software installation instead of multiple installations in different years and on different compliance timetables.¹¹⁶ The consolidated compliance schedule, which establishes a single deadline for compliance with multiple similar changes, also means that downstream equipment field testing and modifications can often be conducted at the same time, saving small as well as other entities the cost of scheduling additional separate field tests and upgrades at different times in different years.¹¹⁷

45. The exception to the one year compliance requirement provides a six year compliance deadline for cable operators to replace downstream equipment to comply with the EAN descriptive text change, and fifteen months for downstream equipment EAN software updates. This implementation extension will substantially reduce costs for small entities, as set-top boxes can be replaced in the ordinary course of business per the normal lifecycle of this equipment, instead of requiring a large scale replacement of set-top boxes for compliance on a nearer term schedule. Accordingly, the marginal cost of compliance with the change to EAN text displayed to the public will be substantially reduced for small and all other cable operators entities including small entities.

46. *Legacy Script Change Exemption.* The Commission exempted radio broadcasters from compliance with the NPT legacy script change. We did not find that the potential marginal benefit of applying the legacy script requirement to all radio broadcasters was justified when the vast majority of radio broadcasters will not produce increased alert clarity as a result of such a requirement. This exemption will reduce costs for small and other radio broadcaster entities. Moreover, since radio broadcasters in particular make up the largest category of EAS Participants by number of entities, lessening costs for this category of EAS participants should minimize the economic impact for a substantial number of small entities.¹¹⁸

47. *Implementation.* The Commission does not mandate how EAS equipment must be designed in order to comply with the rule changes adopted in the *Order* and will use performance standards rather than design standards to measure compliance. EAS Participants will be in compliance with the required changes as long as their EAS equipment performs the CAP polling within the specified time frame, and ensures the new code descriptive text or script is displayed to the public. Leaving the equipment modification decisions up to the industry provides small and other affected EAS Participants the flexibility to make decisions and adopt approaches that are technically and financially feasible for their businesses.

48. *Persistent Alerts.* The Commission has declined to adopt a new persistent alerting requirement in light of the record which establishes that requiring equipment updates and network changes necessary to implement this rule will introduce excessive costs to EAS Participants that are difficult to justify given the complexity and design burdens associated with their adoption. We were not persuaded that implementing persistent alerts would be technically feasible in the context of the basic design of the EAS, and note that there was virtually unanimous opposition to this proposal by commenting parties, including alert originators, SECCs, EAS Participants, and equipment

¹¹⁶ See e.g. *Amendment of Part 11 of the Commission's Rules Regarding Emergency Alert System*, PS Docket No. 15-94, Report and Order, 32 FCC Rcd 10822, 10824, para. 21 (2017) (*Blue Alerts Order*) (“[W]e allow a period of 12 months from the effective date of the rules to enable the delivery of Blue Alerts over EAS...”).

¹¹⁷ See *In the Matter of Review of the Emergency Alert System*, EB Docket No. 04-296, Notice of Proposed Rulemaking, 29 FCC Rcd 8123, 8145, para. 44 (2014) (“Commenters agree that the costs associated with implementing our proposed rules can be reduced by bundling all required upgrades into a regularly scheduled system update.”).

¹¹⁸ Currently, EAS Participants include 17,521 radio broadcasters and 8,133 other participants (television broadcasters, cable operators, and entities in other industry categories). See Report: August 11, 2021 Nationwide EAS Test, Federal Communications Commission Public Safety and Homeland Security Bureau, p. 7 (December 2021).

manufacturers.¹¹⁹ Further, adopting a persistent alerting requirement would have resulted in substantial equipment modifications or replacements for all affected small and other entities, and could have led to significant problems and disruptions to the overall EAS system. Such events, which would result in even greater costs in the form of fixing later-arising problems or malfunctions, and would have further increased costs for all EAS Participants and been detrimental to EAS operations and potentially to the public.

G. Report to Congress

49. The Commission will send a copy of the *Report and Order*, including this FRFA, in a report to Congress pursuant to the Congressional Review Act.¹²⁰ In addition, the Commission will send a copy of the *Report and Order*, including this FRFA, to the Chief Counsel for Advocacy of the SBA. A copy of the *Report and Order* and FRFA (or summaries thereof) will also be published in the *Federal Register*.¹²¹

¹¹⁹ State of Alaska and Alaska SECC NDAA Reply Comments at 1; Nevada SECC NDAA Comments at 2-3; NCTA NDAA Comments at 5-6; ACA NDAA Comments at 3; NAB NDAA Comments at 4; USTelecom NDAA Reply Comments at 2; DAS NDAA Comments at 13-14; Sage NDAA Comments at 6-7.

¹²⁰ See 5 U.S.C. § 801(a)(1)(A).

¹²¹ See 5 U.S.C. § 604(b).

APPENDIX C

List of Commenting Parties

NDAF FNPRM Comments

ACA Connects
Adrienne Abbott
Digital Alert Systems
Gary Timm
National Association of Broadcasters (NAB)
NCTA
Sage Alerting Systems
Sean Donelan
Xperi Holding Corp.

