

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matters of)	
)	
Wireless Emergency Alerts)	PS Docket 15-91
)	
Amendments to Part 11 of the Commission's Rules)	PS Docket 15-94
Regarding the Emergency Alert System)	
)	

**REPLY COMMENTS OF THE NEW YORK CITY EMERGENCY MANAGEMENT DEPARTMENT TO THE
FURTHER NOTICE OF PROPOSED RULEMAKING ON IMPROVING THE EFFECTIVENESS OF EAS and WEA**
Electronically Filed October 9, 2018

INTRODUCTION

1. The City of New York's Emergency Management Department ("NYCEM" or "the Department" or "the agency") is pleased to submit a response to publicly-filed comments in the above captioned matters in response to the Federal Communications Commission's Public Safety and Homeland Security Bureau's ("FCC" or "the Commission") Further Notice of Proposed Rulemaking ("Notice" or "FNPRM"). NYCEM sincerely appreciates the continuing dialogue between the public safety and emergency management community, broadcasters, and commercial mobile service providers ("CMSP" or "CMSPs") on the needed improvements to the nation's emergency alert systems.

NEED FOR ADDITIONAL REPORTING ON WIRELESS EMERGENCY ALERT DELIVERY

2. NYCEM wholeheartedly agrees with comments from Harris County, Texas that the Commission needs to adopt rules that require CMSPs to track and provide delivery information of Wireless Emergency Alert ("WEA") messages.¹ NYCEM strongly disagrees with CTIA's comments that adopting WEA reporting requirements would "undermine the voluntary nature of the WEA program...."² While the authorizing legislation provided for voluntary participation of the CMSPs, it similarly required that the Commission adopts rules governing the implementation of this critical public safety system.³ The authorizing legislation requires CMSPs that elect to participate in the WEA program to "agree to transmit such alerts in a manner consistent with the technical standards, protocols, procedures, and other technical requirements implemented by the Commission."⁴ In fact, the Commission has a

¹ Comments submitted by Harris County, Texas at Paragraph 2, dated September 7, 2018.

² Comments submitted by CTIA at Page 2, dated September 10, 2018.

³ 47 USC 1201, all sections.

⁴ 47 USC 1201 § 602(2)(B)(ii).

statutory obligation to “require by regulation[,] technical testing for CMSPs that elect to transmit emergency alerts and for the devices and equipment used by such providers for transmitting such alerts.”⁵ Congress wanted to ensure that whatever system was implemented, voluntary or not, was successful at delivering emergency alerts. A key component of testing any mission critical communication system is evaluating delivery.

3. With respect to CTIA’s comment that “requiring the Participating CMS Providers to track delivery or display of WEA messages would be infeasible with the foundational cell-broadcast technology used to be the public safety mission of WEA...” and AT&T’s comment that “obtaining accurate performance information, including delivery rates, presents challenges due to the one-way nature of the service,”⁶ the WEA regulations do not mandate cell broadcast technology as the mechanism for WEA delivery. It was solely the industry’s decision for most CMSPs to implement the WEA system using cellular broadcast technology without a feedback loop to confirm successful delivery. Further, NYCEM notes that while both CTIA and AT&T indicated that such WEA performance analysis is “infeasible” and “presents challenges,” neither indicated that such a requirement would be impossible to meet.
4. The Commission and CMSPs should not be constrained by technological approaches and decisions made nearly a decade ago. As the industry’s own research demonstrates there have been dramatic improvements in the speed, capacity, and reliability of today’s wireless networks.⁷ While the Commission should consider adopting performance benchmarks and delivery requirements for current networks, NYCEM strongly recommends that the Commission also adopt rules requiring device-level delivery reporting, performance benchmarks, and other forms of bi-directional communication for **5G and future networks**. Consistent with previous filings, NYCEM urges the Commission to adopt rules that strengthen the capability and reliability of the nation’s WEA system concomitant with 5G implementation.⁸
5. NYCEM sincerely appreciates CTIA’s offer to “collaborate...to help develop an approach, including questions for post-testing surveys, which would provide the data needed to better asses [sic] WEA performance and potentially identify root causes of any non-delivery or non-display issues.”⁹ NYCEM encourages the Commission to enact rules requiring collaboration and would be glad to coordinate with the CTIA and its member companies on this topic and, as a starting point, refers the Commission

⁵ 47 USC 1201 § 602(2)(f).

