



**6712-01**

**FEDERAL COMMUNICATIONS COMMISSION**

**47 CFR Part 11**

**[PS Docket Nos. 15-94, 15-91; FCC 18-94]**

**Emergency Alert System; Wireless Emergency Alerts**

**AGENCY:** Federal Communications Commission.

**ACTION:** Final rule.

**SUMMARY:** In this document, the Federal Communications Commission (FCC or Commission) adopts changes to its rules governing the Emergency Alert System (EAS) to facilitate “Live Code Tests” of the EAS; permit use of the EAS Attention Signal and EAS Header Code tones in Public Service Announcements; implement certain alert authentication and validation procedures; and require reporting of false alerts.

**DATES:** Effective **[INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]**, except for the amendments to 47 CFR 11.33 and 11.56, which are effective August 12, 2019, and the amendments to 47 CFR 11.45(b) and 11.61, which contain modifications to information collection requirements that were previously approved by the Office of Management and Budget (OMB). Once OMB has approved the modifications to these collections, the Commission will publish a document in the Federal Register announcing the effective date.

**FOR FURTHER INFORMATION CONTACT:** Gregory Cooke, Deputy Chief, Policy and Licensing Division, Public Safety and Homeland Security Bureau, at (202) 418-7452, or by email at [Gregory.Cooke@fcc.gov](mailto:Gregory.Cooke@fcc.gov). For additional information concerning the information collection requirements contained in this document, send an email to

PRA@fcc.gov or contact Nicole Ongele, Office of Managing Director, Performance Evaluation and Records Management, 202-418-2991, or by email to PRA@fcc.gov.

**SUPPLEMENTARY INFORMATION:** This is a summary of the Commission’s Report and Order (Order) in PS Docket Nos. 15-94 and 15-91, FCC 18-94, adopted on July 12, 2018, and released on July 13, 2018. The full text of this document is available for inspection and copying during normal business hours in the FCC Reference Center (Room CY-A257), 445 12th Street, SW., Washington, DC 20554. The full text may also be downloaded at: [www.fcc.gov](http://www.fcc.gov).

### **Synopsis**

1. In the Order, the Commission adopts changes to its Part 11 EAS rules to improve the effectiveness and public utility of the EAS by facilitating more effective public safety tests and exercises using the EAS, implementing measures to help prevent distribution of false alerts over the EAS, and requiring reporting of false alerts.

### **I. BACKGROUND**

2. The EAS is a national public warning system through which EAS Participants deliver alerts to the public to warn them of impending emergencies. The primary purpose of the EAS is to provide the President of the United States (President) with “the capability to provide immediate communications and information to the general public at the National, State and Local Area levels during periods of national emergency.” State and local authorities also use this common distribution architecture of the EAS to distribute voluntary weather-related and other emergency alerts. Further, testing of the system at the state and local level increases the proficiency of local emergency personnel, provides insight into the system’s functionality and effectiveness at

the federal level, and enhances the public's ability to respond to EAS alerts when they occur. The integrity of the EAS is maintained through the Commission's EAS rules, which set forth the parameters and frequency with which EAS Participants must test the system, prohibit the unauthorized use of the EAS Attention Signal and codes, and require EAS Participants to keep their EAS equipment in good working order.

## **II. DISCUSSION**

### **A. Building Effective Alerting Exercise Programs**

#### **1. Live Code Testing**

3. Section 11.31(e) of the Commission's rules sets forth the event header codes that are used for alerts in specific emergency situations (e.g., TOR for tornado), as well as the specific test codes to be used for national periodic tests (NPT), required monthly tests (RMT), and required weekly tests (RWT). Section 11.45 of the EAS rules states that "[n]o person may transmit or cause to transmit the EAS codes or Attention Signal, or a recording or simulation thereof, in any circumstance other than in an actual National, State or Local Area emergency or authorized test of the EAS." EAS Participants regularly have sought waivers of these rules to use the event codes used for actual alerts (i.e., "live" event header codes) and the EAS Attention Signal to conduct local EAS public awareness and proficiency training exercises. In the Notice of Proposed Rulemaking (NPRM) in PS Docket Nos. 15-94 and 15-91, 81 FR 15792 (March 24, 2016), the Commission proposed amending the rules to allow EAS Participants to conduct tests that use live EAS header codes and the EAS Attention Signal under specific circumstances without submitting a waiver request. The Commission also proposed amending section 11.45 to exempt state-designed EAS live code exercises from the

prohibition against false or misleading use of the EAS Attention Signal.

4. The Order amends section 11.45 to exempt EAS live code exercises from the prohibition against false or misleading use of the EAS Attention Signal. The Order also amends section 11.61 to include “Live Code Tests” as a separate category of alerting exercise that EAS Participants may undertake voluntarily, provided such live code tests are conducted in accordance with specific parameters. Specifically, EAS Participants may participate in live code tests where the entity conducting the test: (1) notifies the public before the test that live event codes will be used, but that no emergency is, in fact, occurring; (2) to the extent technically feasible, states in the test message that the event is only a test; (3) coordinates the test among EAS Participants and with state and local emergency authorities, the relevant State Emergency Communication Committee (SECC) (or SECCs, if the test could affect multiple states), and first responder organizations, such as Public Safety Answering Points (PSAPs), police, and fire agencies; and (4) consistent with the Commission’s rules, provides in widely accessible formats the required notification to the public that the test is not, in fact, a warning about an actual emergency. The Order requires that live code tests state in the alert message that the event is only a test as a further safeguard against public confusion, especially among those who are blind, deaf and hearing impaired.

5. The Commission agrees with commenters that EAS Participants such as cable operators and broadcasters must be given sufficient notice of live code tests to benefit from them and to allow for planning and coordination to assess and mitigate the impact on downstream equipment and subscribers. Accordingly, the Commission expects test alert originators to coordinate with these stakeholders in good faith, and

encourages them to provide the notice and coordination required by the rules adopted in the Order no later than two weeks prior to the test. As part of that coordination and outreach, the Commission encourages test alert originators to file notice of their intent to conduct a test in the EAS docket (PS Docket No. 15-94).

6. Commenters generally support voluntary live code testing, and agree that such testing can yield important public safety benefits. The record also indicates that live code testing exercises can be tailored to improve public safety at the local or community level.

7. To avoid customer exhaustion and any dissipation of the value of alerting that could come from over-testing the system to the public, the Order limits the number of live code tests that an alert originator may conduct under the new rules it adopts to two (2) within any calendar year. The Commission will continue to monitor the implementation of live code tests to determine whether additional measures are warranted.

