

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

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

REPORT AND ORDER

Adopted: December 14, 2017

Released: December 14, 2017

By the Commission: Chairman Pai and Commissioners Clyburn, O’Rielly, and Carr issuing separate statements; Commissioner Rosenworcel approving in part, dissenting in part, and issuing a statement.

I. INTRODUCTION

1. We advance the important public policy of protecting our nation’s law enforcement officials and the communities they serve,¹ by revising the Federal Communications Commission’s (Commission or FCC) Emergency Alert System (EAS) rules to adopt the three-character code BLU as a new EAS event code to enable the delivery of Blue Alerts over the EAS and Wireless Emergency Alerts (WEA).² Our actions today promote the development of compatible and integrated Blue Alert plans throughout the United States, consistent with the Rafael Ramos and Wenjian Liu National Blue Alert Act of 2015 (Blue Alert Act),³ and support the need for a dedicated EAS event code for Blue Alerts identified by the Office of Community Oriented Policing Service (COPS Office) of the United States Department of Justice (DOJ).⁴

II. BACKGROUND

2. The EAS is a national public warning system through which broadcasters, cable systems, and other service providers (EAS Participants)⁵ deliver alerts to the public to warn them of impending emergencies and dangers to life and property.⁶ Although the primary purpose of the EAS is to equip the

¹ See Exec. Order No. 13774, 82 Fed. Reg. 10695 (Feb. 9, 2017) (Exec. Order No. 13774) (stating that it shall be the policy of the executive branch to “enhance the protection and safety of Federal, State, tribal, and local law enforcement officers”).

² 47 CFR § 11.1 *et. seq.*

³ 34 U.S.C. § 50501 *et. seq.*

⁴ U.S. Dep’t of Justice, Office of Community Oriented Policing Services, Rafael Ramos and Wenjian Liu National Blue Alert Report to Congress at 6 (2016), https://www.cops.usdoj.gov/pdf/blue-alert/2016_report.pdf (2016 Report to Congress) (noting “. . . the need for a dedicated Emergency Alerting System (EAS) event code . . .”).

⁵ The Commission’s rules define EAS Participants as broadcast stations, cable systems; wireline video systems; wireless cable systems; direct broadcast satellite service providers; and digital audio radio service providers. See 47 CFR § 11.11(a).

⁶ *Review of the Emergency Alert System; Independent Spanish Broadcasters Association, The Office of Communication of the United Church of Christ, Inc., and the Minority Media and Telecommunications Council, Petition for Immediate Relief*, Fifth Report and Order, 27 FCC Rcd 642, 646, para. 6 (2012) (*Fifth Report and Order*). See *Review of the Emergency Alert System; Independent Spanish Broadcasters Association, The Office of Communication of the United Church of Christ, Inc., and the Minority Media and Telecommunications Council*,

President with the capability to provide immediate communications and information to the public during periods of national emergency,⁷ the EAS is also used by the National Weather Service (NWS) and state and local governments to distribute voluntary alerts such as weather-related and child abduction (AMBER) alerts. EAS alerts are configured using the EAS Protocol, which uses fixed codes to identify the various elements of an EAS alert so that each alert can deliver accurate, secure, and geographically-targeted alerts to the public.⁸ The EAS Protocol uses a three-character event code to describe the nature of the alert in text crawls and in the audio portion of EAS alerts (e.g., TOR for Tornado).⁹

3. In 2015, Congress enacted the Blue Alert Act to “encourage, enhance, and integrate Blue Alert plans throughout the United States,” thus facilitating the dissemination of information in a consistent manner nationwide when a law enforcement officer is seriously injured, killed or missing in the line of duty.¹⁰ The Blue Alert Act directs the Attorney General to establish a national Blue Alert communications network within DOJ to issue Blue Alerts using plans that would be adopted in coordination with “States, units of local government, law enforcement agencies, and other appropriate entities.”¹¹ To ensure effective deployment of the Blue Alert communications network, the Blue Alert Act directs the Attorney General to assign an existing officer of the DOJ to act as the national coordinator of the Blue Alert communications network.¹² The Blue Alert Act directs the Coordinator to establish voluntary guidelines for States and units of local government to develop compatible and integrated Blue Alert plans throughout the United States.¹³ The Blue Alert Act also directs the Coordinator to cooperate with the Department of Homeland Security, the Department of Transportation, the Federal Communications Commission, and other DOJ offices to carry out its duties under the Blue Alert Act.¹⁴ In September 2016, the Attorney General assigned the COPS Office within DOJ to be the National Blue Alert Coordinator.¹⁵

4. As the National Blue Alert Coordinator, the COPS Office filed two reports to Congress to demonstrate how it was implementing the Blue Alert Act’s mandate. In its *2016 Report to Congress*, the COPS Office identified “the need to promote formal communication mechanisms between law enforcement agencies for Blue Alert information, the need for a dedicated Emergency Alert System (EAS) event code, and the need to increase public and law enforcement awareness of the Blue Alert Act.”¹⁶ Subsequently, in its *2017 Report to Congress*, the COPS Office noted that it had commenced

Petition for Immediate Relief, Second Report and Order and Further Notice of Proposed Rulemaking, 22 FCC Rcd 13275, 13280-83, paras. 11-14 (2007) (*Second Report and Order*).

⁷ 47 CFR § 11.1. EAS Participants are required to broadcast Presidential alerts. 47 CFR § 11.55(a). See also *First Report and Order and Further Notice of Proposed Rule Making*, 20 FCC Rcd at 18628, para. 8. They participate in broadcasting state and local EAS alerts on a voluntary basis. 47 CFR § 11.55.

⁸ *Amendment of Part 11 of the Commission’s Rules*, PS Docket No. 15-94, Notice of Proposed Rulemaking, 32 FCC Rcd 5280, 5280, para. 2 (2017) (*Blue Alert NPRM*).

⁹ See 47 CFR §§ 11.51(d), (g)(3), (h)(3), (j)(2) (requiring television broadcast stations, cable systems, and direct broadcast satellite services to transmit a visual message containing the Originator, Event, Location and the valid time period of an EAS message).

¹⁰ Rafael Ramos and Wenjian Liu National Blue Alert Act of 2015, Pub. L. No. 114-12, 129 Stat. 192 (2015).

¹¹ 34 U.S.C. § 50502.

¹² 34 U.S.C. § 50503(a).

¹³ 34 U.S.C. §§ 50503(b)(2) (directing the establishment of guidelines), 50503(b)(2)(D) (providing specific directions for the content of these guidelines).

¹⁴ 34 U.S.C. § 50503(d).

¹⁵ COPS Office Comments at 1.

¹⁶ *2016 Report to Congress* at 6.

outreach efforts with the FCC to pursue a dedicated Blue Alert EAS event code, and stated that the COPS Office had asked that the FCC consider conducting an expedited rulemaking to the extent feasible.¹⁷

5. The COPS Office established voluntary guidelines for the issuance of Blue Alerts based on the criteria contained in the Blue Alert Act (*Blue Alert Guidelines*).¹⁸ The *Blue Alert Guidelines* identify who may request the issuance of a Blue Alert, when a Blue Alert may be issued, and the requisite content thereof. Specifically, a Blue Alert may be issued only when a request is made by a law enforcement agency having primary jurisdiction over the incident, and one of the following three threshold criteria has been met: (1) death or serious injury of a law enforcement officer in the line of duty; (2) threat to cause death or serious injury to a law enforcement officer; or (3) a law enforcement officer is missing in connection with official duties.¹⁹ If a Blue Alert is based upon the first of the criteria, the law enforcement agency must confirm that a law enforcement officer has been killed, seriously injured, or attacked, and there are indications of death or serious injury. If a Blue Alert is based upon the second of the criteria, the law enforcement agency must confirm that the threat is imminent and credible, and at the time of receipt of the threat, any suspect involved is wanted by a law enforcement agency. Finally, if a Blue Alert is based upon the third of the criteria, the agency must have concluded that there is indication of serious injury to, or death of the missing law enforcement officer.²⁰ In all cases, the agency must confirm that any suspect involved has not been apprehended and there is “sufficient descriptive information of the suspect, including any relevant vehicle and license tag information.”²¹ As to content of the messages, the COPS Office also recommends that Blue Alerts should be focused on the geographic areas most likely to facilitate the apprehension of the suspect, and that the message should include the suspect’s last known location, direction of travel, and possible destination.²²

6. On June 22, 2017, the FCC released the *Blue Alert NPRM*, proposing to revise the EAS rules to adopt a new event code (BLU) that would allow the transmission of Blue Alerts to the public over the EAS, satisfying the need articulated by the COPS Office for a dedicated EAS event code to facilitate broader dissemination of information that the COPS Office, law enforcement officials, and alert originators determine that the messages should include. The Commission received 35 comments and 3 reply comments in response to the *Blue Alert NPRM*.²³

¹⁷ U.S. Dep’t of Justice, Office of Community Oriented Policing Services, Rafael Ramos and Wenjian Liu National Blue Alert Act Report to Congress at 8 (2017), https://cops.usdoj.gov/pdf/blue-alert/2017_report.pdf (2017 Report to Congress).

¹⁸ U.S. Dep’t of Justice, Office of Community Oriented Policing Services, *National Blue Alert Network: When to Issue a Blue Alert*, https://cops.usdoj.gov/pdf/blue-alert/blue_alert_guidelines.pdf (last visited Dec. 5, 2017) (*Blue Alert Guidelines*); 34 U.S.C. § 50503(b)(2)(D). These guidelines shall “provide mechanisms that ensure that Blue Alerts comply with all applicable Federal, State, and local privacy laws and regulations” and “include standards that specifically provide for the protection of the civil liberties, including the privacy, of law enforcement officers who are seriously injured or killed in the line of duty,” are “missing in connection with the officer’s official duties, or who are threatened with death or serious injury, and the families of the officers.” See 34 U.S.C. § 50503(c)(3).

¹⁹ *Id.*

²⁰ *Blue Alert Guidelines*; 34 U.S.C. § 50503(b)(2)(E).

²¹ *Blue Alert Guidelines*; 34 U.S.C. § 50503(b)(2)(D).

²² U.S. Dep’t of Justice, Office of Community Oriented Policing Services, *Effective Blue Alert Plans: Guidance and Recommendations* at 12-13 (2017), https://cops.usdoj.gov/pdf/blue-alert/Blue_Alert_Guidance.pdf (last visited Dec. 5, 2017); see also 34 U.S.C. § 50503(b)(2)(F)(ii) (directing the Coordinator to establish guidelines that Blue Alerts “to the maximum extent practicable . . . be limited to the geographic areas most likely to facilitate the apprehension of the suspect involved or which the suspect could reasonably reach, which should not be limited to State lines”).

²³ See *infra* Appendix C (containing a list of commenters to the *Blue Alert NPRM*).

III. DISCUSSION

A. The EAS is an Effective Mechanism to Deliver Blue Alerts

7. We find—as supported by the majority of commenters—that the EAS is an effective mechanism for the delivery of Blue Alerts. The City of New York (NYC) and the National Association of Broadcasters (NAB) observe that issuing a Blue Alert via the EAS will provide the public with the opportunity to protect themselves and their families and to report relevant information to law enforcement, thus facilitating the apprehension of suspects who are alleged to pose an imminent threat to law enforcement officers.²⁴ NCTA – The Internet & Television Association (NCTA) and the American Cable Association (ACA) agree that adding Blue Alerts to EAS will advance the important public policy of protecting our nation’s law enforcement officials,²⁵ as does the National Public Safety Telecommunications Council (NPSTC), which states that both the EAS and WEA should be available tools to help provide Blue Alerts to the public.²⁶

8. We also find that it is technically feasible to send Blue Alerts using the EAS.²⁷ As NYC and broadcaster engineer Sean Donelan (Donelan) observe, the information required by the *Blue Alert Guidelines* can be successfully communicated within the two-minute period to which EAS alerts are limited.²⁸ Similarly, we agree with the Association of Public-Safety Communications Officials-International, Inc. (APCO) and NYC that EAS Blue Alerts should be focused to an appropriately narrow geographic area,²⁹ and find that the transmission of EAS alerts satisfies the requirement that a Blue Alert be “limited to the geographic areas most likely to facilitate the apprehension of the suspect involved or which the suspect could reasonably reach” and “[is] not . . . limited to state lines.”³⁰ We disagree with the assertion of McCarthy Radio Enterprises, Inc. to the contrary.³¹ EAS alerts are issued using county-based Federal Information Processing Standards (FIPS) codes,³² and may be issued to include multiple counties within a state or across state borders, depending on the geographic scope of the emergency prompting the

²⁴ See NYC Comments at 5; NAB Comments at 2.

²⁵ NCTA Comments at 2; ACA Comments at 1.

²⁶ NPSTC Comments at 1.

²⁷ With regard to the comment of ONE Media, LLC, we find that it is unnecessary to delay the adoption of Blue Alerts until they can be deployed fully within ATSC 3.0. See ONE Media Comments at 1. The EAS and WEA are capable of delivering Blue Alerts effectively. We note that we have recently adopted a *Report and Order* requiring television broadcasters using the ATSC 3.0 standard to comply with our EAS broadcast rules. *Authorizing Permissive Use of the “Next Generation” Broadcast Television Standard*, GN Docket No. 16-142, Report and Order and Further Notice of Proposed Rulemaking, FCC 17-158, at 42, para. 80 (Nov. 20, 2017).