⁶ Comments from CTIA at page 2, dated September 10, 2018; and Comments from AT&T at pages 2-3 dated September 10, 2018.

⁷ See, for example, CTIA’s *Annual Wireless Industry Survey* and accompanying press release that states, Americans “...used a record 13.72 trillion megabytes (MBs) of mobile data in 2016, and increase of 4 trillion MBs over 2015 and 35 times the volume of traffic in 2010. <https://www.ctia.org/news/americans-wireless-data-usage-continues-to-skyrocket>. Accessed May 15, 2018; And CTIA’s *Industry Data* which states mobile download speeds have increased by 61 percent since 2014. <https://www.ctia.org/the-wireless-industry/infographics-library>. Accessed May 18, 2018.

⁸ See NYC Emergency Management’s *Comment Filing*, page 4, dated September 10, 2018.

⁹ Comments submitted by CTIA at Page 7, dated September 10, 2018.

and CTIA to its prior ex parte filing which mapped WEA delivery results as reported through survey data.¹⁰

WEA AND EAS PARTICIPANTS SHOULD BE REQUIRED TO IMMEDIATELY REPORT FALSE ALERTS GENERATED BY *THEIR* EQUIPMENT AND/OR PERSONNEL; NOT FALSE ALERTS THAT THEY SIMPLY CASCADE

6. NYCEM stands by its comments that the Commission “establish rules that require CMSPs, broadcasters, and other regulated emergency messaging dissemination channels to (a) immediately notify state and local governments within the false alert’s distribution area...and (b) establish a dedicated mechanism by which [Emergency Alert System (“EAS”)] participants and other stakeholders report false alerts and lockouts.”¹¹ However, in light of points raised by a number of commenters¹², NYCEM clarifies its position that regulated entities should only need to report false alerts that are generated by their equipment and/or personnel, and not alerts which regulated entities receive, properly authenticate, and cascade to their subscribers or customers. For the purposes of this clarification, NYCEM notes that the phrase “generated by their equipment” includes, but is not limited to, false alerts that are transmitted intentionally or unintentionally as a result of human intervention, system malfunction, and/or security breach (e.g., hacking, malware, etc.). With respect to reporting to the Commission, NYCEM appreciates the thoughtful comments of the American Cable Association¹³ and reaffirms its position that the Commission should require (a) immediate reporting to state and local governments; and (b) reporting to the Commission within 24 hours.¹⁴

THE COMMISSION SHOULD MAXIMIZE THE LIKELIHOOD OF WEA MESSAGE DELIVERY BY MANDATING USE OF REDUNDANT DELIVERY PATHWAYS

7. NYCEM, the public safety and emergency management community, CMSPs, broadcasters, cable operators, and other filers universally agree that WEA messages are of critical importance and have already saved lives. While no technology is perfect, mission critical communication systems – like WEA – must be engineered to maximize every facet of reliability, including successful delivery of messages to their intended audience. In filings to the FNPRM, CTIA and AT&T provide a litany of potential barriers to WEA delivery.¹⁵ As such, NYCEM strongly agrees with the collective comments of America’s Public Television Stations, The Corporation for Public Broadcasting, and the Public Broadcasting Service (collectively “PTV”) that the Commission adopt rules mandating redundant delivery

¹⁰ See letter and accompanying maps submitted by NYCEM, dated April 26, 2016.

<https://ecfsapi.fcc.gov/file/60001703253.pdf>

¹¹ Comments from the New York City Emergency Management Department at 4, dated September 10, 2018.