## **2. EAS Public Service Announcements (PSAs)**

8. Section 11.46 of the Commission's rules provides that PSAs, while permissible, "may not be a part of alerts or tests, and may not simulate or attempt to copy alert tones or codes." The Commission has granted requests from non-governmental organizations (NGOs) and FEMA for waivers of these rules to raise public awareness about the EAS through PSAs that use the EAS Attention Signal, and, in one instance, a simulation of header code sounds. In 2016, the Commission amended its rules to allow authorized entities to use the Attention Signal in PSAs about WEA. In the NPRM, the Commission proposed allowing EAS Participants to use EAS header codes and the

Attention Signal in coordination with federal, state, and local government entities without a waiver, provided that the PSAs are presented in a non-misleading manner that does not cause technical issues for downstream equipment.

9. The Order amends section 11.46 of the Commission's rules to allow, under certain circumstances, EAS Participants to use the Attention Signal in EAS PSAs (including commercially-sponsored announcements, infomercials, or programs) provided by federal, state, and local government entities, and NGOs, to raise public awareness about emergency alerting. This usage is only permitted if the PSA is presented in a non-misleading and technically harmless manner, including with the explicit statement that the Attention Signal is being used in the context of a PSA for the purpose of educating the viewing or listening public about emergency alerting. The Order also makes conforming changes to section 11.45.

10. The Commission declines to allow live EAS header codes to be used in EAS PSAs because, as suggested by some commenters, EAS PSAs containing live EAS header codes could have unintended consequences, including triggering false alerts. However, the Commission will permit the simulation of header code audio tones developed by FEMA in PSAs to deliver the familiar sounds of live EAS header codes that the public associates with the EAS in a manner that would not trigger an actual alert. Entities that want to simulate the EAS header codes in their PSAs must do so using FEMA's simulation. The Commission observes that FEMA's simulation of the header code audio tones is subject to the restrictions of section 11.45 and therefore should not be used for purposes other than the EAS PSAs described in the Order. In adopting these PSA rules, the Commission notes agreement with commenters that EAS PSAs can be

effective tools to raise public awareness of the EAS, particularly those that may be new to this country or have limited English proficiency, who do not recognize EAS tones and could benefit from learning about the EAS's benefits.

### **3. Effective Dates**

11. The Commission proposed that these rules would become effective 30 days from the date of their publication in the Federal Register. No commenters opposed this time frame. Accordingly, the rule amendments for sections 11.45(a) and 11.46, both of which relate to PSAs, will become effective 30 days after publication of the Order in the Federal Register.

12. The rule amendments for section 11.61, which cover "Live Code Tests," will become effective on the date specified in a Commission notice published in the Federal Register announcing their approval under the Paperwork Reduction Act by the Office of Management and Budget, which date will be at least 30 days after the date that this Order and rules adopted herein are published in the Federal Register.

### **B. Ensuring EAS Readiness and Reliability**

#### **1. False Alert Reporting**

13. The Commission agrees with commenters that false alert reporting would benefit ongoing EAS reliability, and that having timely information about false alerts could help identify and mitigate problems with the EAS. Accordingly, the Commission revises its rules to require that no later than twenty-four (24) hours of an EAS Participant's discovery that it has transmitted or otherwise sent a false alert to the public, the EAS Participant send an email to the FCC Ops Center (at [FCCOPS@fcc.gov](mailto:FCCOPS@fcc.gov)), informing the Commission of the event and of any details that the EAS Participant may

have concerning the event. If an EAS Participant has no actual knowledge that it has issued a false alert, then it would not be required to take any action.

## **2. Alert Authentication**

14. The Order revises section 11.56(c) to require that EAS Participants configure their systems to reject all CAP-formatted EAS messages that contain an invalid digital signature, thus helping to prevent the transmission of a false alert. All commenters addressing this issue supported the Commission's proposal and generally acknowledged the benefits of digitally signing CAP alerts. Although the Order requires EAS Participants to configure their systems in such a way as to reject alerts with invalid digital signatures, the Commission does not mandate the use of digital signatures at this time. With respect to broadcast-based, legacy alerts, the Commission believes it would be premature to adopt rules pertaining to specific authentication mechanisms for such alerts at this time. Based on the lack of consensus on an approach forward in the record, the Commission believes it would be prudent to await the recommendation from the Communications Security, Reliability and Interoperability Council VI on this issue rather than moving ahead with one of the originally proposed mechanisms.

## **3. Alert Validation**

15. Section 11.33(a)(10) specifies certain error detection and validation requirements for decoders. Currently, the Commission's rules do not require validation of alerts based upon the time period or year parameter in the "time stamp" portion of the header code, i.e., the portion that determines the correct date and time for the alert. Further, the Commission's rules do not require that valid alerts have an expiration time in the future. Thus, an alert's time stamp does not consistently serve as a filter through

which officials can ensure an alert is confined to its relevant time frame.

16. Alert time validation. The alert message validation requirements in the EAS rules require that EAS decoders validate alert messages by comparing the three EAS header tone bursts that commence all EAS alerts to ensure that at least two out of three match—the content of those header tones is not reviewed for incoming alert message validity. The Order amends section 11.33(a)(10) so that alert message validation confirms that the alert’s expiration time is set to take place in the future, and that its origination time takes place no more than 15 minutes in the future.

17. The Commission observes that commenters generally support proposals that reduce the potential for repeat broadcasts of outdated alerts by validation based on specific origination and expiration times, and support a 15-minute timeframe, and believe that such requirement will require minimal software updates. Based on the record, most EAS equipment already validates the time of EAS messages, blocking alerts that have expired. Remaining equipment can achieve this capability by installing the necessary software as part of a regularly scheduled in-version equipment software update.

18. Year Parameter. The Commission declines to require a year parameter in the time stamp section of the EAS Protocol. The record indicates that adding a year parameter requirement is not technically feasible without significant modification to the current EAS Protocol, as well as all associated equipment, which would be extremely expensive and burdensome, and would cause significant disruption to the NOAA Weather Radio infrastructure.

#### **4. Compliance timeline**

19. The Order adopts a one-year compliance timeframe from publication in

the Federal Register. The record indicates that most EAS Participants already have EAS equipment capable of complying with these requirements. The Commission also observes that a one-year time frame would allow equipment manufacturers to develop and make available software updates to implement these requirements in deployed equipment that do not already meet these requirements.

20. The rule amendments for section 11.45(b), which address the filing of false alert reports will become effective on the date specified in a Commission notice published in the Federal Register announcing their approval under the Paperwork Reduction Act by the Office of Management and Budget, which date will be at least 30 days after the date that this Order and rules adopted herein are published in the Federal Register.

### **C. Benefit-Cost Analysis**

21. The rule changes adopted in the Order reduce burdens by eliminating waiver filing time and costs. To the extent the Commission adopts new requirements, it does so in a minimally burdensome way that either imposes no additional costs or imposes only minimal costs. Other than the alert validation and authentication requirements, for which a one-year compliance timeframe is provided, only the new false alert reporting rule will involve new costs to EAS Participants. As discussed below, the Commission concludes that the benefits of these rule changes exceed their costs.