²⁸ NYC Comments at 4 (stating that a brief description of the situation, a description of the suspect or suspects, and other identifying information could all be transmitted within a two-minute time frame); Donelan Comments at 3 (stating that two minutes should be more than sufficient for an initial EAS alert message, as long as additional information is distributed by Blue Alert programs through other information channels).

²⁹ See, e.g., APCO Comments at 2 (arguing that effective geo-targeting is important to preserve the public’s trust in emergency alerts); NYC Comments at 4 (supporting limiting the targeted geographic areas of Blue Alerts to the maximum extent practicable due to concerns that regional transmission may cause unnecessary activation of EAS and contribute to warning fatigue).

³⁰ See *Blue Alert NPRM*, 32 FCC Rcd at 5284, para. 10 (citing 42 U.S.C. § 14165b (b)(2)(F)(ii)).

³¹ MRE Comments at 8 (arguing that because alerts can only be sent to entire counties, broadcast EAS is “simply the wrong vehicle for micro-area notification”).

³² See 47 CFR § 11.31(f). FIPS codes represent the counties and other entities treated as equivalent legal and/or statistical subdivisions of the 50 States, the District of Columbia, and the possessions and freely associated areas of the United States. 47 CFR § 10.10(e).

alert.³³ We believe that this level of geographic targeting is consistent with effective delivery of Blue Alerts, given the type of potentially mobile suspect that would be the subject of many Blue Alerts. We agree with Donelan that a suspect's movements in the circumstances that would give rise to a Blue Alert likely would be similar to that of a suspect in AMBER Alert circumstances, where suspects may travel hundreds of miles within a few hours.³⁴

9. We also agree with commenters such as NYC that EAS Blue Alerts sent via the Integrated Public Alert and Warning System (IPAWS) can support transmission of the detailed information required by the *Blue Alert Guidelines*.³⁵ As the Commission acknowledged in the *Blue Alerts NPRM*, EAS alerts delivered over IPAWS use the IP-based Common Alerting Protocol (CAP) to deliver alerts with detailed text files, non-English alerts, or other content-rich data that would not be available to EAS alerts delivered via the broadcast-based daisy chain.³⁶ As NYC and NPSTC note, EAS-based Blue Alerts that provide such detailed information will greatly improve the ability of the public to recognize and avoid an unsafe situation.³⁷ We accordingly urge that alert originators initiate Blue Alerts via IPAWS and recommend that alert originators include detailed information as part of each Blue Alert for which it is available. We note that EAS Participants are required to create video crawls based upon the enhanced text contained within the CAP message.³⁸ We agree with the COPS Office's recommendation that the last known location, direction of travel, and possible destinations of the suspect be included as part of the alert message.³⁹ We believe that these steps, in combination with training, will allow Blue Alert originators to address the concerns raised by the Boulder Regional Emergency Telephone Service Authority (BRETSA) and other commenters that frequent, repeated, misused, or overly long alerts can result in recipients "tuning out" alerts and even disabling alerts on their devices.⁴⁰

³³ See 47 CFR § 11.31(f); see also Monroe Comments at 14.

³⁴ Donelan Comments at 3-4 (citing National Center for Missing & Exploited Children, 2016 AMBER Alert Report at 8 (2017), http://www.missingkids.com/en_US/documents/2016AMBERAlertReport.pdf) (noting also that AMBER Alerts were issued state-wide 72 percent of the time in 2016).

³⁵ See NYC Comments at 4.

³⁶ *Blue Alert NPRM*, 32 FCC Rcd at 5283, para. 9. CAP is a digital format for exchanging emergency alerts that allows a consistent alert message to be disseminated simultaneously over many different communications systems. Federal Emergency Management Agency, CAP Implementation Fact Sheet (Dec. 14, 2015), <https://www.fema.gov/media-library/assets/documents/105521>.

³⁷ NPSTC Comments at 7 (stating that where technically possible, and to be of the greatest value, such alerts should provide law enforcement the option to include an image of a suspect under pursuit, the license plate of a vehicle of interest, or when deemed appropriate, the image of an officer who is in danger); NYC Comments at 4 (stating that it is important that the public be shown a photograph and not just text).

³⁸ See 47 C.F.R. §§ 11.51(d), (g)(3), (h)(3), (j)(2). Alert originators widely use enhanced text and digital audio functionalities. The Commission's rules require EAS Participants require to support these functionalities, if included in the alert message. Although IPAWS has the capability to deliver other enhanced features such as photos, alert originators are still developing their capabilities to deliver these advanced functionalities. See, e.g., Integrated Public Alert Warning Systems (IPAWS) OPEN Developers, <https://www.fema.gov/media-library/assets/documents/25916> (last visited Dec. 5, 2017) (identifying third-party organizations that have executed Memorandums of Agreement with the Federal Emergency Management Agency to gain access to the IPAWS-OPEN Test Environment to support interoperable software development).

³⁹ See U.S. Dep't of Justice, Office of Community Oriented Policing Services, *Effective Blue Alert Plans: Guidance and Recommendations* at 9 (2017), https://cops.usdoj.gov/pdf/blue-alert/Blue_Alert_Guidance.pdf.

⁴⁰ See BRETSA Comments at 2-3; see also May Comments at 1 (expressing concern that Blue Alerts may be easily abused and over-used since they would be triggered by the very community that they affect and could be used maliciously as a tool to gain political advantage or public favor); Cole Comments at 1 (expressing concerns that

10. We believe that Blue Alerts delivered via the broadcast EAS continues to be an effective mechanism for the delivery of Blue Alerts. Concerns about the relative value of IPAWS-based, as opposed to daisy chain-based, EAS alerts are not unique to Blue Alerts. For example, AMBER Alerts are subject to the same technical limitations, potentially providing the public with an alert from the daisy chain that lacks the descriptive information about the victim that an IPAWS-based alert would provide.⁴¹ We agree with commenters that concerns that arise from these technical limitations are mitigated because the public is likely to learn adequate information about an emergency and, as needed, check other media for additional information after receiving an alert.⁴² Further, EAS messages delivered via the broadcast daisy chain can supply life-saving information and may act as a source of redundancy for portions of the EAS that draw on the advanced capability of CAP. Accordingly, we conclude that the mere fact of any discrepancy between the information provided by an IPAWS-based EAS Blue Alert and a broadcast-based EAS Blue Alert is not sufficient reason to deny potentially life-saving information to all members of the public.

11. Nonetheless, we encourage EAS manufacturers and EAS Participants to take technical steps to facilitate the delivery of IPAWS-based EAS Blue Alerts to the public where an alert is first delivered to an EAS Participant via broadcast. We note that Monroe Electronics, Inc. (Monroe) and other commenters propose that the Commission permit “triggered CAP polling,” by which the EAS device would automatically poll IPAWS upon receipt of a broadcast EAS message to verify whether a corresponding CAP message exists, and if it does, use the CAP message instead of the broadcast EAS message.⁴³ The part 11 EAS rules do not bar EAS Participants from triggered CAP polling.⁴⁴ Because triggered CAP polling is estimated to require a “few seconds” to complete,⁴⁵ we find that its use in these instances is consistent with Section 11.51(n) of the EAS rules, which allows EAS Participants to employ a delay of up to 15 minutes before interrupting their programming and retransmitting EAS voluntary event codes.⁴⁶

B. A Dedicated Blue Alert EAS Event Code is in the Public Interest

12. We determine that it would serve the public interest and promote the purpose of the Blue Alert Act to adopt a dedicated EAS event code for Blue Alerts. Accordingly, we amend Section 11.31(e) of the EAS rules to create and add the dedicated BLU event code to the EAS Protocol for Blue Alerts.⁴⁷ We agree with the COPS Office that a dedicated EAS event code would “convey the appropriate sense of urgency” and “galvanize the public awareness necessary to protect law enforcement officers and the

Blue Alerts will be used to serve police and not the interests of the public as a whole); Raymond Comments at 1 (arguing that Blue Alerts will serve as a media platform for law enforcement and cause alarm in the general public).

⁴¹ See 47 CFR §10.400(c).

⁴² See NPSTC Comments at 7 (arguing that a Blue Alert that is delivered with only the most basic information may prompt the public to monitor the media for additional information); Donelan Comments at 2-3 (arguing that if a Blue Alert EAS event code generating a generic message contains no useful information, journalists will still cover Blue Alerts extensively using information from other news sources).

⁴³ See, e.g., Monroe Comments at 4; Donelan Comments at 12.

⁴⁴ We do not address the use of triggered CAP polling for the mandatory nationwide Emergency Action Notification (EAN) and National Periodic Test (NPT) event codes, nor do we address the meaning of “immediately” for alerts that use these codes. See 47 CFR §§ 11.31(e), 11.51(n), 11.54(a).

⁴⁵ Monroe Comments at 5.

⁴⁶ See 47 CFR § 11.51(n).

⁴⁷ 47 CFR § 11.31(e).

public from extremely dangerous offenders.”⁴⁸ We also agree with the COPS Office that no existing EAS event code is adequate or acceptable to accomplish the objectives of the Blue Alert Act.⁴⁹

13. We are supported in our conclusion by the NPSTC and others that agree that a dedicated BLU event code is well suited to serve as the central organizing element for Blue Alert plans nationally.⁵⁰ As APCO notes, a dedicated code would facilitate consistent operations and terminology within the National Blue Alert Network, as called for by the Blue Alert Act.⁵¹ Similarly, NYC and NAB agree that establishing this dedicated EAS event code to deliver Blue Alerts would help facilitate the delivery of Blue Alerts to the public in a uniform and consistent manner.⁵² We also agree with NYC that a dedicated code would lead state and local alert originators to engage relevant stakeholders to operationalize the steps necessary to issue a Blue Alert.⁵³

14. Further, we are persuaded by the COPS Office that an EAS event code solely dedicated to Blue Alerts would “facilitate and streamline the adoption of new Blue Alert plans throughout the nation and would help to integrate existing plans into a coordinated national framework.”⁵⁴ The recommendation by the COPS Office is supported by its extensive outreach to U.S. States and territories.⁵⁵ According to the COPS Office, twenty eight states operate Blue Alert systems, and twenty

⁴⁸ 2017 Report to Congress at 8.

⁴⁹ 2017 Report to Congress at 7-10.

⁵⁰ See, e.g., NPSTC Comments at 5 (The addition of the BLU code for the EAS would help law enforcement in the voluntary issuance of Blue Alerts to the public); ACA Comments at 4-5 (noting that it supports the use of a voluntary EAS code).

⁵¹ See APCO Comments at 2 (stating that it supports the Commission’s proposal to create a dedicated BLU code because it would improve the effectiveness of the National Blue Alert Network and facilitate the integration of Blue Alert plans nationwide). See also Letter from Arizona Department of Public Safety (ADPS) to Marlene H. Dortch, Secretary, FCC, PS Docket No. 15-94 (filed Dec 11, 2017) (ADPS *Ex Parte*) (stating that a dedicated Blue Alert code would streamline plans across the nation and thus assist with cross jurisdictional guidelines); Letter from Jay Moseley to Marlene H. Dortch, Secretary, FCC, PS Docket No. 15-94 (filed Nov. 29, 2017) (Moseley *Ex Parte*) (stating that the absence of a dedicated Blue Alert EAS event code is a key limitation to broader adoption and use of Blue Alert plans); Letter from Jennifer Viets to Marlene H. Dortch, Secretary, FCC, PS Docket No. 15-94 (filed Nov. 20, 2017) (Viets *Ex Parte*) (stating that the absence of a dedicated code hampers the implementation of Blue Alerts in Montana); Letter from Vernon Keenan to Marlene H. Dortch, Secretary, FCC, PS Docket No. 15-94 (filed Nov. 20, 2017) (Keenan *Ex Parte*) (stating that a dedicated EAS code would serve as the central and organizing element of Blue Alert plans coast-to-coast).

⁵² NYC Comments at 5; NAB Comments at 2 (stating that “[l]ike the AMBER program, a uniform approach to Blue Alerts will facilitate nationwide implementation, uniform message formulation and the consistent dissemination of Blue Alerts by EAS Participants”).

⁵³ NYC Comments at 5.

⁵⁴ U.S. Dep’t of Justice, Office of Community Oriented Policing Services, National Blue Alert Network Rollout: Frequently Asked Questions (*Blue Alert FAQ*) https://cops.usdoj.gov/pdf/blue-alert/Blue_Alert_Frequently_Asked_Questions.pdf (last visited Nov. 1, 2017).