¹² See, for example, Comments from CTIA at page 10, dated September 10, 2018; Comments from NCTA – The Internet and Television Association at page 4, dated September 10, 2018; Comments from the American Cable Association at page 5, dated September 10, 2018.

¹³ Comments from the American Cable Association at page 6, dated September 10, 2018

¹⁴ Comments from the New York City Emergency Management Department at 4, dated September 10, 2018.

¹⁵ See, for example, Comments from CTIA at page 5, dated September 10, 2018; and AT&T at pages 3-4, dated, September 10, 2018.

pathways.”¹⁶ While radio frequency propagation issues, active 3G voice/data sessions, lack of radio coverage will continue to present barriers to WEA delivery, adopting rules that require alternate/redundant delivery pathways will improve WEA reliability.

8. NYCEM also agrees with and fully supports PTV’s recommendation for frequent testing of any redundant delivery pathway implemented, similar to the regular weekly and monthly tests of the Emergency Alert System. In addition to participating in required weekly and monthly tests of the EAS system, NYCEM has also adopted “WEA Wednesday”, where we test our alert origination software’s connectivity to the Federal Emergency Management Agency’s Integrated Public Alert and Warning System (“IPAWS”) aggregator. While these tests are transparent to the public they do increase NYCEM’s confidence in our software systems, the reliability of IPAWS, and have increased our staff’s proficiency in generating WEA messages.

LOCKOUTS, WHILE RARE, SHOULD BE PROMPTLY REPORTED TO STATE AND LOCAL GOVERNMENTS AND THE COMMISSION

9. NYCEM appreciates the steps taken by the cable industry to prevent lockouts through “software updates and improvements in cable equipment” and that the cable industry has an inherent interest in preventing such occurrences.¹⁷ Although rare, when lockouts occur, they may prevent local emergency management and public safety officials from delivering critical life safety information to those who need it. As a result, NYCEM continues to support immediate reporting of lockouts to local and state emergency management officials and subsequent reporting to the Commission.

“ONE AND DONE” DOES NOT WORK - FORTHCOMING GEOTARGETING REQUIREMENTS WILL IMPROVE WEA BUT MUST ACCOUNT FOR TRAVELING POPULATIONS

10. In NYCEM’s comments to the FNPRM, it highlighted its concern that the CMSP industry’s technological approach to implementing improved geotargeting requirements will not account for mobile or traveling populations who may enter an alert’s target area *after* the alert is already active.¹⁸ The National Weather Service (“NWS”) echoed this concern in its filing, highlighting that this is a national concern and not just a concern in dense urban areas like New York City.¹⁹ Further, NWS offered recommendations similar to those of NYCEM for mitigating this concern: device re-checks of its location relative to the target area and regular re-broadcasts of the WEA message.²⁰ As the standards development process is well underway in anticipation of the November 2019 deadline, NYCEM strongly advises the Commission to take action on this concern as soon as possible.

¹⁶ Comments of America’s Public Television Stations, The Corporation for Public Broadcasting, and the Public Broadcasting Service at pages 2-3, dated September 10, 2018.

¹⁷ Comments from NCTA – The Internet and Television Association at page 8, dated September 10, 2018.

¹⁸ Comments from the New York City Emergency Management Department at pages 5-6, dated September 10, 2018.

¹⁹ Comments from the National Weather Service at page 1-2, dated September 9, 2018.

²⁰ Comments from the National Weather Service at page 1-2, dated September 9, 2018.

CONCLUSION

11. NYCEM appreciates the Commission's and industry's on-going efforts to improve the nation's emergency alert and warning systems and applauds the improvements adopted to date. Just as our nation's threat environment continues to evolve, the technological ecosystem that the public safety and emergency management community relies on to keep our communities safe must evolve with it. Unfortunately, today's emergency alert and warning systems continue to lag behind what widely adopted consumer technology offers. NYCEM looks forward to working with the Commission, government, and industry partners on bringing our nation's emergency alerting systems into the 21st century.