#### **1. Benefits**

22. The rule changes adopted in the Order will reduce regulatory burden on EAS stakeholders. Waivers will no longer be needed for live code testing. The rule changes also reduce the regulatory burden on EAS Participants by allowing them to

produce PSAs using EAS header codes and a simulated Attention Signal without requesting a waiver. This change will make the process of producing a PSA less costly, and promote greater proficiency in the use of EAS, both by EAS alert initiators and EAS Participants.

23. These rule changes will also help prevent incidents of misuse and abuse of the EAS. The authentication and validation rule changes will require the use of EAS equipment's existing capabilities to help prevent misuse and abuse of the EAS, thus protecting its integrity and maintaining its credibility with the public and alerting officials. To provide an estimate of the value of the benefits of the rules adopted in the Order, the Commission turns to the overall value of the EAS. Scholars agree that public safety in the United States has improved over the years because its early warning systems for recurring hazards, such as lightning, floods, storms and heat waves, are continually improving. By reducing the frequency of false alerts, the rule changes adopted in the Order strengthen public confidence in the EAS, thus avoiding erosion in its overall value.

## **2. Costs**

24. The rule changes to section 11.61 for live code testing and to sections 11.45 and 11.46 for public service announcements do not impose any new costs. Rather, they codify requirements that were previously imposed on waivers granted by the Commission. Removing the requirement to file a waiver removes the need for legal and other staff time associated with filing a waiver. The new rules therefore eliminate any legal or administrative costs that were associated with filing waiver requests.

25. The Commission estimates that compliance with the alert authentication and validation rule changes will involve only minimal costs to EAS Participants. Current

EAS rules require that EAS Participants must have EAS equipment that is capable of being updated via software. According to the record, most EAS equipment deployed in the field is already configured to support the validation and authentication rule changes adopted in the Order. The one-year compliance period adopted for these rule changes will provide sufficient time for any necessary update to be deployed within a previously scheduled in-version equipment software update. In combination, these factors result in no incremental cost to EAS Participants for installing the update.

26. With respect to the new false alert reporting requirement, the Commission concludes that the cost of reporting false alerts will be \$11,600 per year, based upon an average of 290 EAS participants each spending 15 minutes to file one report.

27. Therefore, based on the foregoing analysis, the Commission finds it reasonable to conclude that the benefits of the rules adopted in the Order will exceed the costs of their implementation. The rule changes will support greater testing and awareness of the EAS and promote the security of the EAS. They will also likely result in fewer false alerts, and thus fewer unnecessary 911 calls. The benefits of these rule changes will continue to accrue to the public each year, while the imposed costs are low.

### **III. PROCEDURAL MATTERS**

#### **A. Accessible Formats**

28. 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](mailto:fcc504@fcc.gov) or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (tty).

#### **B. Regulatory Flexibility Analysis.**

29. As required by the Regulatory Flexibility Act of 1980, as amended (RFA), an Initial Regulatory Flexibility Analysis (IRFA) was incorporated in the Notice of Proposed Rulemaking (NPRM) in PS Docket Nos. 15-94 and 15-91, 81 FR 15792 (March 24, 2016). The Commission sought written public comment on the proposals in the NPRM, including comment on the IRFA. No comments were filed addressing the IRFA. This present Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.

**1. Need for, and Objectives of, the Report and Order**

30. In today's Report and Order (Order), the Commission adopts rules that fall into two categories: (1) building stronger alerting exercise programs and greater awareness of the EAS; and (2) taking steps to ensure the readiness and reliability of the EAS to protect it against accidental misuse and malicious intrusion.

31. With respect to building effective public safety exercises and supporting greater testing and awareness of the EAS, the Commission permits the use of "live code" EAS public safety exercises to empower communities to meet their emergency preparedness needs and to provide opportunities for system verification and proficiency training. The Commission also allows EAS Participants to use the EAS Attention Signal and simulation of the header codes in Public Service Announcements (PSAs) provided by federal, state, and local government entities, as well as non-governmental organizations (NGOs) to raise public awareness about emergency alerting.

32. With respect to taking steps to ensure the readiness and reliability of the EAS, the Commission requires EAS Participants, upon discovery (i.e., actual knowledge) that they have transmitted or otherwise sent a false alert to the public, to provide minimal reports to the Commission. The Commission also requires EAS Participants to reject any

CAP-formatted EAS messages that contain an invalid digital signature, and require EAS Participants to reject all EAS alerts that they receive with header code date/time data inconsistent with the current date and time.

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

33. There were no comments filed that specifically addressed the proposed rules and policies presented in the IRFA.

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

34. 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.

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

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

36. The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the rules adopted, herein. The RFA generally defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.” In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act. A “small business concern” is

one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.

37. Small Businesses, Small Organizations, and Small Governmental Jurisdictions. The Commission’s actions, over time, may affect small entities that are not easily categorized at present. The Commission therefore describes here, at the outset, three broad groups of small entities that could be directly affected herein. 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. These types of small businesses represent 99.9% of all businesses in the United States which translates to 28.8 million businesses.

38. 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.” Nationwide, as of Aug. 2016, there were approximately 356,494 small organizations based on registration and tax data filed by nonprofits with the Internal Revenue Service (IRS).

39. 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.” U.S. Census Bureau data from the 2012 Census of Governments indicates that there were 90,056 local governmental jurisdictions consisting of general purpose governments and special purpose governments in the United States. Of this number there were 37, 132 General purpose governments (county, municipal and town or township ) with

populations of less than 50,000 and 12,184 Special purpose governments (independent school districts and special districts) with populations of less than 50,000. The 2012 U.S. Census Bureau data for most types of governments in the local government category shows that the majority of these governments have populations of less than 50,000. Based on this data the Commission estimates that at least 49,316 local government jurisdictions fall in the category of “small governmental jurisdictions.”

40. Radio Stations. This Economic Census category “comprises establishments primarily engaged in broadcasting aural programs by radio to the public. Programming may originate in their own studio, from an affiliated network, or from external sources.” The SBA has established a small business size standard for this category as firms having \$38.5 million or less in annual receipts. Economic Census data for 2012 shows that 2,849 radio station firms operated during that year. Of that number, 2,806 operated with annual receipts of less than \$25 million per year, 17 with annual receipts between \$25 million and \$49,999,999 million and 26 with annual receipts of \$50 million or more. Therefore, based on the SBA’s size standard the majority of such entities are small entities.