⁵⁵ 2017 Report to Congress at 10 (stating that the COPS Office made direct outreach calls to each of the fifty six states and territories; verified which states have Blue Alert plans and the extent to which the plans comply with the *Blue Alert Guidelines*; secured copies of Blue Alert plans and related materials such as program overviews, activation plans, legislation, and brochures from states that currently have Blue Alert plans; and compiled a legislation compendium containing the specific public laws, statutes, or executive orders that authorized and created Blue Alert systems).

eight states and territories do not.⁵⁶ In its *2017 Report to Congress*, the COPS Office noted the inconsistency of plans from state to state and the negative consequences that have arisen as a result.⁵⁷ Specifically, according to the *2017 Report to Congress*, “the lack of such a resource [i.e., a dedicated EAS event code] affected jurisdictions’ ability to communicate within states and across the country. Even in states with established Blue Alert plans, it was often difficult to identify important points of contact necessary for alert activation or interstate coordination.”⁵⁸ We thus agree with the COPS Office that implementation of a dedicated Blue Alert EAS code could ease the burden of designing a consistent model for Blue Alert plans, and thus encourage states that do not have Blue Alert plans to establish one.⁵⁹

15. We also conclude that the three-character BLU EAS event code, rather than a currently existing EAS code, would help ensure that both Blue Alerts and related outreach and training are undertaken in a consistent manner nationally. We agree with NYC that using the BLU code would allow for pre-scripted, standardized on-screen text that is more descriptive than the existing categories, and would serve to socialize the Blue Alert concept with the public, much like the AMBER Alerts have done for years.⁶⁰ We are also persuaded that a dedicated event code with consistent national standards would allow Federal, state, and local authorities to create consistent training programs for alert originators, as well as public service announcements, ad campaigns, and informational material that would serve to educate the public ahead of time.⁶¹

16. We disagree with commenters that Blue Alerts should extend beyond law enforcement officers to include all uniformed first responders, including firefighters and paramedics.⁶² The stated purpose of the Blue Alert Act is to “encourage, enhance, and integrate Blue Alert plans throughout the United States in order to disseminate information when a law enforcement officer is seriously injured or killed in the line of duty, is missing in connection with the officer’s official duties, or an imminent and credible threat that an individual intends to cause the serious injury or death of a law enforcement officer is received.”⁶³ We agree with the COPS Office that Commission action should not extend beyond the Congressional mandate by including parties other than law enforcement officers.⁶⁴ Such action would fall outside the scope of the Blue Alert Act, which limits Blue Alerts to a “law enforcement officer.”⁶⁵

17. Similarly, we find that existing EAS codes LEW (Law Enforcement Warning), LAE (Local Area Emergency), and CEM (Civil Emergency Message)⁶⁶ would not be as effective as a BLU

⁵⁶*Id.*; U.S. Dep’t of Justice, Office of Community Oriented Policing Services, Blue Alert State Plans, <https://cops.usdoj.gov/bluealert> (last visited Oct. 4, 2017). See also Blue Alert Foundation, National Blue Alert System: About Us, http://www.bluealert.us/about_us (last visited Oct. 4, 2017); BRETSA Comments at 2.

⁵⁷ *2017 Report to Congress* at 10.

⁵⁸ *Id.*

⁵⁹ *Id.*

⁶⁰ NYC Comments at 4.

⁶¹ See *id.*

⁶² BRETSA Comments at 4.

⁶³ Rafael Ramos and Wenjian Liu National Blue Alert Act of 2015, Pub. L. No. 114-12, 129 Stat. 192 (2015).

⁶⁴ Letter from Russell Washington, Acting Director, U.S. Dep’t of Justice, Office of Community Oriented Policing Services, to Ajit Pai, Chairman, Federal Communications Commission at 1 (Nov. 16, 2017) (COPS Office Nov. 16 *Ex Parte* Letter).

⁶⁵ 34 U.S.C. § 50501(4) (*referencing* 34 U.S.C. § 10284(6)) (defining “law enforcement officer” as “individual[s] involved in crime and juvenile delinquency control or reduction, or enforcement of the criminal laws (including juvenile delinquency), including, but not limited to, police, corrections, probation, parole, and judicial officers”).

⁶⁶ LEW, LAE and CEM are among the EAS event codes contained in section 11.31(e) of the Commission’s EAS rules. 47 CFR § 11.31(e).

event code.⁶⁷ We agree with the COPS Office that the absence of a dedicated BLU event code requires states and local law enforcement agencies to use one of the existing generic event codes in an ad hoc manner and that existing event codes such as LEW are inadequate.⁶⁸ NAB also notes that there is confusion about the true nature or severity of an emergency when LEW is used.⁶⁹ The record supports the conclusion by the COPS Office that there is a lack of urgency associated with the existing LEW, LAE and CEM event codes because they are sometimes used for matters that do not suggest the need for immediate action.⁷⁰ For example, the COPS Office observes that LEW alerts address a broad array of matters including police activity, weather-related incidents, road hazards, missing persons, and other miscellaneous alerts.⁷¹ Similarly, LAE and CEM alerts are more varied than LEW, as they additionally include alerts addressing utility issues and fire hazards.⁷² We do not address the efficacy of such multiple uses for LEW, LAE, and CEM, but do agree with the COPS Office that the broad use of these event codes make them inappropriate for use as the Blue Alert event code. We agree with the COPS Office that using LEW, LAE, or CEM for Blue Alerts would create confusion, as instructions for different situations can be contradictory and the public would not know what kind of action to take based on the event code alone. As we found in the *NWS Report and Order* proceeding, the public interest is not served by relying on inadequate warnings that might provide incorrect or even opposite remedial advice to the public.⁷³ We find that Blue Alerts have a purpose that is sufficiently unique and well defined (as compared to the

⁶⁷ See, e.g., Abbott Comments at 1 (stating that law enforcement officials already can use EAS to issue warnings about suspects who pose an imminent and credible threat to law enforcement officers and the public -- these warnings can be issued using the LEW); ACA Comments at 1 (stating that the FCC should consider Monroe Electronics' proposal to use an existing event code, such as the LEW code, rather than creating and implementing a new code); Appelbaum Comments at 1 (stating that LEW and LAE could serve the purpose of implementing Blue Alert Plans); MRE Comments at 5 (stating that, "[u]nlike the Child Abduction (CAE) Event Code which didn't have any suitable preexisting event codes on which to base such messages, the Blue Alert mission is already served by one, if not several existing Event Codes created and contemplated for such use"); Monroe Comments at 6 (stating that a new dedicated blue alert event code would not provide any significant advantages over the existing LEW event code; and in fact would cause additional complications, costs and delays in implementation); Washington SECC Comments at 2 (stating that the existing LEW Alert Code is well-suited for the proposed purpose and signals high urgency).

⁶⁸ See *2017 Report to Congress* at 7-8 and 10-12.

⁶⁹ NAB Comments at 3. See also State of Montana, *2016 Emergency Alert System (EAS) Plan* at 27 (Mar. 16, 2016), https://www.readygallatin.com/download/website/plans/ST_Plans/MT-EAS-Plan-Mar-16-2016.pdf; IPAWS Non-Weather, Alert: EAS Law Enforcement Warning (Jan. 9, 2017), <http://ipawsnonweather.alertblogger.com/?p=13270>; State of Washington, U.S. House Committee on Public Safety and Emergency Preparedness, *House Bill Report HB 1820: An Act Relating to the Blue Alert System* (2011), <http://lawfilesexternal.wa.gov/biennium/2011-12/Pdf/Bill%20Reports/House/1820%20HBR%20PSEP%2011.pdf>; *2017 Report to Congress* at 7; *Blue Alert FAQ*; Adrienne Abbott Comments at 1; American Cable Association Comments at 1; Jonathan Appelbaum Comments at 1; Washington State Emergency Communications Committee Comments at 2; McCarthy Radio Enterprise, Inc. Comments at 5.

⁷⁰ *2017 Report to Congress* at 7-8. See also NYC Comments at 5 (stating that, to the extent that jurisdictions are routinely using the LEW EAS event code for road closures and hazardous driving conditions, the highly specific nature of a dedicated Blue Alert code would be even more necessary to indicate to broadcasters that a public safety official is in danger); COPS Office Nov. 16 *Ex Parte* Letter at 1-2.

⁷¹ See Letter from Russell Washington, Acting Director, U.S. Dep't of Justice, Office of Community Oriented Policing Services, to Ajit Pai, Chairman, Federal Communications Commission at 1 (August 28, 2017) (stating that review of actual LEW alerts issued during the past three years show alerts traffic disruptions, missing persons, reported police activity, and wanted fugitives); COPS Office Nov. 16 *Ex Parte* Letter at 2.

⁷² COPS Office Nov. 16 *Ex Parte* Letter at 2.

⁷³ *Amendment of Part 11 of the Commission's Rules Regarding the Emergency Alert System*, PSHSB Docket No. 15-94, Report and Order, 31 FCC Rcd 7915, 7921, para. 12 (2016) (*NWS Report and Order*).

circumstances that have prompted the use of other codes) to warrant a unique dedicated BLU event code, which could serve as a vital tool” for “protect[ing] law enforcement officers and the communities they serve.”⁷⁴

C. WEA Delivery of Blue Alerts

18. Although the COPS Office limited its request to an EAS event code for Blue Alerts,⁷⁵ Blue Alerts are also capable of delivery over WEA as that system is currently configured.⁷⁶ Moreover, incidents that qualify for the initiation of a Blue Alert under the *Blue Alert Guidelines* would also satisfy the minimum requirements for initiation of an “Imminent Threat” Alert via WEA.⁷⁷ Accordingly, we permit Blue Alerts to be deployed via WEA using existing alerting methodologies and consistent with our WEA rules.

19. NYC suggests that Blue Alerts use the Imminent Threat Alert classification only as a temporary measure until such time that a dedicated WEA message classification for Blue Alerts can be developed and deployed.⁷⁸ NYC is concerned that the existing pre-scripted text for Imminent Threat Alert is “overly vague,” lacks capabilities for “alert originators entering free form text” or “Blue Alert-specific pre-scripted text,” and “can lead to public confusion and/or panic.”⁷⁹ Although NYC’s concerns are somewhat mitigated by the evidence in the record that alert originators can use message “templates” that could be used for different Blue Alert scenarios,⁸⁰ we believe the issue merits further study. We sought comment in the *Blue Alert NPRM* on the extent to which additional guidance or direction would be helpful regarding how Blue Alerts should be classified for purposes of WEA.⁸¹ Although we decline to adopt a separate classification for WEA Blue Alerts at this time, we will leave this aspect of the issue teed up in the *Blue Alert NPRM* pending, and keep the above-captioned docket open, to help gather additional information on this issue beyond what the record currently contains, including further comment from those interested on potential implementation steps, time frame, and costs, until sixty days after the date of publication of this *Order* in the Federal Register. In the meantime, we find that issuance of Blue Alerts using WEA’s existing standards and structures at least as a temporary measure will be effective, will reduce the necessary time for Blue Alerts to become available on WEA, and will reduce the costs to WEA stakeholders.

⁷⁴ Letter from Russell Washington, Acting Director, U.S. Dep’t of Justice, Office of Community Oriented Policing Services, to Ajit Pai, Chairman, Federal Communications Commission at 1 (Aug. 28, 2017).

⁷⁵ See *2017 Report to Congress* at 8.

⁷⁶ CTIA Reply Comments at 4 (stating that Blue Alerts could be sent using the existing Imminent Threat Alert class, and that “integration as an Imminent Threat alert would allow a seamless delivery of Blue Alerts to all WEA-capable mobile devices, including legacy devices”). WEA allows Participating Commercial Mobile Service Providers to alert subscribers of imminent threats to safety in their area by sending geographically-targeted, text-like messages to enabled mobile devices. See FCC, Wireless Emergency Alerts (WEA) (Sep. 8, 2017), <https://www.fcc.gov/consumers/guides/wireless-emergency-alerts-wea>.

⁷⁷ 47 CFR § 10.400(b). The part 10 WEA rules provide that an Imminent Threat Alert is an alert that, at minimum, involves (1) a level of urgency that is either Immediate (*i.e.*, responsive action should be taken immediately) or Expected (*i.e.*, responsive action should be taken soon, within the next hour); (2) a level of severity that is either Extreme (*i.e.*, an extraordinary threat to life or property) or Severe (*i.e.*, a significant threat to life or property); and (3) a level of certainty that is either Observed (*i.e.*, determined to have occurred or to be ongoing) or Likely (*i.e.*, has a probability of greater than 50 percent).

⁷⁸ See NYC Comments at 6.

⁷⁹ *Id.* (internal quotations omitted).

⁸⁰ Monroe Comments at 12.

⁸¹ *Blue Alert NPRM*, 32 FCC Rcd at 5288, para. 20.