NDAF FNPRM Reply Comments

Advanced Warning and Response Network (AWARN) and Advanced Television Systems Committee (ATSC)
National Association of Broadcasters (NAB)
Sage Alerting Systems
State of Alaska, Alaska SECC, and Alaska Broadcasters Association
USTelecom

NDAF Ex Parte Comments

ACA Connects
Digital Alert Systems
NCTA
Sage Alerting Systems

Accessibility NPRM Comments

Deaf Link
Digital Alert Systems
Donald Walker
Frank Bell
Gary Timm
National Association of Broadcasters (NAB)
National Oceanic and Atmospheric Administration (NOAA) and National Weather Service (NWS)
NCTA
Sage Alerting Systems
Telecommunications for the Deaf and Hard of Hearing, Inc. (TDI), AccesSOS, Association of Late-Deafened Adults (ALDA), Communication Service for the Deaf (CSD), Helen Keller National Center (HKNC), Conference of Educational Administrators of Schools and Programs for the Deaf (CEASD), Deaf Seniors of America (DSA), Hearing Loss Association of America (HLAA), National Association of the Deaf (NAD), National Association of State Administrators of the Deaf and Hard of Hearing (NASADHH), Northern Virginia Resource Center for Deaf and Hard of Hearing Persons (NVRC), Registry of Interpreters for the Deaf (RID), and Rochester Institute of Technology/National Technical Institute for the Deaf – Center on Access Technology (CAT)

Accessibility NPRM Reply Comments

ACA Connects
DigIt Signage Technologies
Donald Walker
Gary Timm

Accessibility *Ex Parte* Comments

REC Networks
Sage Alerting Systems

**STATEMENT OF
CHAIRWOMAN JESSICA ROSENWORCEL**

Re: *Amendment of Part 11 of the Commission's Rules Regarding the Emergency Alert System; Wireless Emergency Alerts*, PS Docket Nos. 15-94, Report and Order (September 29, 2022)

At this very moment, Hurricane Ian is racing across Florida. A few weeks ago, one of its predecessors, Hurricane Fiona, did damage in Puerto Rico. A year ago, it was Hurricane Ida that came ashore and wreaked havoc in Louisiana. Commissioner Carr and I saw the aftermath of that storm when we visited the Bayou state last year. And of course just a few years before that, Hurricane Maria barreled through Puerto Rico, leaving historic destruction in its wake, destruction that I also saw in person—along with the resilience of the people and communities affected.

There is a pattern here. Climate change is making storms more frequent, more dangerous, and more damaging. We need to respond in kind. That's because keeping communications networks up and running can save lives. Ensuring they deliver the right emergency information to people at the right time can keep communities safe. So today we update our Emergency Alert System to make sure the messages it provides are clear for everyone.

To understand why, it is important to know that when we turn on the television screens to get information about an impending weather event or other disaster there is both a recorded EAS message and a text crawl. To avoid confusion, this should be the same information. But because of the nature of legacy television architecture, the recorded message does not always match the visual text. It often contains less information and this has resulted in problems, especially for people with disabilities who may be uniquely vulnerable in disaster situations.

Today we end that confusion. We clean up this mismatch by requiring EAS participants to check whether the newest, internet-based protocol version of an alert exists and to use it if it does. This is valuable because this version provides more details, like how those who receive it should respond to the emergency. These actions matter because they modernize a key system for disaster response. In light of the growing frequency of devastating weather events, it is essential we do so.

Thank you to the staff responsible for this effort to make these alerts both clearer and more accessible, including Maureen Bizhko, Steve Carpenter, John Evanoff, Chris Fedeli, David Furth, Deb Jordan, Nicole McGinnis, Dave Munson, Austin Randazzo, and David Sieradzki from the Public Safety and Homeland Security Bureau; Doug Klein, Marcus Maher, and Bill Richardson from the Office of General Counsel; Chuck Needy, Emily Talaga, and Aleks Yankelevich from the Office of Economics and Analytics; Suzy Singleton and William Wallace from the Consumer and Governmental Affairs Bureau; Hillary DeNigro, Brendan Holland, Evan Morris, and Maria Mularkey from the Media Bureau; Eric Ehrenreich, Sharon Lee, Jeremy Marcus, Philip Rosario, and Ashley Tyson from the Enforcement Bureau; Zachary Ross from the Wireline Competition Bureau; and Chana Wilkerson from the Office of Communications Business Opportunities.

**STATEMENT OF
COMMISSIONER GEOFFREY STARKS**

Re: *In the Matter of Amendment of Part 11 of the Commission's Rules Regarding the Emergency Alert System*, PS Docket No. 15-94

Every time I make a statement about our emergency alert system, there is, unfortunately, a too-recent extreme weather event to turn to that illustrates its importance. Days before the five-year anniversary of Hurricane Maria in Puerto Rico, Hurricane Fiona barreled over the island, bringing more than 20 inches of rain, causing flash flooding, triggering mudslides, and leaving the entire territory without power. The same weekend, the remnants of a typhoon caused one of the strongest storms in more than a decade to strike Alaska, causing hurricane-force winds and dangerous coastal flooding. And right now, we see severe damage being caused by Hurricane Ian in Florida and up the East Coast. My thoughts and prayers go out to all affected. These events affect every corner of our country. It has never been more important for all Americans to have timely, clear, and detailed notice of emergency events.

The rules we adopt today help serve that goal. The Order makes sure that, when available, broadcasters and MVPDs will transmit alerts in the IP-based Common Alerting Protocol ("CAP") format, rather than the legacy format. CAP alerts enable the agency initiating the alert to provide more detailed information and, especially important for deaf and hard-of-hearing individuals, ensure that all of that information is included in the visual alert displayed on the TV screen, as well as the audio alert. Even if not all agencies are using the CAP format yet, it is still important that our EAS Participants begin to check for these alerts, to future-proof the system going forward. I also support the common-sense updates the Order makes to the prescribed language corresponding to the three national EAS alert codes. With these rules in place, millions of Americans will benefit from clearer and more detailed information during emergencies.

Thank you to the Public Safety and Homeland Security Bureau for their work on this important item.