41. According to Commission staff review of the BIA/Kelsey, LLC’s Media Access Pro Radio Database as of January 2018, about 11,261 (or about 99.9 percent) of 11,383 commercial radio stations had revenues of \$38.5 million or less and thus qualify as small entities under the SBA definition. The Commission has estimated the number of licensed commercial AM radio stations to be 4,639 stations and the number of commercial FM radio stations to be 6,744, for a total number of 11,383. The Commission notes that the Commission has also estimated the number of licensed NCE

radio stations to be 4,120. Nevertheless, the Commission does not compile and otherwise does not have access to information on the revenue of NCE stations that would permit it to determine how many such stations would qualify as small entities.

42. The Commission also notes, that in assessing whether a business entity qualifies as small under the above definition, business control affiliations must be included. The Commission's estimate therefore likely overstates the number of small entities that might be affected by its action, because the revenue figure on which it is based does not include or aggregate revenues from affiliated companies. In addition, to be determined a "small business," an entity may not be dominant in its field of operation. The Commission further notes, that it is difficult at times to assess these criteria in the context of media entities, and the estimate of small businesses to which these rules may apply does not exclude any radio station from the definition of a small business on this basis, thus the Commission's estimate of small businesses may therefore be over-inclusive. Also, as noted above, an additional element of the definition of "small business" is that the entity must be independently owned and operated. The Commission notes that it is difficult at times to assess these criteria in the context of media entities and the estimates of small businesses to which they apply may be over-inclusive to this extent.

43. Low-Power FM Stations. Low Power FM Stations are classified in the category of Radio Stations and are assigned the same NAICS Code as licensees of radio stations. This U.S. industry, Radio Stations, comprises establishments primarily engaged in broadcasting aural programs by radio to the public. Programming may originate in their own studio, from an affiliated network, or from external sources. The SBA has

established a small business size standard which consists of all radio stations whose annual receipts are \$38.5 million dollars or less. U.S. Census data for 2012 indicates that 2,849 radio station firms operated during that year. Of that number, 2,806 operated with annual receipts of less than \$25 million per year, 17 with annual receipts between \$25 million and \$49,999,999 million and 26 with annual receipts of \$50 million or more. Based on U.S. Census data, the Commission concludes that the majority of Low Power FM Stations are small.

44. Television Broadcasting. This Economic Census category “comprises establishments primarily engaged in broadcasting images together with sound.” These establishments operate television broadcast studios and facilities for the programming and transmission of programs to the public. These establishments also produce or transmit visual programming to affiliated broadcast television stations, which in turn broadcast the programs to the public on a predetermined schedule. Programming may originate in their own studio, from an affiliated network, or from external sources. The SBA has created the following small business size standard for such businesses: those having \$38.5 million or less in annual receipts. The 2012 Economic Census reports that 751 firms in this category operated in that year. Of that number, 656 had annual receipts of \$25,000,000 or less, 25 had annual receipts between \$25,000,000 and \$49,999,999 and 70 had annual receipts of \$50,000,000 or more. Based on this data the Commission therefore estimates that the majority of commercial television broadcasters are small entities under the applicable SBA size standard.

45. The Commission has estimated the number of licensed commercial television stations to be 1,378. Of this total, 1,258 stations (or about 91 percent) had

revenues of \$38.5 million or less, according to Commission staff review of the BIA Kelsey Inc. Media Access Pro Television Database (BIA) on November 16, 2017, and therefore these licensees qualify as small entities under the SBA definition. In addition, the Commission has estimated the number of licensed noncommercial educational (NCE) television stations to be 395. Notwithstanding, the Commission does not compile and otherwise does not have access to information on the revenue of NCE stations that would permit it to determine how many such stations would qualify as small entities. There are also 2,367 low power television stations, including Class A stations (LPTV) and 3,750 TV translator stations. Given the nature of these services, the Commission will presume that all of these entities qualify as small entities under the above SBA small business size standard.

46. The Commission notes, however, that in assessing whether a business concern qualifies as “small” under the above definition, business (control) affiliations must be included. The Commission’s estimate, therefore likely overstates the number of small entities that might be affected by the Commission’s action, because the revenue figure on which it is based does not include or aggregate revenues from affiliated companies. In addition, another element of the definition of “small business” requires that an entity not be dominant in its field of operation. The Commission is unable at this time to define or quantify the criteria that would establish whether a specific television broadcast station is dominant in its field of operation. Accordingly, the estimate of small businesses to which rules may apply does not exclude any television station from the definition of a small business on this basis and is therefore possibly over-inclusive. Also, as noted above, an additional element of the definition of “small business” is that the

entity must be independently owned and operated. The Commission notes that it is difficult at times to assess these criteria in the context of media entities and its estimates of small businesses to which they apply may be over-inclusive to this extent.

47. Wired Telecommunications Carriers. The U.S. Census Bureau defines this industry as “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 communications networks. Transmission facilities may be based on a single technology or a combination of technologies. 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. By exception, establishments providing satellite television distribution services using facilities and infrastructure that they operate are included in this industry.” The SBA has developed a small business size standard for Wired Telecommunications Carriers, which consists of all such companies having 1,500 or fewer employees. U.S. Census Bureau data for 2012 shows that there were 3,117 firms that operated that year. Of this total, 3,083 operated with fewer than 1,000 employees. Thus, under this size standard, the majority of firms in this industry can be considered small.

48. Cable and Other Subscription Programming. This industry comprises establishments primarily engaged in operating studios and facilities for the broadcasting of programs on a subscription or fee basis. The broadcast programming is typically narrowcast in nature (e.g., limited format, such as news, sports, education, or youth-

oriented). These establishments produce programming in their own facilities or acquire programming from external sources. The programming material is usually delivered to a third party, such as cable systems or direct-to-home satellite systems, for transmission to viewers. The SBA size standard for this industry establishes as small, any company in this category which has annual receipts of \$38.5 million or less. According to 2012 U.S. Census Bureau data, 367 firms operated for that entire year. Of that number, 319 operated with annual receipts of less than \$25 million a year and 48 firms operated with annual receipts of \$25 million or more. Based on this data, the Commission estimates that the majority of firms operating in this industry are small.

49. Cable Companies and Systems (Rate Regulation). The Commission has developed its own small business size standards 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. Industry data indicate that there are currently 4,600 active cable systems in the United States. Of this total, all but nine cable operators nationwide are small under the 400,000-subscriber size standard. In addition, under the Commission's rate regulation rules, a "small system" is a cable system serving 15,000 or fewer subscribers. Current Commission records show 4,600 cable systems nationwide. Of this total, 3,900 cable systems have fewer than 15,000 subscribers, and 700 systems have 15,000 or more subscribers, based on the same records. Thus, under this standard as well, the Commission estimates that most cable systems are small entities.