D. Implementation Schedule

20. In the *Blue Alert NPRM*, the Commission sought comment on the proposal that EAS equipment manufacturers should integrate the Blue Alert event code into equipment yet to be manufactured or sold, and make necessary software upgrades available to EAS Participants, no later than six months from the effective date of the rules.⁸² This proposal was based on the Commission's experience with the *NWS Report and Order* proceeding, in which the Commission required a similar schedule for implementation of severe weather-related EAS event codes.⁸³ In the *Blue Alert NPRM*, the Commission likewise noted that adding a BLU EAS event code would trigger technical and public safety requirements regarding equipment readiness that were similar to those discussed in the *NWS Report and Order* proceeding.⁸⁴

21. We encourage stakeholders to work together voluntarily to implement Blue Alerts as swiftly as possible in light of the important public safety objectives involved. We recognize, however, the record reflects that some time is necessary for equipment manufacturers and Participating Commercial Mobile Service (CMS) Providers to prepare their equipment and networks to be able to process any Blue Alerts that are sent over EAS and WEA,⁸⁵ as well as for alert originators, EAS Participants, and other stakeholders to have the necessary training and resources to deliver Blue Alerts to the public if they choose to do so. Accordingly, we allow a period of 12 months from the effective date of the rules to enable the delivery of Blue Alerts over EAS, and a period of 18 months from the effective date of the rules to enable the delivery of Blue Alerts over WEA. This implementation schedule will ensure all stakeholders have sufficient time to address any technical, resource, and training needs they may require to ensure the successful delivery of Blue Alerts.⁸⁶

22. Although NYC states that six months is sufficient time for EAS equipment manufacturers to release the necessary software upgrades for a dedicated Blue Alert event code,⁸⁷ other commenters suggest more time is warranted for implementation of Blue Alerts for both EAS and WEA. NCTA states that we should work with EAS manufacturers to determine the adequacy of the time allocated for software upgrades to equipment.⁸⁸ EAS equipment manufacturers Monroe and Sage Alerting Systems (Sage) state that 12 months is sufficient to allow for the new event code to be deployed within a scheduled in-version equipment software update, resulting in no incremental cost to EAS Participants, rather than as a scheduled major version upgrade that would have to be separately purchased.⁸⁹

⁸² *Blue Alert NPRM*, 32 FCC Rcd at 5287, para. 17.

⁸³ *Amendment of Part 11 of the Commission's Rules Regarding the Emergency Alert System*, PSHSB Docket No. 15-94, Report and Order, 31 FCC Rcd 7915, 7926, para. 27 (2016) (*NWS Report and Order*).

⁸⁴ *Blue Alert NPRM*, 32 FCC Rcd at 5287, para. 17.

⁸⁵ Participating CMS Providers are Commercial Mobile Service Providers that have voluntarily elected to transmit Alert Messages under subpart B of the part 10 WEA rules. 47 CFR § 10.10(f).

⁸⁶ See Letter from Jamie M. (Mike) Tam, Director, Federal Regulatory, AT&T Services, Inc. to Marlene H. Dortch, Secretary, FCC, PS Docket No. 15-94, at 1 (Nov. 16, 2017) (stating belief that the industry could deliver Blue Alerts over WEA by May 2019) (AT&T Nov. 16 *Ex Parte* Letter); Letter from Steve Sharkey, Vice President, Technology and Engineering Policy, T-Mobile USA, Inc., to Marlene H. Dortch, Secretary, FCC, PS Docket No. 15-94, at 1 (Nov. 17, 2017) (anticipating that changes necessary to support delivery of Blue Alerts using the event code "BLU" can be implemented in approximately 18 months) (T-Mobile Nov. 17 *Ex Parte* Letter).

⁸⁷ NYC Comments at 5.

⁸⁸ NCTA Comments at 2-3.

⁸⁹ Monroe Comments at 12 (recommending an implementation period of 12 to 18 months); Letter from Harold Price, President, Sage Alerting Systems, Inc., to Marlene H. Dortch, Secretary, FCC, PS Docket No. 15-94, at 1 (filed Nov. 13, 2017) (stating that 12 months is a sufficient amount of time to make necessary software upgrades

Broadcaster Adrienne Abbott (Abbott) states that EAS stakeholders have additional needs that must be met to ensure the successful delivery of Blue Alerts (e.g., the updating of EAS Plans to accommodate the use of the new code, time for Councils of Governments (COGs) to add the Blue Alert Event Code to their list of approved codes, and public awareness campaigns to be conducted to raise awareness and understanding of Blue Alerts).⁹⁰ The record, however, does not support Abbott's contention that this entire process will require two years to complete.⁹¹ For the reasons described in this *Order* and the earlier *NWS Report and Order*, the Commission's experience tells us that this process can occur in parallel with the development and deployment of EAS equipment software updates and can be accommodated within a 12-month period. Participating CMS Providers have requested 18 months to complete the incorporation of pending standards into their networks and devices that will enable the delivery of Blue Alerts as Imminent Threats over WEA, such as modification of the "C-interface," the secure interface that exists between IPAWS and commercial mobile service provider gateways.⁹² In connection, NYC acknowledges that "a longer implementation timeframe is likely necessary for the wireless industry."⁹³ Based on the record, we believe that a 12-month implementation period for EAS and an 18-month implementation period for WEA will provide all stakeholders adequate time to ensure that the necessary equipment upgrades, software updates, development, and testing are completed to enable the delivery of Blue Alerts over EAS and WEA as contemplated by this *Order*.

23. The *Blue Alert NPRM* proposed to allow EAS Participants to upgrade their equipment to add a designated Blue Alert event code on a voluntary basis until their equipment is replaced, which is the same approach the Commission has taken when it has adopted other new EAS event codes in the past.⁹⁴ We adopt a modified version of this proposal and permit EAS Participants to update their software to add the BLU event code on a voluntary basis. All EAS Participants should be able to add the BLU event code using a software upgrade because, as of July 30, 2016, all EAS Participants should have equipment in place that is capable, at the minimum, of being upgraded by software to accommodate EAS modifications, and thus, the need to upgrade existing equipment no longer appears to be necessary.⁹⁵ We also agree with NCTA that permitting software upgrades on a voluntary basis is a "sensible and effective" approach to adopting a new event code,⁹⁶ and with ACA, which notes that this approach "appropriately balances the public's interest in the safety and well-being of law enforcement officials against the costs of implementing new EAS codes."⁹⁷ We disagree with the NYC argument that allowing EAS Participants to upgrade their software on a voluntary basis undermines the creation of a cohesive national Blue Alert

available to its users to support the BLU code and to integrate the event code into equipment not yet sold or manufactured).

⁹⁰ Abbott Comments at 2.

⁹¹ *Id.*

⁹² See AT&T Nov. 16 *Ex Parte* Letter at 1; T-Mobile Nov. 17 *Ex Parte* Letter at 1.

⁹³ NYC Comments at 5.

⁹⁴ *Blue Alert NPRM*, 32 FCC Rcd at 5287, para. 18 (citing *NWS Report and Order*, 31 FCC Rcd at 7926, para. 27).

⁹⁵ *Blue Alert NPRM*, 32 FCC Rcd at 5290, para. 26 (citing *NWS Report and Order*, 31 FCC Rcd at 7924, para. 22 n.77).

⁹⁶ NCTA Comments at 3 (stating that making upgrades on a voluntary basis until equipment is replaced is "a sensible and effective approach for adopting a new code by EAS Participants based on past experience with other new EAS codes").

⁹⁷ ACA Comments at 3 (noting that the Commission has previously found that "it would be contrary to the voluntary nature of state and local EAS to mandate upgrades to existing EAS equipment to incorporate new optional event codes," and "imposing additional costs and burdens on broadcast stations and cable systems . . . may have the undesired effect of reducing voluntary participation in state and local EAS activities").

system.⁹⁸ As the Commission observed in the *NWS Report and Order*, the use by EAS Participants of these codes is and has always been voluntary, and “it would be contrary to the voluntary nature of state and local EAS to mandate upgrades to existing EAS equipment to incorporate new optional event codes.”⁹⁹ As we discuss below, we also find that this approach will significantly reduce the costs to EAS Participants.

E. Cost Benefit Analysis

24. We conclude that the benefits of implementing BLU outweigh its cost. We acknowledge as we did in the *Blue Alert NPRM*, the COPS Office’s guidance and expertise regarding the potential benefits of Blue Alerts. We also draw on the Commission’s experience with the implementation of new EAS codes.¹⁰⁰ We find that most of the potential costs of implementation arise from software updates made outside of the normal course of planned upgrades. We allow sufficient time and flexibility to allow manufacturers and EAS Participants make upgrades and to conduct associated testing in tandem with general software upgrades installed during the regular course of business, thus minimizing costs. The rule we adopt today presents many potential benefits by keeping the public informed, out of harm’s way, and by enlisting their aid to more quickly apprehend dangerous suspects as well as cost reductions for 911 call centers and emergency responders.¹⁰¹

25. *Costs.* We find, as suggested in the *Blue Alert NPRM*, that the main cost to EAS Participants that elect to install BLU will be the cost involved in downloading the software updates into their devices and conducting associated testing.¹⁰² The *Blue Alert NPRM* found that adopting a Blue Alert EAS event code presents similar technical issues to those raised in the *NWS Report and Order*, and, accordingly, tentatively concluded that the costs for adding a dedicated Blue Alert EAS event code would not exceed a one-time \$3.5 million implementation ceiling. In the *NWS Report and Order* proceeding, Monroe Electronics indicated that the new event codes could be implemented through a software update downloaded from its website, while Sage Alerting Systems indicated that end users could implement event codes in 10 minutes or less, at no cost other than labor.¹⁰³ 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.¹⁰⁴ 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. We note that EAS Participants can avoid most incremental implementation costs by downloading the new Blue Alert code in conjunction with a scheduled software update. Although we recognize that EAS equipment manufacturers will incur some costs in making the new event code available to all EAS Participants,¹⁰⁵ we

⁹⁸ NYC Comments at 5-6.

⁹⁹ *NWS Report and Order*, 31 FCC Rcd at 7927, para. 28 (quoting *Amendment of Part 11 of the Commission’s Rules Regarding the Emergency Alert System*, Report and Order, 17 FCC Rcd 4055, 4062, para. 14 (2002)).

¹⁰⁰ *Blue Alert NPRM*, 32 FCC Rcd at 5289, para. 27.

¹⁰¹ See *Wireless Emergency Alerts, Amendments to Part 11 of the Commission’s Rules Regarding the Emergency Alert System*, PS Docket No. 15-91, Report and Order and Further Notice of Proposed Rulemaking, 31 FCC Rcd 11112, 11168-11174, paras. 89-95 (2016) (*WEA Report and Order and FNPRM*) (discussing how WEA saves lives).

¹⁰² See *Blue Alert NPRM*, 32 FCC Rcd at 5288, para. 25.

¹⁰³ *Blue Alert NPRM*, 32 FCC Rcd at 5288, para. 26.

¹⁰⁴ See *NWS Report and Order*, 31 FCC Rcd at 7924, para. 23.

¹⁰⁵ See e.g. Monroe Comments at 9 (explaining that the cost of a new event code could go up or down based upon the timing, and noting that, “[f]or the severe weather codes, EAS Participants benefitted by a coincidence of timing which allowed the functionality to be included in an imminent in-version (or minor) scheduled software update”); Washington State ECC Comments at 1 (noting that, although a new EAS Alert Code would pose minimal expense, software changes require broadcasters to update their EAS equipment and verify that it continues to operate

believe that 12 months will provide sufficient time to dovetail the BLU upgrade with other scheduled upgrades, posing minimal expense to equipment manufacturers. We believe that the costs for implementation of WEA will be similarly low, because Blue Alerts will be delivered over the existing Imminent Threat WEA classification, using WEA in its current configuration.¹⁰⁶ As such, we believe there will be no incremental costs associated with the delivery of Blue Alerts over WEA, and that the 18 months that we grant to Participating CMS Providers is sufficient to allow providers to minimize the costs of deployment.¹⁰⁷

26. *Benefits.* We anticipate that establishing the BLU event code will improve emergency alerting during events described in the *Blue Alert Guidelines*, thereby helping to keep people safe from harm. We agree with the COPS Office that existing codes, such as LEW, cannot effectively identify Blue Alerts to the public.¹⁰⁸ While precise numerical estimation is not possible, we expect that the BLU event code will improve public safety by saving lives and preventing injuries. One way of measuring the value of lives saved is the value of a statistical life (VSL), currently estimated at \$9.6 million.¹⁰⁹ Accordingly, if the BLU code is expected to save at least one life, its value would be at least \$9.6 million, which far exceeds the one-time \$3.5 million implementation cost ceiling. This expected benefit is consistent with statistics from the Federal Bureau of Investigation's Uniform Crime Reporting Program, which state that 66 officers were killed in the line of duty in 2016.¹¹⁰ We believe that at least some portion of these crimes would have qualified for a Blue Alert and could have led to lives saved quicker apprehension of the suspect, or both.¹¹¹ We note the success of AMBER Alerts, where 43 out of the 179 abducted children reported in 2017 were saved as a direct result of AMBER Alerts.¹¹² We believe that it is reasonable to expect that the life of at least one police officer or other member of the public will be saved due to the

properly, and this process poses a burden on already-struggling broadcasters); ACA Comments at 1 (reminding the Commission to consider the cumulative effects of our requirements, and noting that many of its members recently spent substantial resources to purchase or upgrade EAS equipment to participate in 2016 EAS Nationwide test; NCTA Comments at 4 (stating that, "[t]his process is measured in weeks, or potentially longer in the event of unforeseen testing issues, not an hour as the Notice suggests.... [f]ull implementation of Blue Alerts will require operators to not only download and install software in each of their EAS encoder/decoders but they must also test the new software on a variety of downstream devices, operating systems, and signaling formats and protocols in their video distribution systems end-to-end").