50. Cable System Operators (Telecom Act Standard). The Communications Act of 1934, as amended, also contains a size standard for small cable system operators, which is "a cable operator that, directly or through an affiliate, serves in the aggregate

fewer than 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.” There are approximately 52,403,705 cable video subscribers in the United States today. Accordingly, an operator serving fewer than 524,037 subscribers shall be deemed a small operator if its annual revenues, when combined with the total annual revenues of all its affiliates, do not exceed \$250 million in the aggregate. Based on available data, the Commission finds that all but nine incumbent cable operators are small entities under this size standard. The Commission notes that it neither requests nor collects information on whether cable system operators are affiliated with entities whose gross annual revenues exceed \$250 million. Although it seems certain that some of these cable system operators are affiliated with entities whose gross annual revenues exceed \$250,000,000, the Commission is 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.

51. Satellite Telecommunications. This category 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.” Satellite telecommunications service providers include satellite and earth station operators. The category has a small business size standard of \$32.5 million or less in average annual receipts under SBA rules. For this category, U.S. Census Bureau data for 2012 shows that there were a total of 333 firms that operated for the entire year. Of this total, 299 firms had annual receipts of less than \$25 million.

Consequently, the Commission estimates that the majority of satellite telecommunications providers are small entities.

52. All Other Telecommunications. The “All Other Telecommunications” category is comprised of establishments primarily engaged in providing specialized telecommunications services, such as satellite tracking, communications telemetry, and radar station operation. 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. Establishments providing Internet services or voice over Internet protocol (VoIP) services via client-supplied telecommunications connections are also included in this industry. The SBA has developed a small business size standard for All Other Telecommunications, which consists of all such firms with annual receipts of \$ 32.5 million or less. For this category, U.S. Census Bureau data for 2012 shows that there were 1,442 firms that operated for the entire year. Of those firms, a total of 1,400 had annual receipts less than \$25 million and 42 firms had annual receipts of \$25 million to \$49,999,999. Thus, the Commission estimates that the majority of “All Other Telecommunications” firms potentially affected by the Commission’s action can be considered small.

53. The Educational Broadcasting Services. Cable-based Educational Broadcasting Services have been included in the broad economic census category and Small Business Administration (SBA) size standard for Wired Telecommunications Carriers since 2007. Wired Telecommunications Carriers, which was developed for small wireline businesses is defined as follows: “This industry 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. Transmission facilities may be based on a single technology or a combination of technologies. 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.” The SBA has developed a small business size standard for this category, which is all such businesses having 1,500 or fewer employees. U.S. Census data for 2012 shows that there were 3,117 firms that operated that year. Of this total, 3,083 operated with fewer than 1,000 employees. Thus, under this size standard, the majority of firms in this industry can be considered small. In addition to Census Bureau data, the Commission’s internal records indicate that, as of October 2014, there were 2,206 active EBS licenses. The Commission estimates that of these 2,206 licenses, the majority are held by non-profit educational institutions and school districts, which are defined by statute as small businesses.

54. 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 SBA’s economic census category “Wired Telecommunications Carriers.” The Wired Telecommunications Carriers industry 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. Transmission facilities may be based on a single technology or combination of technologies. Establishments in this industry use the wired telecommunications network facilities that they operate to provide a variety of services, such as wired telephone services, including VoIP services, wired (cable) audio, and video programming distribution, and wired broadband Internet services. By exception, establishments providing satellite television distribution services using facilities and infrastructure that they operate are included in this industry. The SBA determines that a wireline business is small if it has fewer than 1,500 employees. U.S. Census Bureau data for 2012 indicates that 3,117 wireline companies were operational during that year. Of that number, 3,083 operated with fewer than 1,000 employees. Based on that data, the Commission concludes that the majority of wireline firms are small under the applicable standard. However, currently, only two entities provide DBS service, which requires a great deal of capital for operation: DIRECTV (owned by AT&T) and DISH Network. DIRECTV and DISH Network each report annual revenues that are in excess of the threshold for a small business. Accordingly, the Commission must conclude that internally developed FCC data are persuasive, that, in general, DBS service is provided only by large firms.

55. Wireless Telecommunications Carriers (Except Satellite). This industry comprises establishments engaged in operating and maintaining switching and transmission facilities to provide communications via the airwaves. Establishments in this industry have spectrum licenses and provide services using that spectrum, such as cellular services, paging services, wireless internet access, and wireless video services. The appropriate size standard under SBA rules is that such a business is small if it has

1,500 or fewer employees. For this industry, U.S. Census data for 2012 shows that there were 967 firms that operated for the entire year. Of this total, 955 firms had fewer than 1,000 employees. Thus, under this category and the associated size standard, the Commission estimates that the majority of wireless telecommunications carriers (except satellite) are small entities.

56. The Commission’s own data—available in its Universal Licensing System—indicate that, as of October 25, 2016, there are 280 Cellular licensees that will be affected by the Commission’s actions today. The Commission does not know how many of these licensees are small, as the Commission does not collect that information for these types of entities. Similarly, according to internally developed Commission data, 413 carriers reported that they were engaged in the provision of wireless telephony, including cellular service, Personal Communications Service (PCS), and Specialized Mobile Radio (SMR) services. Of this total, an estimated 261 have 1,500 or fewer employees and 152 have more than 1,500 employees. Thus, using available data, the Commission estimates that the majority of wireless firms can be considered small.

57. Broadband Personal Communications Service. The broadband personal communications service (PCS) spectrum is divided into six frequency blocks designated A through F, and the Commission has held auctions for each block. The Commission initially defined a “small business” for C- and F-Block licenses as an entity that has average gross revenues of \$40 million or less in the three previous calendar years. For F-Block licenses, an additional small business size standard for “very small business” was added and is defined as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years. These

standards defining “small entity”, in the context of broadband PCS auctions, have been approved by the SBA. No small businesses within the SBA-approved small business size standards bid successfully for licenses in Blocks A and B. There were 90 winning bidders that claimed small business status in the first two C-Block auctions. A total of 93 bidders that claimed small business status won approximately 40 percent of the 1,479 licenses in the first auction for the D-, E-, and F-Blocks. On April 15, 1999, the Commission completed the reauction of 347 C-, D-, E-, and F-Block licenses in Auction No. 22. Of the 57 winning bidders in that auction, 48 claimed small business status and won 277 licenses.

58. On January 26, 2001, the Commission completed the auction of 422 C- and F-Block Broadband PCS licenses in Auction No. 35. Of the 35 winning bidders in that auction, 29 claimed small business status. Subsequent events concerning Auction No. 35, including judicial and agency determinations, resulted in a total of 163 C- and F-Block licenses being available for grant. On February 15, 2005, the Commission completed an auction of 242 C-, D-, E-, and F-Block licenses in Auction No. 58. Of the 24 winning bidders in that auction, 16 claimed small business status and won 156 licenses. On May 21, 2007, the Commission completed an auction of 33 licenses in the A-, C-, and F-Blocks in Auction No. 71. Of the 12 winning bidders in that auction, five claimed small business status and won 18 licenses. On August 20, 2008, the Commission completed the auction of 20 C-, D-, E-, and F-Block Broadband PCS licenses in Auction No. 78. Of the eight winning bidders for Broadband PCS licenses in that auction, six claimed small business status and won 14 licenses.

59. Narrowband Personal Communications Services. Two auctions of

narrowband personal communications services (PCS) licenses have been conducted. To ensure meaningful participation of small business entities in future auctions, the Commission has adopted a two-tiered small business size standard in the Narrowband PCS Second Report and Order. Through these auctions, the Commission has awarded a total of 41 licenses, 11 of which were obtained by small businesses. A “small business” is an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than \$40 million. A “very small business” is an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than \$15 million. The SBA has approved these small business size standards.

60. 700 MHz Guard Band Licensees. In 2000, in the 700 MHz Guard Band Order, the Commission adopted size standards for “small businesses” and “very small businesses” for purposes of determining their eligibility for special provisions such as bidding credits and installment payments. A small business in this service is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$40 million for the preceding three years. Additionally, a very small business is an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$15 million for the preceding three years. SBA approval of these definitions is not required. An auction of 52 Major Economic Area (“MEA”) licenses commenced on September 6, 2000, and closed on September 21, 2000. Of the 104 licenses auctioned, 96 licenses were sold to nine bidders. Five of these bidders were small businesses that won a total of 26 licenses. A second auction of 700 MHz Guard Band licenses commenced on February 13, 2001, and closed on February 21, 2001. All

eight of the licenses auctioned were sold to three bidders. One of these bidders was a small business that won a total of two licenses.

61. Lower 700 MHz Band Licenses. The Commission previously adopted criteria for defining three groups of small businesses for purposes of determining their eligibility for special provisions such as bidding credits. The Commission defined a “small business” as an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$40 million for the preceding three years. A “very small business” is defined as an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$15 million for the preceding three years. Additionally, the lower 700 MHz Service had a third category of small business status for Metropolitan/Rural Service Area (MSA/RSA) licenses—“entrepreneur”—which is defined as an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$3 million for the preceding three years. The SBA approved these small size standards. An auction of 740 licenses (one license in each of the 734 MSAs/RSAs and one license in each of the six Economic Area Groupings (EAGs)) commenced on August 27, 2002, and closed on September 18, 2002. Of the 740 licenses available for auction, 484 licenses were won by 102 winning bidders. Seventy-two of the winning bidders claimed small business, very small business or entrepreneur status and won a total of 329 licenses. A second auction commenced on May 28, 2003, closed on June 13, 2003, and included 256 licenses: 5 EAG licenses and 476 Cellular Market Area licenses. Seventeen winning bidders claimed small or very small business status and won 60 licenses, and nine winning bidders claimed entrepreneur status and won 154 licenses. On July 26, 2005, the

Commission completed an auction of five licenses in the Lower 700 MHz band (Auction No. 60). There were three winning bidders for five licenses. All three winning bidders claimed small business status.

62. In 2007, the Commission reexamined its rules governing the 700 MHz band in the 700 MHz Second Report and Order. An auction of 700 MHz licenses commenced January 24, 2008, and closed on March 18, 2008, which included: 176 Economic Area licenses in the A-Block, 734 Cellular Market Area licenses in the B-Block, and 176 EA licenses in the E-Block. Twenty winning bidders, claiming small business status (those with attributable average annual gross revenues that exceed \$15 million and do not exceed \$40 million for the preceding three years) won 49 licenses. Thirty-three winning bidders claiming very small business status (those with attributable average annual gross revenues that do not exceed \$15 million for the preceding three years) won 325 licenses.

63. Upper 700 MHz Band Licenses. In the 700 MHz Second Report and Order, the Commission revised its rules regarding Upper 700 MHz licenses. On January 24, 2008, the Commission commenced Auction No. 73, in which several licenses in the Upper 700 MHz band were available for licensing: 12 Regional Economic Area Grouping licenses in the C-Block, and one nationwide license in the D-Block. The auction concluded on March 18, 2008, with three winning bidders claiming very small business status (those with attributable average annual gross revenues that do not exceed \$15 million for the preceding three years) and winning five licenses.

64. Advanced Wireless Services. AWS Services (1710–1755 MHz and 2110–2155 MHz bands (AWS-1); 1915–1920 MHz, 1995–2000 MHz, 2020–2025 MHz and

2175–2180 MHz bands (AWS-2); 2155–2175 MHz band (AWS-3)). For the AWS-1 bands, the Commission has defined a “small business” as an entity with average annual gross revenues for the preceding three years not exceeding \$40 million, and a “very small business” as an entity with average annual gross revenues for the preceding three years not exceeding \$15 million. For AWS-2 and AWS-3, although the Commission does not know for certain which entities are likely to apply for these frequencies, the Commission notes that the AWS-1 bands are comparable to those used for cellular service and personal communications service. The Commission has not yet adopted size standards for the AWS-2 or AWS-3 bands, but proposes to treat both AWS-2 and AWS-3 similarly to broadband PCS service and AWS-1 service due to the comparable capital requirements and other factors, such as issues involved in relocating incumbents and developing markets, technologies, and services.

65. 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,” 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 Instructional Television Fixed Service (ITFS)).

66. BRS – In connection with the 1996 BRS auction, the Commission established a small business size standard as an entity that had annual average gross revenues of no more than \$40 million in the previous three calendar years. The BRS auctions resulted in 67 successful bidders obtaining licensing opportunities for 493 Basic

Trading Areas (BTAs). Of the 67 auction winners, 61 met the definition of a small business. BRS also includes licensees of stations authorized prior to the auction. At this time, the Commission estimates that of the 61 small business BRS auction winners, 48 remain small business licensees. In addition to the 48 small businesses that hold BTA authorizations, there are approximately 392 incumbent BRS licensees that are considered small entities. After adding the number of small business auction licensees to the number of incumbent licensees not already counted, the Commission finds that there are currently approximately 440 BRS licensees that are defined as small businesses under either the SBA or the Commission's rules.

67. In 2009, the Commission conducted Auction No. 86, the sale of 78 licenses in the BRS areas. The Commission offered three levels of bidding credits: (i) a bidder with attributed average annual gross revenues that exceed \$15 million and do not exceed \$40 million for the preceding three years (small business) received a 15 percent discount on its winning bid; (ii) a bidder with attributed average annual gross revenues that exceed \$3 million and do not exceed \$15 million for the preceding three years (very small business) received a 25 percent discount on its winning bid; and (iii) a bidder with attributed average annual gross revenues that do not exceed \$3 million for the preceding three years (entrepreneur) received a 35 percent discount on its winning bid. Auction No. 86 concluded in 2009 with the sale of 61 licenses. Of the ten winning bidders, two bidders that claimed small business status won four licenses; one bidder that claimed very small business status won three licenses; and two bidders that claimed entrepreneur status won six licenses.