¹⁰⁶ CTIA Reply Comments at 4.

¹⁰⁷ AT&T Nov. 16 *Ex Parte* Letter at 1 (stating that industry implementation of WEA Blue Alerts, using the Imminent Threat classification, by May 2019 would coincide with modifications to the WEA program being made through the existing standards process).

¹⁰⁸ See *2017 Report to Congress* at 7-8 and 10-12.

¹⁰⁹ U.S. Department of Transportation, Office of the Secretary of Transportation, Memorandum to Secretarial Officers Modal Administrators (August 8, 2016), <https://www.transportation.gov/sites/dot.gov/files/docs/2016%20Revised%20Value%20of%20a%20Statistical%20Life%20Guidance.pdf> (last visited Oct. 30, 2017).

¹¹⁰ Federal Bureau of Investigation, Law Enforcement Officers Killed and Assaulted 2016, Table 1 (2016), <https://ucr.fbi.gov/leoka/2016/officers-feloniously-killed/tables/table-1.xls> (last visited Nov. 16, 2017) (presenting statistics for felonious, as opposed to accidental or naturally caused, deaths).

¹¹¹ Cf. COPS Office Nov. 16 *Ex Parte* Letter at 2 (describing ways in which Blue Alerts could save lives of law enforcement or the public by reducing the amount of time offenders are at large).

¹¹² National Center for Missing & Exploited Children, 2016 AMBER Alert Report at 8 (2016), http://www.missingkids.com/content/dam/ncmec/en_us/documents/2016amberalertreport.pdf.

issuance of an EAS Blue Alert that uses the BLU event code.¹¹³ Injury prevention is another benefit of the BLU event code. The value of injury prevention provides an independent, quantitative metric to express the minimum benefit our rules could produce.¹¹⁴ Like fatalities, it is difficult to predict the specific number of injuries that the BLU event code will prevent. However, according to the Department of Transportation, nonfatal injuries are far more common than fatalities, and vary widely in severity, as well as probability.¹¹⁵ Accordingly, we reason that the public benefit of the rule we adopt today is heightened by its role in preventing injuries.¹¹⁶

27. The establishment of a dedicated Blue Alert code will also provide the benefit of generating assistance from the public and cost savings for emergency responders. According to NYC, threats and/or violent crimes, including those covered by Blue Alerts, have an economic impact on jurisdictions that should be counted among the benefits of Blue Alerts.¹¹⁷ Blue Alerts can provide an immediate warning to the public in an area where an extremely dangerous suspect is thought to be.¹¹⁸ As the Commission noted in the *WEA Report and Order and FNPRM*, when people can avert situations where they need emergency assistance and therefore do not need to call 911, Public Safety Answering Points are able to avert the cost of resource deployment.¹¹⁹ NYC also argues that Blue Alerts will help major visitor destinations like NYC provide information to and elicit support from non-residents.¹²⁰ We agree with the COPS Office, that the public has repeatedly played a critical role in assisting law enforcement in maintaining safety; but to assist and avoid danger, the public must be informed.¹²¹ According to the COPS Office, there are clear and significant differences between states' handling of Blue Alerts, which could limit or complicate coordination efforts when a suspect flees, or is thought to have fled, to another jurisdiction.¹²² We agree with the COPS Office that widespread, uniform adoption of the BLU event code, would arm law enforcement officers with the information necessary to rapidly apprehend those who remain a threat to law enforcement and our communities. We conclude that the minor burdens associated with adopting the BLU code will be more than offset by its benefits.

¹¹³ See e.g. NYC Comments at 7 (Blue Alerts will save lives of both public safety officials and members of the public); PERF Comments at 1 (stating that Blue Alerts can help save lives by alerting the public when officers are attacked); Coady Comments at 1 (stating that a Blue Alert event code could help save lives).

¹¹⁴ U.S. Department of Transportation, Office of the Secretary of Transportation, Memorandum to Secretarial Officers Modal Administrators at 10 (stating that, pursuant to this approach, each type of injury is rated on a scale of quality-adjusted life years (QALYs) in comparison with the alternative of perfect health); see also Department of Transportation, TIGER Benefit-Cost Analysis (BCA) Resource Guide (2014) (expressing a conversion table for the KABCO scale, a method of measuring injury prevention normally used by law enforcement, to the AIS scale).

¹¹⁵ U.S. Department of Transportation, Office of the Secretary of Transportation, Memorandum to Secretarial Officers Modal Administrators at 11.

¹¹⁶ See *WEA Report and Order and FNPRM*, 31 FCC Rcd at 11172, para. 93 (explaining that WEA would likely prevent 15 injuries of various severities, producing a minimum public value of \$437,320, and a maximum public value of \$84.5 million, depending on the severity of injuries).

¹¹⁷ NYC Comments at 7.

¹¹⁸ COPS Office Reply Comments at 1.

¹¹⁹ *WEA Report and Order and FNPRM*, 31 FCC Rcd at 11172, para. 94 (discussing how WEA creates opportunities for emergency management agencies to avoid response costs).

¹²⁰ NYC Comment at 7.

¹²¹ COPS Office Comments at 2.

¹²² *2017 Report to Congress* at 10.

IV. 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 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, see 5 U.S.C. § 603, the Commission has prepared a Final Regulatory Flexibility Analysis (FRFA) of the possible significant economic impact on small entities of the policies and rules addressed in this document. The FRFA is set forth in Appendix B.

C. Paperwork Reduction Analysis

30. This document does not contain proposed information collection(s) subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13. 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, Public Law 107-198, see 44 U.S.C. 3506(c)(4).

D. Congressional Review Act

31. The Commission will send a copy of this Order to Congress and the Government Accountability Office pursuant to the Congressional Review Act (CRA).¹²³

V. ORDERING CLAUSES

32. Accordingly, IT IS ORDERED that pursuant to Sections 1, 4(i), 4(o), 303(r), 624(g), and 706 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i), 154(o), 303(r), 544(g), 606, as well as by sections 602(a),(b),(c), (f), 603, 604 and 606 of the Warning, Alert and Response Network Act, 47 U.S.C. §§ 1202(a),(b),(c), (f), 1203, 1204 and 1206, that this *Order* IS ADOPTED.

33. IT IS FURTHER ORDERED that the Commission's rules ARE HEREBY AMENDED as set forth in Appendix A.

34. IT IS FURTHER ORDERED that the rules and requirements adopted herein, including at Appendix A, to enable the delivery of Blue Alerts over EAS WILL BECOME EFFECTIVE 12 months from the date of publication in the Federal Register.

35. IT IS FURTHER ORDERED that the rules and requirements adopted herein, including at Appendix A, to enable the delivery of Blue Alerts over WEA WILL BECOME EFFECTIVE 18 months from the date of publication in the Federal Register.

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

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

¹²³ See 5 U.S.C. § 801(a)(1)(A).

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) and 606.

2. Amend § 11.31 by revising paragraphs (e) to read as follows:

§ 11.31 EAS protocol.

* * * * *

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

Nature of activation	Event codes
National Codes (Required):	
Emergency Action Notification (National only)	EAN.
National Information Center	NIC
National Periodic Test	NPT.
Required Monthly Test	RMT.
Required Weekly Test	RWT.
State and Local Codes (Optional):	
Administrative Message	ADR.
Avalanche Warning	AVW.
Avalanche Watch	AVA.
Blizzard Warning	BZW.

Blue Alert	BLU.
Child Abduction Emergency	CAE.
Civil Danger Warning	CDW.
Civil Emergency Message	CEM.
Coastal Flood Warning	CFW.
Coastal Flood Watch	CFA.
Dust Storm Warning	DSW.
Earthquake Warning	EQW.
Evacuation Immediate	EVI.
Extreme Wind Warning	EWW.
Fire Warning	FRW.
Flash Flood Warning	FFW.
Flash Flood Watch	FFA.
Flash Flood Statement	FFS.
Flood Warning	FLW.
Flood Watch	FLA.
Flood Statement	FLS.
Hazardous Materials Warning	HMW.
High Wind Warning	HWW.
High Wind Watch	HWA.

Hurricane Warning	HUW.
Hurricane Watch	HUA.
Hurricane Statement	HLS.
Law Enforcement Warning	LEW.
Local Area Emergency	LAE.
Network Message Notification	NMN.
911 Telephone Outage Emergency	TOE.
Nuclear Power Plant Warning	NUW.
Practice/Demo Warning	DMO.
Radiological Hazard Warning	RHW.
Severe Thunderstorm Warning	SVR.
Severe Thunderstorm Watch	SVA.
Severe Weather Statement	SVS.
Shelter in Place Warning	SPW.
Special Marine Warning	SMW.
Special Weather Statement	SPS.
Storm Surge Watch	SSA.
Storm Surge Warning	SSW.
Tornado Warning	TOR.
Tornado Watch	TOA.

Tropical Storm Warning	TRW.
Tropical Storm Watch	TRA.
Tsunami Warning	TSW.
Tsunami Watch	TSA.
Volcano Warning	VOW.
Winter Storm Warning	WSW.
Winter Storm Watch	WSA.

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 included in the *Notice of Proposed Rulemaking (Blue Alert NPRM)* released in June 2017.² The Commission sought written public comment on the proposals in the *Blue Alert NPRM*, including comments on the IRFA. No comments were filed addressing the IRFA. This Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.³

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

2. This *Order* advances the important public policy of protecting our nation's law enforcement officials and the communities they serve,⁴ by revising part 11 of the Commission's rules governing the Emergency Alert System (EAS).⁵ Specifically, this *Order* adopts the three-character code BLU as a new event code for the transmission of Blue Alerts, a voluntary type of alert, over the EAS. This *Order* promotes the development of compatible and integrated Blue Alert plans throughout the United States, consistent with the Rafael Ramos and Wenjian Liu National Blue Alert Act of 2015 (Blue Alert Act),⁶ and supports the need for a dedicated EAS event code for Blue Alerts, identified by the Office of Community Oriented Policing Service (COPS Office) of the United States Department of Justice (DOJ).⁷ This *Order* also describes the integration of Blue Alerts into Wireless Emergency Alerts (WEA) but does not adopt rule changes for WEA at this time.

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

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

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

4. 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.⁸

¹ See 5 U.S.C. § 603. The RFA, see 5 U.S.C. §§ 601-612, was 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 Part 11 of the Commission's Rules Regarding the Emergency Alert System*, PS Docket No. 13-94, Notice of Proposed Rulemaking, 32 FCC Rcd 5280, Appendix B (2017) (*Blue Alert NPRM*).

³ See 5 U.S.C. § 604.

⁴ See Exec. Order No. 13774, 82 Fed. Reg. 10695 (Feb. 9, 2017) (Exec. Order No. 13774) (stating that it shall be the policy of the executive branch to "enhance the protection and safety of Federal, State, tribal, and local law enforcement officers").

⁵ 47 CFR § 11.1 *et. seq.*

⁶ 34 U.S.C. § 50501 *et. seq.*

⁷ U.S. Dep't of Justice, Office of Community Oriented Policing Services, Rafael Ramos and Wenjian Liu National Blue Alert Report to Congress at 6 (2016), https://www.cops.usdoj.gov/pdf/blue-alert/2016_report.pdf (2016 Report to Congress) (noting "... the need for a dedicated Emergency Alerting System (EAS) event code ...").

⁸ 5 U.S.C. § 604 (a)(3).

5. The Chief Counsel did not file any comments in response to the proposed rule changes in this proceeding.

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

6. 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.⁹ The RFA generally defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small governmental jurisdiction.”¹⁰ In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act.¹¹ 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.¹²

7. *Small Businesses, Small Organizations, Small Governmental Jurisdictions.* Our actions, over time, may 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.¹³ 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.¹⁴ These types of small businesses represent 99.9% of all businesses in the United States which translates to 28.8 million businesses.¹⁵

8. 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.”¹⁶ 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).¹⁷

⁹ 5 U.S.C. § 603(a)(4).

¹⁰ 5 U.S.C. § 601(6).

¹¹ 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.”

¹² 15 U.S.C. § 632.

¹³ See 5 U.S.C. § 601(3)-(6).

¹⁴ See SBA, Office of Advocacy, “Frequently Asked Questions, Question 1 – What is a small business?” https://www.sba.gov/sites/default/files/advocacy/SB-FAQ-2016_WEB.pdf (June 2016)

¹⁵ See SBA, Office of Advocacy, “Frequently Asked Questions, Question 2- How many small business are there in the U.S.?” https://www.sba.gov/sites/default/files/advocacy/SB-FAQ-2016_WEB.pdf (June 2016).

¹⁶ 5 U.S.C. § 601(4).

¹⁷ Data from the Urban Institute, National Center for Charitable Statistics (NCCS) reporting on nonprofit organizations registered with the IRS was used to estimate the number of small organizations. Reports generated using the NCCS online database indicated that as of August 2016 there were 356,494 registered nonprofits with total revenues of less than \$100,000. Of this number 326,897 entities filed tax returns with 65,113 registered nonprofits reporting total revenues of \$50,000 or less on the IRS Form 990-N for Small Exempt Organizations and 261,784 nonprofits reporting total revenues of \$100,000 or less on some other version of the IRS Form 990 within 24 months of the August 2016 data release date. See <http://nccs.urban.org/sites/all/nccs-archive/html/tablewiz/tw.php> where the report showing this data can be generated by selecting the following data fields: Show: “Registered Nonprofit Organizations”; By: “Total Revenue Level (years 1995, Aug to 2016, Aug)”; and For: “2016, Aug” then selecting “Show Results”.

9. 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 2012 Census of Governments¹⁹ indicates that there were 90,056 local governmental jurisdictions consisting of general purpose governments and special purpose governments in the United States.²⁰ Of this number there were 37,132 General purpose governments (county²¹, municipal and town or township²²) with populations of less than 50,000 and 12,184 Special purpose governments (independent school districts²³ and special districts²⁴) 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 50,000.²⁵ Based on this data we estimate that at least 49,316 local government jurisdictions fall in the category of “small governmental jurisdictions.”²⁶

10. *Television Broadcasting.* This Economic Census category “comprises establishments primarily engaged in broadcasting images together with sound.”²⁷ These establishments operate

¹⁸ 5 U.S.C. § 601(5).

¹⁹ See 13 U.S.C. § 161. The Census of Government is conducted every five (5) years compiling data for years ending with “2” and “7”. See also Program Description Census of Government <https://factfinder.census.gov/faces/affhelp/jsf/pages/metadata.xhtml?lang=en&type=program&id=program.en.CO G#>.

²⁰ See U.S. Census Bureau, 2012 Census of Governments, Local Governments by Type and State: 2012 - United States-States. <https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG02.US01>. Local governmental jurisdictions are classified in two categories - General purpose governments (county, municipal and town or township) and Special purpose governments (special districts and independent school districts).

²¹ See U.S. Census Bureau, 2012 Census of Governments, County Governments by Population-Size Group and State: 2012 - United States-States. <https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG06.US01>. There were 2,114 county governments with populations less than 50,000.

²² See U.S. Census Bureau, 2012 Census of Governments, Subcounty General-Purpose Governments by Population-Size Group and State: 2012 - United States – States. <https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG07.US01>. There were 18,811 municipal and 16,207 town and township governments with populations less than 50,000.

²³ See U.S. Census Bureau, 2012 Census of Governments, Elementary and Secondary School Systems by Enrollment-Size Group and State: 2012 - United States-States. <https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG11.US01>. There were 12,184 independent school districts with enrollment populations less than 50,000.

²⁴ See U.S. Census Bureau, 2012 Census of Governments, Special District Governments by Function and State: 2012 - United States-States. <https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG09.US01>. The U.S. Census Bureau data did not provide a population breakout for special district governments.

²⁵ See U.S. Census Bureau, 2012 Census of Governments, County Governments by Population-Size Group and State: 2012 - United States-States - <https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG06.US01>; Subcounty General-Purpose Governments by Population-Size Group and State: 2012 - United States–States - <https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG07.US01>; and Elementary and Secondary School Systems by Enrollment-Size Group and State: 2012 - United States-States. <https://factfinder.census.gov/bkmk/table/1.0/en/COG/2012/ORG11.US01>. While U.S. Census Bureau data did not provide a population breakout for special district governments, if the population of less than 50,000 for this category of local government is consistent with the other types of local governments the majority of the 38,266 special district governments have populations of less than 50,000.

²⁶ *Id.*

²⁷ U.S. Census Bureau, 2017 NAICS Definitions, “515120 Television Broadcasting,” <https://www.census.gov/cgi-bin/sssd/naics/naicsrch?input=515120&search=2017+NAICS+Search&search=2017>.

television broadcast studios and facilities for the programming and transmission of programs to the public.²⁸ 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.²⁹ 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.³⁰ Based on this data we therefore estimate that the majority of commercial television broadcasters are small entities under the applicable SBA size standard.

11. The Commission has estimated the number of licensed commercial television stations to be 1,383.³¹ Of this total, 1,263 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 May 9, 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 television stations to be 394.³² 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.

12. 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 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.

13. *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.”³⁴ The SBA has established a small business

²⁸ *Id.*

²⁹ 13 C.F.R. § 121.201; 2012 NAICS code 515120.

³⁰ U.S. Census Bureau, Table No. EC1251SSSZ4, *Information: Subject Series - Establishment and Firm Size: Receipts Size of Firms for the United States: 2012* (515120 Television Broadcasting). https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/51SSSZ4/naics~515120.

³¹ Broadcast Station Totals as of March 31, 2017, Press Release (MB Apr. 11, 2017) (March 31, 2017 Broadcast Station Totals), https://apps.fcc.gov/edocs_public/attachmatch/DOC-344256A1.pdf.

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 C.F.R. § 21.103(a)(1).

³⁴ U.S. Census Bureau, 2017 NAICS Definitions, “515112 Radio Stations,” <https://www.census.gov/cgi-bin/sssd/naics/naicsrch?input=515112&search=2017+NAICS+Search&search=2017>.

size standard for this category as firms having \$38.5 million or less in annual receipts.³⁵ Economic Census data for 2012 shows that 2,849 radio station firms operated during that year.³⁶ 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.³⁷ Therefore, based on the SBA's size standard the majority of such entities are small entities.

14. According to Commission staff review of the BIA/Kelsey, LLC's Media Access Pro Radio Database on May 9, 2017, about 11,411 (or about 99.9 percent) of 11,420 of commercial radio stations had revenues of \$38.5 million or less and thus qualify as small entities under the SBA definition.³⁸ The Commission has estimated the number of licensed commercial radio stations to be 11,420.³⁹ We note the Commission has also estimated the number of licensed noncommercial (NCE) radio stations to be 4,112.⁴⁰ 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.

15. We also note, that in assessing whether a business entity qualifies as small under the above definition, business control affiliations must be included.⁴¹ 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.⁴² We further note, 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 these basis, thus our 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.

16. *FM Translator Stations and Low Power FM Stations.* FM translators and Low Power FM Stations are classified in the category of Radio Stations and are assigned the same NAICS Code as licensees of radio stations.⁴³ This U.S. industry, Radio Stations, comprises establishments primarily engaged in broadcasting aural programs by radio to the public.⁴⁴ Programming may originate in their own

³⁵ 3 CFR § 121.201, NAICS code 515112 Radio Stations.

³⁶ U.S. Census Bureau, Table No. EC1251SSSZ4, *Information: Subject Series - Establishment and Firm Size: Receipts Size of Firms for the United States: 2012* (515112 Radio Stations) https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/51SSSZ4/naics~515112|515120.

³⁷ *Id.*

³⁸ Broadcast Station Totals as of March 31, 2017, Press Release (MB Apr. 11, 2017) (March 31, 2017 Broadcast Station Totals), https://apps.fcc.gov/edocs_public/attachmatch/DOC-344256A1.pdf.

³⁹ *Id.*

⁴⁰ *Id.*

⁴¹ "[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 power to control both." 13 C.F.R. § 121.103(a)(1).

⁴² 13 C.F.R. § 121.102(b).

⁴³ See, U.S. Census Bureau, 2017 NAICS Definitions, "515112 Radio Stations," <https://www.census.gov/cgi-bin/sssd/naics/naicsrch?input=515112&search=2017+NAICS+Search&search=2017>.

⁴⁴ U.S. Census Bureau, Table No. EC1251SSSZ4, *Information: Subject Series - Establishment and Firm Size: Receipts Size of Firms for the United States: 2012* (515112 Radio Stations) https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/51SSSZ4/naics~515112|515120.

studio, from an affiliated network, or from external sources.⁴⁵ 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.⁴⁶ U.S. Census Bureau data for 2012 indicates that 2,849 radio station firms operated during that year.⁴⁷ 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.⁴⁸ Therefore, based on the SBA's size standard we conclude that the majority of FM Translator Stations and Low Power FM Stations are small.

17. *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.”⁴⁹ 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.⁵⁰ U.S. Census Bureau data for 2012 shows that there were 3,117 firms that operated that year.⁵¹ Of this total, 3,083 operated with fewer than 1,000 employees.⁵² Thus, under this size standard, the majority of firms in this industry can be considered small.

18. *Wireless Communications Services.* 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.⁵³ The SBA has approved these small business size standards.⁵⁴ In the Commission's auction for geographic area licenses in the WCS there were seven winning bidders that qualified as “very small business” entities, and one that qualified as a “small business” entity.

⁴⁵ *Id.*

⁴⁶ 13 C.F.R. 121.201, NAICS code 515112 Radio Stations.

⁴⁷ *See supra* note 2.

⁴⁸ *Id.*

⁴⁹ *See* 13 CFR § 120.201. The Wired Telecommunications Carrier category formerly used the NAICS code of 517110. As of 2017 the U.S. Census Bureau definition shows the NAICS code as 517311 for Wired Telecommunications Carriers. *See*, <https://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517311&search=2017>.

⁵⁰ *Id.*

⁵¹ *See* U.S. Census Bureau, *2012 Economic Census of the United States*, Table No. EC1251SSSZ5, *Information: Subject Series - Estab & Firm Size: Employment Size of Firms: 2012* (517110 Wired Telecommunications Carriers). https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/51SSSZ5//naics~517110.

⁵² *Id.*

⁵³ *Amendment of the Commission's Rules to Establish Part 27, the Wireless Communications Service (WCS)*, Report and Order, 12 FCC Rcd 10785, 10879, para. 194 (1997).

⁵⁴ *See* Letter from Aida Alvarez, Administrator, SBA, to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, FCC (filed Dec. 2, 1998) (*Alvarez Letter 1998*).

19. *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 receives annual receipts of \$38.5 million or less.⁵⁵ Based on U.S. Census data for 2012, in that year 725 establishments operated for the entire year. Of that number, 488 operated with annual receipts of less than \$10 million a year and 237 establishments operated with annual receipts of \$10 million or more. Based on this data, the Commission estimates that the majority of establishments operating in this industry are small.⁵⁶

20. *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.⁵⁷ Industry data indicate that there are currently 4,600 active cable systems in the United States.⁵⁸ Of this total, all but nine cable operators nationwide are small under the 400,000-subscriber size standard.⁵⁹ In addition, under the Commission's rate regulation rules, a "small system" is a cable system serving 15,000 or fewer subscribers.⁶⁰ Current Commission records show 4,600 cable systems nationwide.⁶¹ 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.⁶² Thus, under this standard as well, we estimate that most cable systems are small entities.

21. *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 1 percent of all subscribers in the United States and is not affiliated with any entity or entities whose gross annual revenues in the aggregate exceed \$250,000,000."⁶³ There are approximately 52,403,705 cable video subscribers in the United States today.⁶⁴ 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.⁶⁵ Based on available data, we find that all but nine incumbent cable

⁵⁵ See 13 C.F.R. 121.201, NAICS Code 515210.

⁵⁶ AMERICAN FACT FINDER, UNITED STATES CENSUS BUREAU, http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2012_US_51SSSZ1&prodType=prodType=table.

⁵⁷ 47 CFR § 76.901(e).

⁵⁸ The number of active, registered cable systems comes from the Commission's Cable Operations and Licensing System (COALS) database on August 15, 2015. See FCC, *Cable Operations and Licensing System (COALS)*, www.fcc.gov/coals (last visited Oct. 25, 2016).

⁵⁹ See SNL KAGAN, *Top Cable MSOs*, <https://www.snl.com/Interactivex/TopCableMSOs.aspx> (last visited Oct. 25, 2016).

⁶⁰ 47 CFR § 76.901(c).

⁶¹ See *supra* Note 59.

⁶² See FCC, *Cable Operations and Licensing System (COALS)*, www.fcc.gov/coals (last visited Oct. 25, 2016).

⁶³ 47 CFR § 76.90(f) and notes ff. 1, 2, and 3.

⁶⁴ See SNL KAGAN at <http://www.snl.com/interactivex/MultichannelIndustryBenchmarks.aspx>.

⁶⁵ 47 CFR § 76.901(f) and notes ff. 1, 2, and 3.

operators are small entities under this size standard.⁶⁶ We note that the Commission neither requests nor collects information on whether cable system operators are affiliated with entities whose gross annual revenues exceed \$250 million.⁶⁷ Although it seems certain that some of these cable system operators are affiliated with entities whose gross annual revenues exceed \$250 million, 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. *Custom Computer Programming Services.* This industry comprises establishments primarily engaged in writing, modifying, testing, and supporting software to meet the needs of a particular customer.⁶⁸ The SBA has developed a small business size standard for this category, which is annual gross receipts of \$27.5 million or less.⁶⁹ According to data from the 2012 U.S. Census, there were 47,918 establishments engaged in this business in 2012. Of these, 45,786 had annual gross receipts of less than \$10,000,000. Another 2,132 establishments had gross receipts of \$10,000,000 or more.⁷⁰ Based on this data, the Commission concludes that the majority of the businesses engaged in this industry are small.