68. EBS – Educational Broadband Service has been included within the broad

economic census category and the SBA size standard for Wired Telecommunications Carriers since 2007. Wired Telecommunications Carriers are comprised of 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. Transmission facilities may be based on a single technology or a combination of technologies. The SBA's small business size standard for this category is all such firms having 1,500 or fewer employees. U.S. Census data for 2012 shows that there were 3,117 firms that operated that year. Of this total, 3,083 operated with fewer than 1,000 employees. Thus, under this size standard, the majority of firms in this industry can be considered small. In addition to Census Bureau data, the Commission's Universal Licensing System indicates that as of October 2014, there are 2,206 active EBS licenses. The Commission estimates that of these 2,206 licenses, the majority are held by non-profit educational institutions and school districts, which are by statute defined as small businesses.

69. Wireless Communications Service. This service can be used for fixed, mobile, radiolocation, and digital audio broadcasting satellite uses. The Commission defined "small business" for the wireless communications services (WCS) auction as an entity with average gross revenues of \$40 million for each of the three preceding years, and a "very small business" as an entity with average gross revenues of \$15 million for each of the three preceding years. The SBA has approved these small business size standards. In the Commission's auction for geographic area licenses in the WCS service there were seven winning bidders that qualified as "very small business" entities, and one that qualified as a "small business" entity.

70. 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. 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. The SBA has established a small business size standard for this industry of 1,250 employees or less. U.S. Census data for 2012 shows that 841 establishments operated in this industry in that year. Of that number, 819 establishments operated with less than 500 employees. Based on this data, the Commission concludes that a majority of manufacturers in this industry are small.

71. Software Publishers. This industry comprises establishments primarily engaged in computer software publishing or publishing and reproduction. Establishments in this industry carry out operations necessary for producing and distributing computer software, such as designing, providing documentation, assisting in installation, and providing support services to software purchasers. These establishments may design, develop, and publish, or publish only. The SBA has established a size standard for this industry of annual receipts of \$38.5 million per year. U.S. Census data for 2012 indicates that 5,079 firms operated in that year. Of that number, 4,697 firms had annual receipts of \$25 million or less. Based on that data, the Commission concludes that a majority of firms in this industry are small.

72. NCE and Public Broadcast Stations. Non-commercial educational and public broadcast television stations fall within the U.S. Census Bureau's definition for

Television Broadcasting. This industry comprises establishments primarily engaged in broadcasting images together with sound and operating television broadcasting studios and facilities for the programming and transmission of programs to the public. The SBA has created a small business size standard for Television Broadcasting entities, which is such firms having \$38.5 million or less in annual receipts. The 2012 Economic Census reports that 751 firms in this category operated in that year. Of that number, 656 had annual receipts of \$25,000,000 or less, 25 had annual receipts between \$25,000,000 and \$49,999,999 and 70 had annual receipts of \$50,000,000 or more. Based on this data the Commission concludes that the majority of NCEs and Public Broadcast Stations are small entities under the applicable SBA size standard.

73. According to Commission staff review of the BIA Kelsey Inc. Media Access Pro Television Database (BIA) as of November 16, 2017, approximately 1,258 of the 1,378 licensed commercial television stations (or about 91 percent) had revenues of \$38.5 million or less, and therefore these licensees qualify as small entities under the SBA definition. The Commission also estimates that there are 395 licensed noncommercial educational NCE television stations. Notwithstanding, the Commission does not compile and otherwise does not have access to information on the revenue of NCE stations that would permit it to determine how many such stations would qualify as small entities. In addition to licensed commercial television stations and NCEs, there are also an estimated 2,367 low power television stations (LPTV), including Class A stations and 3,750 TV translator stations. Given the nature of these services, the Commission will presume that all of these entities qualify as small entities under the above SBA small business size standard.

74. The Commission notes, however, that in assessing whether a business concern qualifies as small under the above definition, business (control) affiliations must be included. The Commission's estimate, therefore, likely overstates the number of small entities that might be affected by the Commission's action, because the revenue figure on which it is based does not include or aggregate revenues from affiliated companies. Moreover, the definition of "small business" also requires that an entity not be dominant in its field of operation and that the entity be independently owned and operated. The estimate of small businesses to which rules may apply does not exclude any television station from the definition of a small business on these bases and is therefore over-inclusive to that extent. Further, the Commission is unable at this time to define or quantify the criteria that would establish whether a specific television station is dominant in its field of operation. The Commission further notes that it is difficult at times to assess these criteria in the context of media entities, and therefore the Commission's estimates of small businesses to which they apply may be over-inclusive to this extent.

##### **5. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements for Small Entities**

75. The Order allows EAS Participants to take part in live code EAS public safety exercises, provided that the entity conducting the test provides notification during the test to the extent technically feasible that there is no actual emergency and provides notice to the public and coordinates with EAS Participants, state and local emergency authorities, the SECC, and other entities before the test to inform the public and other affected entities that live event codes will be used and that no emergency is occurring. In addition, the Order allows EAS Participants to use the EAS Attention Signal and a

harmless simulation of EAS header codes in PSAs provided by federal, state, and local government entities, as well as NGOs. These measures will obviate recurring costs associated with the filing of live code waiver requests (e.g., legal, administrative, printing, and mailing costs) and will not create any cost burdens for EAS Participants. The Order also requires that no later than twenty-four (24) hours of an EAS Participant's discovery (i.e., actual knowledge) that it has transmitted or otherwise sent a false alert to the public that the it send an email to the FCC Ops Center (at FCCOPS@fcc.gov) informing the Commission of the event and of any details that the EAS Participant may have concerning the event. This measure will help ensure that all alerting stakeholder have sufficient situational awareness of a false alert to quickly respond to and remediate the situation.

76. The Order requires EAS Participants to reject all digitally-signed CAP-formatted EAS alerts that are invalidly signed. It further requires EAS Participants to reject all EAS alerts that are received with header code date/time data inconsistent with the current date and time. Most EAS equipment deployed in the field already supports these authentication and validation rules, but the Commission anticipates that a small minority of EAS Participants may need to update software to comply with these rules. Such an update should result in minimal costs to EAS Participants, as it can be performed during a scheduled in-version equipment software update.

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

77. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its approach, which may include the following four

alternatives (among others): “(1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) and exemption from coverage of the rule, or any part thereof, for small entities.”

78. The Commission does not expect its actions in the Order to have a significant economic impact on small entities. The rule changes to section 11.61 with respect to live code tests do not impose any new requirements or new costs for small entities or other EAS Participants. The steps taken by the Commission eliminating the waiver filing requirement will benefit small entities by reducing the need for legal and other staff time associated with filing a waiver, which will translate into cost reductions and have a positive economic impact. Thus, as an alternative to the existing process, the record supports the Commission’s conclusion that removing the need for entities to request a waiver of the Commission’s rules to conduct live code tests will reduce costs and remove regulatory burdens for small entities as well as other entities subject to these rules.