23. *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.⁷¹ 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.⁷² The SBA has established a small business size standard for this industry of 1,250 employees or less.⁷³ U.S. Census Bureau data for 2012 shows that 841 establishments operated in this industry in that year.⁷⁴ Of that number, 828 establishments operated with fewer than 1,000 employees, 7 establishments operated with between 1,000 and 2,499 employees and 6 establishments operated with 2,500 or more employees.⁷⁵ Based on this data, we conclude that a majority of manufacturers in this industry are small.

⁶⁶ See SNL KAGAN at http://www.snl.com/interactivex/TopCable_MSOs.aspx.

⁶⁷ The Commission does receive such information on a case-by-case basis if a cable operator appeals a local franchise authority's finding that the operator does not qualify as a small cable operator pursuant to section 76.901(f) of the Commission's rules. See 47 CFR § 76.901(f).

⁶⁸ See U.S. Census Bureau, 2012 NAICS Definitions, "541511 Custom Computer Programming Services," <https://factfinder.census.gov/faces/affhelp/jsf/pages/metadata.xhtml?lang=en&type=ib&id=ib.en./ECN.NAICS2012.541511#>.

⁶⁹ 13 CFR § 121.201

⁷⁰ See U.S. Census Bureau, Table No. EC1254SSSZ1, *Professional, Scientific, and Technical Services: Subject Series – Estab. and Firm Size: Receipts/Revenue Size of Establishments for the United States: 2012* (541511 Custom Computer Programming Services) https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/54SSSZ1/naics~541511

⁷¹ The NAICS Code for this service is 334220. 13 C.F.R 121.201. See also U.S. Census Bureau, 2012 NAICS Definitions, "334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing" <https://factfinder.census.gov/faces/affhelp/jsf/pages/metadata.xhtml?lang=en&type=ib&id=ib.en./ECN.NAICS2012.334220#>.

⁷² *Id.*

⁷³ 13 CFR § 121.201, NAICS Code 334220.

⁷⁴ U.S. Census Bureau, 2012 *Economic Census of the United States*, Table EC1231SG2, Manufacturing: Summary Series: General Summary: Industry Statistics for Subsectors and Industries by Employment Size: 2012, NAICS Code 334220, https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/31SG2/naics~334220.

⁷⁵ *Id.*

24. *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)).⁷⁶

25. *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.⁷⁷ 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, we estimate 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.⁷⁸ After adding the number of small business auction licensees to the number of incumbent licensees not already counted, we find that there are currently approximately 440 BRS licensees that are defined as small businesses under either the SBA or the Commission’s rules.

26. In 2009, the Commission conducted Auction 86, the sale of 78 licenses in the BRS areas.⁷⁹ 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.⁸⁰ Auction 86 concluded in 2009 with the sale of 61 licenses.⁸¹ Of the ten winning bidders, two bidders that claimed small business status won 4 licenses; one bidder that claimed very small business status won three licenses; and two bidders that claimed entrepreneur status won six licenses.

27. *EBS* - The SBA’s Cable Television Distribution Services small business size standard is applicable to EBS. There are presently 2,436 EBS licensees. All but 100 of these licenses are held by

⁷⁶ *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).

⁷⁷ 47 CFR § 21.961(b)(1).

⁷⁸ 47 U.S.C. § 309(j). Hundreds of stations were licensed to incumbent MDS licensees prior to implementation of Section 309(j) of the Communications Act of 1934, 47 U.S.C. § 309(j). For these pre-auction licenses, the applicable standard is SBA’s small business size standard of 1500 or fewer employees.

⁷⁹ *Auction of Broadband Radio Service (BRS) Licenses, Scheduled for October 27, 2009, Notice and Filing Requirements, Minimum Opening Bids, Upfront Payments, and Other Procedures for Auction 86*, Public Notice, 24 FCC Rcd 8277 (2009).

⁸⁰ *Id.* at 8296 para. 73.

⁸¹ *Auction of Broadband Radio Service Licenses Closes, Winning Bidders Announced for Auction 86, Down Payments Due November 23, 2009, Final Payments Due December 8, 2009, Ten-Day Petition to Deny Period*, Public Notice, 24 FCC Rcd 13572 (2009).

educational institutions. Educational institutions are included in this analysis as small entities.⁸² Thus, we estimate that at least 2,336 licensees are small businesses. Since 2007, Cable Television Distribution Services have been defined within the broad economic census category of Wired Telecommunications Carriers. 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.”⁸³ The SBA’s small business size standard for this category is all such firms having 1,500 or fewer employees.⁸⁴ 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.

28. *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.⁸⁵ The appropriate size standard under SBA rules is that such a business is small if it has 1,500 or fewer employees.⁸⁶ For this industry, U.S. Census Bureau data for 2012 shows that there were 967 firms that operated for the entire year.⁸⁷ Of this total, 955 firms had employment of 999 or fewer employees and 12 had employment of 1000 employees or more.⁸⁸ Thus under this category and the associated size standard, the Commission estimates that the majority of wireless telecommunications carriers (except satellite) are small entities.

29. 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 our actions today.⁸⁹ 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) Telephony

⁸² The term “small entity” within SBREFA applies to small organizations (nonprofits) and to small governmental jurisdictions (cities, counties, towns, townships, villages, school districts, and special districts with populations of less than 50,000). 5 U.S.C. §§ 601(4)-(6). We do not collect annual revenue data on EBS licensees.

⁸³ U.S. Census Bureau, 2017 NAICS Definitions, “517311 Wired Telecommunications Carriers,” (partial definition), <http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517311&search=2017>.

⁸⁴ See, 13 CFR § 121.201. The Wired Telecommunications Carrier category formerly used the NAICS code of 517110. As of 2017 the U.S. Census Bureau definition shows the NAICS code as 517311 for Wired Telecommunications Carriers. See, <https://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517311&search=2017>.

⁸⁵ NAICS Code 517210. See <https://factfinder.census.gov/faces/affhelp/jsf/pages/metadata.xhtml?lang=en&type=ib&id=ib.en/ECN.NAICS2012.517210>.

⁸⁶ 13 CFR § 121.201, NAICS code 517210.

⁸⁷ U.S. Census Bureau, 2012 *Economic Census of the United States*, Table EC1251SSSZ5, Information: Subject Series: Estab and Firm Size: Employment Size of Firms for the U.S.: 2012 NAICS Code 517210 (rel. Jan. 8, 2016). https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/51SSSZ5/naics~517210.

⁸⁸ *Id.* Available census data does not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with “1000 employees or more.”

⁸⁹ See <http://wireless.fcc.gov/uls>. For the purposes of this FRFA, consistent with Commission practice for wireless services, the Commission estimates the number of licensees based on the number of unique FCC Registration Numbers.

services.⁹⁰ Of this total, an estimated 261 have 1,500 or fewer employees, and 152 have more than 1,500 employees.⁹¹ Thus, using available data, we estimate that the majority of wireless firms can be considered small. *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.”⁹² 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.⁹³ 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.⁹⁴ Of this total, 299 firms had annual receipts of less than \$25 million.⁹⁵ Consequently, we estimate that the majority of satellite telecommunications providers are small entities.

30. *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 SBA’s economic census category “Wired Telecommunications Carriers.”⁹⁶ 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.⁹⁷ 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 telephony services, including VoIP services, wired (cable) audio and video programming distribution; and wired broadband internet services.⁹⁸ By exception, establishments providing satellite television distribution services using facilities and infrastructure that they operate are included in this industry.⁹⁹ The SBA determines that a wireline business is small if it has fewer than 1500 employees.¹⁰⁰ U.S. Census Bureau data for 2012 indicates that

⁹⁰ See Federal Communications Commission, Wireline Competition Bureau, Industry Analysis and Technology Division, Trends in Telephone Service at Table 5.3 (Sept. 2010) (*Trends in Telephone Service*), https://apps.fcc.gov/edocs_public/attachmatch/DOC-301823A1.pdf.

⁹¹ See *id.*

⁹² U.S. Census Bureau, 2017 NAICS Definitions, “517410 Satellite Telecommunications”; <https://www.census.gov/cgi-bin/sssd/naics/naicsrch?input=517410&search=2017+NAICS+Search&search=2017>.

⁹³ 13 CFR § 121.201, NAICS code 517410.

⁹⁴ U.S. Census Bureau, *2012 Economic Census of the United States*, Table EC1251SSSZ4, Information: Subject Series - Estab and Firm Size: Receipts Size of Firms for the United States: 2012, NAICS code 517410 https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/51SSSZ4/naics~517410.

⁹⁵ *Id.*

⁹⁶ See 13 CFR § 120.201. The Wired Telecommunications Carrier category formerly used the NAICS code of 517110. As of 2017 the U.S. Census Bureau definition shows the NAICS code as 517311 for Wired Telecommunications Carriers. See, <https://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517311&search=2017>.

⁹⁷ *Id.*

⁹⁸ See *id.* Examples of this category are: broadband Internet service providers (e.g., cable, DSL); local telephone carriers (wired); cable television distribution services; long-distance telephone carriers (wired); CCTV services; VoIP service providers, using own operated wired telecommunications infrastructure; DTH services; telecommunications carriers (wired); satellite television distribution systems; and MMDS.

⁹⁹ *Id.*

¹⁰⁰ 13 CFR § 121.201, NAICS CODE 517110.

3,117 wireline companies were operational during that year.¹⁰¹ Of that number, 3,083 operated with fewer than 1,000 employees.¹⁰² Based on that data, we conclude that the majority of DBS firms are small under the applicable SBA standard. Currently, however, only two entities provide DBS service, which requires a great deal of capital for operation: DIRECTV (owned by AT&T) and DISH Network.¹⁰³ DIRECTV and DISH Network each report annual revenues that are in excess of the threshold for a small business. Accordingly, we must conclude that internally developed FCC data are persuasive that, in general, DBS service is provided only by large firms.

31. *All Other Telecommunications.* The “All Other Telecommunications” category is comprised of establishments that are primarily engaged in providing specialized telecommunications services, such as satellite tracking, communications telemetry, and radar station operation.¹⁰⁴ 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.¹⁰⁵ Establishments providing Internet services or voice over Internet protocol (VoIP) services via client-supplied telecommunications connections are also included in this industry.¹⁰⁶ The SBA has developed a small business size standard for “All Other Telecommunications,” which consists of all such firms with gross annual receipts of \$32.5 million or less.¹⁰⁷ For this category, U.S. Census Bureau data for 2012 shows that there were 1,442 firms that operated for the entire year.¹⁰⁸ Of these firms, a total of 1,400 had gross annual receipts of less than \$25 million and 42 firms had gross annual receipts of \$25 million to \$49,999,999.¹⁰⁹ Thus, the Commission estimates that a majority of “All Other Telecommunications” firms potentially affected by our action can be considered small.

32. *Software Publishers.* This industry comprises establishments primarily engaged in computer software publishing or publishing and reproduction.¹¹⁰ 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.¹¹¹ The SBA has established a size standard for this industry of annual receipts of \$38.5 million per year.¹¹² U.S. Census data for 2012

¹⁰¹ See U.S. Census Bureau, *2012 Economic Census of the United States*, Table No. EC1251SSSZ5, *Information: Subject Series - Estab & Firm Size: Employment Size of Firms: 2012* (517110 Wired Telecommunications Carriers). https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/51SSSZ5//naics~517110

¹⁰² *Id.*

¹⁰³ See *15th Annual Video Competition Report*, 28 FCC Rcd at 1057, Section 27.

¹⁰⁴ See U.S. Census Bureau, 2017 NAICS Definitions, NAICS Code “517919 All Other Telecommunications”, <https://www.census.gov/cgi-bin/sssd/naics/naicsrch?input=517919&search=2017+NAICS+Search&search=2017>.

¹⁰⁵ *Id.*

¹⁰⁶ *Id.*

¹⁰⁷ 13 CFR 121.201; NAICS Code 517919.

¹⁰⁸ U.S. Census Bureau, *2012 Economic Census of the United States*, Table EC1251SSSZ4, *Information: Subject Series - Estab and Firm Size: Receipts Size of Firms for the United States: 2012*, NAICS code 517919, https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/51SSSZ4//naics~517919.

¹⁰⁹ *Id.*

¹¹⁰ See U.S. Census Bureau, 2017 NAICS Definitions, “511210 Software Publishers”, <https://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=511210&search=2017>.

¹¹¹ *Id.*

¹¹² 13 CFR § 121.201, 511210.

indicates that 5,079 firms operated in that year.¹¹³ Of that number 4,697 firms had annual receipts of \$25 million or less.¹¹⁴ Based on that data, we conclude that a majority of firms in this industry are small.

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

33. As proposed in the *Blue Alert NPRM*, use of Blue Alerts is voluntary. The main cost is to EAS Participants, in that those who elect to install the BLU alert code will bear the cost involved in downloading the software updates into their devices, and any associated clerical work.¹¹⁵ We minimize additional costs by allowing sufficient time and flexibility so that manufacturers and EAS Participants may make upgrades in tandem with general software upgrades installed during the regular course of business.¹¹⁶ This approach will significantly reduce the costs to small entities as well as to other EAS Participants, which fosters greater support for the Blue Alert program and ensures that a cohesive system is developed over time. As noted above, the *Order* permits transmission of Blue Alerts over WEA using an existing WEA message classification.