79. The false alert reporting rules the Commission adopts today similarly impose minimal burdens on small entities. The reporting requirement is triggered only upon discovery of the false alert, allows twenty-four hours for the submission of the report and imposes no obligation to and investigate the false report. Further, the Commission recognizes that smaller entities often face particular challenges in achieving authentication and validation of EAS messages due to limited human, financial, or

technical resources. Due, in part, to the potentially significant burdens that the originally-proposed requirements would pose, the Commission declines, at this time, to adopt certain of the proposals and defer consideration of others. Those the Commission adopts are unlikely to pose burdens that are not already incurred in the normal course of business.

80. Finally, the Commission adopts implementation timeframes for each of the Commission's rules that are intended to allow EAS Participants to come into compliance with the Commission's rules in a manner that balances the need for improving EAS organization and effectiveness as soon as possible with any potential burdens that may be imposed by adoption of the Commission's proposals.

81. The Commission concludes that the adopted mandates provide small entities as well as other EAS Participants with a sufficient measure of flexibility to account for technical and cost-related concerns. The Commission has determined that implementing these improvements to the EAS is technically feasible. In the event that small entities face unique circumstances that restrict their ability to comply with the Commission's rules, the Commission can address them through the waiver process.

**C. Paperwork Reduction Act Analysis.**

82. This document contains modified information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13. It will be submitted to the Office of Management and Budget (OMB) for review under section 3507(d) of the PRA. OMB, the general public, and other Federal agencies will be invited to comment on the new or modified information collection requirements contained in this proceeding. In addition, the Commission notes that pursuant to the Small Business

Paperwork Relief Act of 2002, Public Law 107-198, see 44 U.S.C. 3506(c)(4), the Commission previously sought specific comment on how the Commission might further reduce the information collection burden for small business concerns with fewer than 25 employees.

**D. Congressional Review Act**

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

**IV. ORDERING CLAUSES**

84. Accordingly, IT IS ORDERED, 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, and 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), 1203, 1204 and 1206, and the Twenty-First Century Communications and Video Accessibility Act of 2010, Pub. L. No. 111-260 and Pub. L. No. 111-265, that this Report and Order IS ADOPTED.

85. IT IS FURTHER ORDERED that the rule amendments adopted herein WILL BECOME EFFECTIVE [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER], except that the amendments to sections 11.33 and 11.56 WILL BECOME EFFECTIVE August 12, 2019, and the amendments to sections 11.45(b) and 11.61, which contain modifications to information collection requirements that are currently approved by the Office of Management and Budget (OMB), WILL BECOME EFFECTIVE on the date specified in a Commission

notice published in the Federal Register announcing their approval (which date shall not be less than 30 days after publication of this Report and Order in the Federal Register).

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

List of Subjects in 47 CFR Part 11

Radio, Television.

**FEDERAL COMMUNICATIONS COMMISSION**

**Marlene H. Dortch,**  
Secretary.

## Final Rules

For the reasons discussed in the preamble, the Federal Communications Commission amends 47 CFR part 11 as follows:

### **PART 11 – EMERGENCY ALERT SYSTEM (EAS)**

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

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

2. Amend § 11.33 by revising paragraph (a)(10) to read as follows:

#### **§ 11.33 EAS Decoder.**

(a) \* \* \*

(10) Message Validity. An EAS Decoder must provide error detection and validation of the header codes of each message to ascertain if the message is valid. Header code comparisons may be accomplished through the use of a bit-by-bit compare or any other error detection and validation protocol. A header code must only be considered valid when two of the three headers match exactly; the Origination Date/Time field (JJJHHMM) is not more than 15 minutes in the future and the expiration time (Origination Date/Time plus Valid Time TTTT) is in the future (i.e., current time at the EAS equipment when the alert is received is between origination time minus 15 minutes and expiration time). Duplicate messages must not be relayed automatically.

\* \* \* \* \*

3. Revise § 11.45 to read as follows:

#### **§ 11.45 Prohibition of false or deceptive EAS transmissions.**

(a) No person may transmit or cause to transmit the EAS codes or Attention Signal, or a recording or simulation thereof, in any circumstance other than in an actual National, State or Local Area emergency or authorized test of the EAS; or as specified in §§ 10.520(d), 11.46, and 11.61 of this chapter.

(b) No later than twenty-four (24) hours of an EAS Participant's discovery (i.e., actual knowledge) that it has transmitted or otherwise sent a false alert to the public, the EAS Participant send an email to the Commission at the FCC Ops Center at FCCOPS@fcc.gov, informing the Commission of the event and of any details that the EAS Participant may have concerning the event.

4. Revise § 11.46 to read as follows:

**§ 11.46 EAS public service announcements.**

EAS Participants may use the EAS Attention Signal and a simulation of the EAS codes as provided by FEMA in EAS Public Service Announcements (PSAs) (including commercially-sponsored announcements, infomercials, or programs) provided by federal, state, and local government entities, or non-governmental organizations, to raise public awareness about emergency alerting. This usage is only permitted if the PSA is presented in a non-misleading and technically harmless manner, including with the explicit statement that the Attention Signal and EAS code simulation are being used in the context of a PSA for the purpose of educating the viewing or listening public about emergency alerting.

5. Amend § 11.56 by redesignating paragraph (c) as paragraph (d) and adding new paragraph (c) to read as follows:

**§ 11.56 Obligation to process CAP-formatted EAS messages.**

\* \* \* \* \*

(c) EAS Participants shall configure their systems to reject all CAP-formatted EAS messages that include an invalid digital signature.

\* \* \* \* \*

6. Amend § 11.61 by adding paragraph (a)(5) to read as follows:

**§ 11.61 Tests of EAS procedures.**

(a) \* \* \*

(5) Live Code Tests. EAS Participants may participate in no more than two (2) “Live Code” EAS Tests per calendar year that are conducted to exercise the EAS and raise public awareness for it, provided that the entity conducting the test:

- (i) Notifies the public before the test that live event codes will be used, but that no emergency is, in fact, occurring;
- (ii) To the extent technically feasible, states in the test message that the event is only a test;
- (iii) Coordinates the test among EAS Participants and with state and local emergency authorities, the relevant SECC (or SECCs, if the test could affect multiple states), and first responder organizations, such as PSAPs, police, and fire agencies); and,
- (iv) Consistent with § 11.51, provides in widely accessible formats the notification to the public required by this subsection that the test is only a test, and is not a warning about an actual emergency.

\* \* \* \* \*

[FR Doc. 2018-17096 Filed: 8/9/2018 8:45 am; Publication Date: 8/10/2018]