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

34. The RFA requires an agency to describe any significant, specifically small business alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): “(1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) and exemption from coverage of the rule, or any part thereof, for small entities.”¹¹⁷

35. As mentioned above, this *Order* allows small entities, including EAS Participants, to implement the BLU EAS event code on a voluntary basis. As we indicate above, however, we reduce costs to EAS Participants and equipment manufacturers by allowing sufficient time and flexibility that manufacturers and EAS Participants may make upgrades in tandem with general software upgrades installed during the regular course of business. To further reduce any costs incurred by small entities including equipment manufacturers and Participating CMS Providers in preparing their equipment and networks to be able to process any Blue Alerts that are sent over EAS and WEA, as well as for alert originators, EAS Participants and other stakeholders to have the necessary training and resources to deliver Blue Alerts to the public if they choose to do so, we are allowing a period of 12 months from the effective date of our rules for small entities and other stakeholders to enable the delivery of Blue Alerts over EAS, and a period of 18 months from the effective date of our rules for small entities and other stakeholders to enable the delivery of Blue Alerts over WEA. This will afford small entities and other stakeholders sufficient time to address any technical, resource, and training needs they may require to ensure the successful delivery of Blue Alerts, and to address those needs at an opportunity when it would cost the least, such as in conjunction with a scheduled software upgrade. We believe that the costs for implementation of WEA are low, and that the 18 months that we grant to Participating CMS Providers is sufficient to allow small entities and other providers to minimize the costs of deployment.

¹¹³ See U.S. Census Bureau, *2012 Economic Census of the United States*, Table EC1251SSSZ4, Information: Subject Series - Estab and Firm Size: Receipts Size of Firms for the United States: 2012, NAICS code 511210, https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/51SSSZ4//naics~511210.

¹¹⁴ *Id.*

¹¹⁵ See *Blue Alert NPRM*, 32 FCC Rcd at 5288, para. 25.

¹¹⁶ See *supra* para. 23.

¹¹⁷ 5 U.S.C. § 603(c)(1)-(4).

G. Report to Congress

36. The Commission will send a copy of the *Order*, including this FRFA, in a report to be sent to Congress pursuant to the Congressional Review Act.¹¹⁸ In addition, the Commission will send a copy of the *Order*, including this FRFA, to the Chief Counsel for Advocacy of the SBA. A copy of the *Order* and FRFA (or summaries thereof) will also be published in the Federal Register.¹¹⁹

¹¹⁸ See 5 U.S.C. § 801(a)(1)(A).

¹¹⁹ See 5 U.S.C. § 604(b).

APPENDIX C**Commenters**

- Adrienne Abbott (Abbott)
- American Cable Association (ACA)
- Association of Public-Safety Communications Officials-International, Inc. (APCO)
- Jonathan Appelbaum (Appelbaum)
- Blue Alert Foundation (BAF)
- Richard Best (Best)
- Robert S. Biermann (Biermann)
- Ira Dalton Bohm-Sanchez (Bohm-Sanchez)
- Boulder Regional Emergency Telephone Service Authority (BRETSA)
- Mike Clements (Clements)
- Noel Coady (Coady)
- Wayne Cole (Cole)
- U.S. Department of Justice, Office of Community Oriented Policing Services (COPS Office)
- CTIA (CTIA)
- Sean Donelan (Donelan)
- Shannon Long (Long)
- Tom May (May)
- Monroe Electronics (Monroe)
- Motorola Solutions, Inc. (Motorola)
- McCarthy Radio Enterprises, Inc. (MRE)
- National Association of Broadcasters (NAB)
- National Association of Police Organizations (NAPO)
- NCTA – The Internet & Television Association (NCTA)
- North Las Vegas Police Officers Association (NLVPOA)
- National Public Safety Telecommunications Council (NPSTC)
- The City of New York (NYC)
- Jeff Olson (Olson)
- ONE Media, LLC (ONE Media)
- Police Executive Research Forum (PERF)
- Stephen Raymond (Raymond)
- Aaron Read (Read)
- Sage Alerting Systems, Inc. (Sage)
- T-Mobile USA, Inc. (T-Mobile)
- Washington State Emergency Communications Committee (Washington SECC)
- Michael Zanyor (Zanyor)
- Rodney V. Zeigler (Zeigler)

**STATEMENT OF
CHAIRMAN AJIT PAI**

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

We typically give thanks and celebrate with family and friends during the holidays. But for Maritza, Justin, Jaden, and Angelina Ramos, Sindy Gonzalez, Pei Xia Chen, Wei Tang Liu, and Xiu Yan Li, every Christmas over the past three years has been one more reminder of the loss they suffered on December 20, 2014. For it was on that day—less than one week before Christmas—that Detectives Rafael Ramos and Wenjian Liu of the New York Police Department were senselessly gunned down while on duty. They were doing what they loved to do and were proud to do: protecting the citizens of New York City.

Their dedication exemplifies what it means to be a public servant: to improve their communities and the lives of others, despite the inherent dangers. Detective Ramos, a dedicated Mets fan who had a taste for ham-and-cheese sandwiches, once told a fellow church member that he wanted to “bring something more to the uniform.” Detective Ramos was scheduled to graduate from the New York State Chaplain’s Task Force the day after he lost his life. For his part, when Detective Liu was once asked why he wanted to be a police officer, he replied, “I know that being a cop is dangerous, but I must do it. If I don’t do it . . . then who is going to do it?”

Detectives Ramos and Liu made the ultimate sacrifice. We owe them and their brave family members who have come here today a tremendous debt of gratitude. We cannot begin to fathom your pain. But we can honor your sacrifice.

And the FCC attempts to do that today by adopting rules so that police officers across America, and the communities they so proudly serve, will be better protected. Specifically, we are creating a dedicated Blue Alert event code in the Emergency Alert System. Similar to the Amber Alerts that many are familiar with, Blue Alerts will enable authorities to warn the public when there is actionable information related to a law enforcement officer who is missing, seriously injured or killed in the line of duty, or when there is an imminent credible threat to an officer. These warnings can be sent to the public through broadcast, cable, satellite, and wireline video providers. Officials may also send Blue Alerts through the Wireless Emergency Alert system to consumers’ wireless phones. We aim to promote compatible and integrated Blue Alert plans throughout the United States, consistent with the Rafael Ramos and Wenjian Liu National Blue Alert Act of 2015.²⁴³ Six months ago, I made a promise to adopt these rules, and I am pleased that my fellow Commissioners and I make good on that promise today. Obviously, what we do here doesn’t change what happened that sad afternoon in New York. But it does respect these officers’ spirit and courage.

I want to thank William Johnson, Executive Director of the National Association of Police Organizations for his advocacy and support for Blue Alerts, and especially Pei Xia Chen, Wei Tang Liu, and Maritza Ramos for their moving testimony today. I also want to acknowledge the unwavering support from members of the U.S. Department of Justice’s Office of Community Oriented Policing Services who have joined us this morning: Acting Director and National Blue Alert Coordinator Russell Washington, Deputy National Blue Alert Coordinator Vince Davenport, Senior Counsel to the Director Shanetta Cutlar, and Blue Alert Team Leader Tracie Johnson Farrell.

I also want to extend a special thanks to Deputy Chief Thomas Burns, Commanding Officer of the NYPD Employee Relations Section, and his staff, Lieutenant Debra Lott, Sergeant Patrick Whalen, and Officer Frank Russo. Each of them plays a very important role in consoling grieving family members

²⁴³ 34 U.S.C. § 50501 *et. seq.*

of fallen NYPD police officers. I also am grateful to Detective Jose Falero and Sergeant Johnny Yin from the NYPD for safely escorting our guests this morning from New York City.

And last but not least, for their tireless efforts and dedication to keeping Americans safe, I want to thank the staff of the Public Safety and Homeland Security Bureau: Rochelle Cohen, Greg Cooke, Lisa Fowlkes, Nicole McGinnis, Linda Pintro, Austin Randazzo, and James Wiley; and David Horowitz and Anjali Singh from the Office of General Counsel.

**STATEMENT OF
COMMISSIONER MIGNON L. CLYBURN**

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

Mr. Liu, and Ms. Liu, and Ms. Ramos, thank you for traveling to D.C. to take part in this event. Your sons and husbands served their community with great honor, dedication and courage. Today, with the adoption of this rule to promote an alert code when there is a credible threat against law enforcement officers, we honor the memory of your loved ones and take an important step to help ensure the safety of our police officers when they're in the line of duty.

An estimated 240 million calls are made to 9-1-1 centers each year. But when the need arises for one of us to make that dreaded call for help, it is our nation's first responders -- which includes law enforcement officers -- who step up, often at great risk to their own personal safety, in order to ensure ours. For that, we will always be indebted.

So I am thankful we can show support for them through today's Order which revises the Commission's Emergency Alert System, or EAS rules. Adding a three-character Blue Alert event code is the most effective means to share vital information in critical situations involving: the serious injury or death of a law enforcement officer in the line of duty; an officer who is missing in connection with his or her official duties; or an imminent and credible threat that an individual intends to cause serious injury to, or kill, a law enforcement officer.

It is important that we do our part as a Commission to update the EAS system to facilitate broader dissemination of information that can help keep these officers safe. And as the City of New York and the National Association of Broadcasters have pointed out, issuing the Blue Alert via the EAS system has the added benefit of further protecting the public from violent suspects.

I thank Lisa Fowlkes and her staff in the Public Safety and Homeland Security Bureau for your work on this important item.

**STATEMENT OF
COMMISSIONER MICHAEL O'RIELLY**

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

The Commission should do what we can, within our statutory authority, to assist and protect our law enforcement professionals and the American public at large. To the extent that an appropriate public safety agency finds that the BLU alert code could be helpful and voluntarily decides to activate this warning, I will support their ability to do so. However, I am not sure this code, if ever triggered, would provide added protection for public safety officials or the general public, as the item suggests. When events that would now generate a BLU alert code occurred in the past, our nation's local broadcasters traditionally jumped right into action to inform the public. Moreover, public safety officials already have separate devices and codes to communicate if and when such horrific events occur.

For this reason, the cost-benefit analysis in this item continues our streak of subpar work in the public safety area. For instance, instead of a true analysis of the benefits, it dredges up the same discredited value of a statistical life that the Commission abused in the past.

But, more importantly, we should pray that this code is seldom needed because its use would mean a law enforcement officer is seriously injured, killed, in imminent danger, or missing — truly awful scenarios that heartbreakingly have remained a consistent threat for those in this line of work. I don't have the right words to fully express my appreciation to all of the brave souls who serve as law enforcement officers in their communities, but for the men and women who pursue this chosen profession, may the circumstances and outcomes contemplated in this item never happen again.

**STATEMENT OF
COMMISSIONER BRENDAN CARR**

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

Today, the FCC does its part to help promote the safety of our nation's law enforcement officials and the communities they serve. We do so by facilitating the use of Blue Alerts, which can provide advanced warning of imminent threats to law enforcement. This is a crucial effort. Last year, 135 officers were killed in the line of duty and 21 of those were ambush-style killings. In many of these cases, the perpetrators posted imminent and credible threats to law enforcement officers ahead of time on social media, and some of them may have been thwarted by a coordinated National Blue Alert Network.

In 2015, Congress directed the Attorney General to create such a network within the Department of Justice (DOJ) and to support state and local law enforcement as they work to develop and implement Blue Alert plans. But the lack of a dedicated event code for Blue Alerts in the Emergency Alert System (EAS) is one of the primary obstacles to more states adopting and using Blue Alert plans. Indeed, the DOJ's Office of Community Oriented Policing Services has stated that creation of such a code is "the single greatest need of the National Blue Alert Network." In today's Order, we therefore adopt a new dedicated EAS event code to enable the transmission of Blue Alerts over the EAS and Wireless Emergency Alerts. This action should facilitate the delivery of Blue Alerts in a uniform and consistent manner nationwide and, in the process, increase the reach and effectiveness of these potentially life-saving warnings.

I'm pleased that the Commission moved quickly to address this critical issue, and I thank the staff of the Public Safety and Homeland Security Bureau for their diligent work on this item. It has my full support.

**STATEMENT OF
COMMISSIONER JESSICA ROSENWORCEL,
APPROVING IN PART, DISSENTING IN PART**

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

Today, the Commission fulfills the promise of the Rafael Ramos and Wenjian Liu National Blue Alert Act, which was signed into law by President Obama in 2015. We create a new Emergency Alert Code—BLU—for use with our public alerting systems when a law enforcement officer is in peril. This new code and these three letters have the potential to save lives and increase situational awareness for our first responders. This is good stuff. It has my support.

I dissent, however, on one aspect of today's decision. In evaluating the merits of the Blue Alert system that we adopt today, the Commission puts forward a cost-benefit analysis that weighs the cost of industry compliance against the value of a police officer's life. You heard that right—in deciding whether to impose a requirement under this law the Commission puts a price on the death of first responders and then nets it out against industry expenses. Fortunately for law enforcement, the math works out. But this cold calculus is neither needed nor smart. There is a way to do cost-benefit analysis thoughtfully and with dignity for those who wear the shield—some of whom sit before us right here, right now. This isn't it. On this disrespectful analysis, I dissent.