Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of )
) Wireless Emergency Alerts ) PS Docket No. 15-91
) )
Amendments to Part 11 of the Commission’s ) PS Docket No. 15-94
Rules Regarding the Emergency Alert System )

COMMENTS OF APCO INTERNATIONAL

The Association of Public-Safety Communications Officials (APCO) International, Inc., offers the following comments in response to the Further Notice of Proposed Rulemaking in the above-captioned proceeding. APCO commends the Commission for taking steps to improve the use and effectiveness of the Wireless Emergency Alert (WEA) system. Here, APCO offers recommendations on ways the Commission can make the WEA system a more useful public safety tool by adding multimedia capabilities and instilling confidence with improved transparency and consistency in WEA performance.

1 Founded in 1935, APCO is the nation’s oldest and largest organization of public safety communications professionals. APCO is a non-profit association with over 39,000 members, primarily consisting of state and local government employees who manage and operate public safety communications systems – including 9-1-1 Emergency Communications Centers (ECCs), emergency operations centers, radio networks, and information technology – for law enforcement, fire, emergency medical, and other public safety agencies.
I. The Commission Should Require Enhancements to WEA Capabilities to Make it a More Useful Tool

As the Commission notes, WEA has become the nation’s primary alerting method. With the ubiquitous nature of mobile devices and services, WEA has the potential to save even more lives in a variety of emergencies. While there have been improvements to WEA in recent years, its capabilities have not kept pace with the advancements in wireless networks and public expectations. For example, for years consumers have been able to send high-quality multimedia messages to multiple recipients with near-immediate delivery, but public safety agencies cannot do the same with WEA during emergencies. Service providers should develop and maintain WEA capabilities in a manner that eliminates disparities between what is available to consumers and what is available to WEA alert originators.

The Commission seeks comment on a variety of enhancements to the WEA system related to the transmission of multimedia in alerts. APCO supports these enhancements and would go further, requiring participating service providers to support any type of multimedia that is in common use by consumers. As the Commission noted in 2016, “Allowing multimedia content in WEA Alert Messages would have tremendous public safety benefits.” Today, there is a “robust record” demonstrating alerting authorities’ desire to incorporate multimedia content in WEA messages and that it is technically feasible to do so. The ability to include photos,

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3 Id. at para. 8.
4 Id. at para. 22 (proposing to require participating service providers to support the sending of thumbnail-sized images); id. at para. 25 (proposing to require participating service providers to support location-aware maps); see also id. at para. 26 (seeking comment on whether it is feasible for participating service providers to support the transmission of a data element that triggers mobile devices to display pre-installed media content, such as infographics); id. at para. 27 (seeking comment on whether participating service providers could enable WEA messages to include a symbol set designed for emergency communications).
6 FNPRM at paras. 21, 22.
7 Id. at para. 22 (‘‘ATIS’’ Feasibility Study for WEA Supplemental Text finds that Participating CMS Providers could support the transmission of an appropriately formatted, thumbnail-sized image using 0.013 megabytes of data.”).
symbols, maps, and other multimedia content will undoubtedly make alerts more effective. To illustrate, as the Commission tentatively concludes, including a picture of a missing child in an AMBER Alert will result in better assistance to law enforcement efforts to locate a missing child.\(^8\) Virtually any alert could be more effective with multimedia content to quickly and intuitively convey critical information.

In addition to multimedia content in WEA messages, APCO generally supports other opportunities to make WEA messages more effective for alert originators and the public. This includes requiring participating service providers to support the presentation of alert messages in the 13 most common languages in the United States,\(^9\) ASL-formatted messages and text-to-speech capabilities,\(^10\) and transmission of WEA messages without triggering the audio attention signal and vibration cadence.\(^11\)

II. The Commission Should Take Steps to Improve Transparency and Consistency for WEA

As the Commission notes, the WEA system is being under-utilized due to alerting authorities’ lack of confidence in the WEA system.\(^12\) APCO supports proposals that will improve transparency and consistency for WEA, which will increase alert originators’ confidence and effective use of the system.

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\(^8\) *Id.* at para. 22.
\(^9\) *Id.* at para. 13.
\(^10\) *Id.* at paras. 19, 20.
\(^11\) *Id.* at para. 29.
\(^12\) *Id.* at para. 2.
A. Definition of WEA-Capable Mobile Devices

The Commission proposes to update the definition of “WEA-capable mobile device” to ensure that WEA-capable mobile devices offer all WEA capabilities rather than a subset.\(^\text{13}\) APCO shares the concern that, with the status quo, consumers might mistakenly believe that all WEA-capable devices offer all WEA capabilities.\(^\text{14}\) Therefore we support updating the definition. Consumers and alert originators will place more trust in WEA messages when their experiences are uniform across devices and service providers.

B. Establishment of WEA Performance Minimums

APCO agrees that establishing performance minimums for reliability, accuracy, and speed will improve the effectiveness of WEA, enhancing consistency and confidence in the WEA system.\(^\text{15}\) Timely delivery of alerts to the affected communities will save lives. APCO supports the Commission’s proposal to establish performance minimums for reliability\(^\text{16}\) and speed\(^\text{17}\) and is particularly interested in improving the accuracy of alert delivery.

The Commission seeks comment on why WEA-capable mobile devices may be falling short of the existing geotargeting requirements\(^\text{18}\) and proposes to improve WEA accuracy by

\(^{13}\) Id. at para. 44 (explaining that mobile devices have continued to be considered “WEA-capable” even if they do not support the capabilities such as embedded links and enhanced geotargeting that have become central to WEA’s effectiveness).

\(^{14}\) Id.

\(^{15}\) Id. at para. 47.

\(^{16}\) Id. at para. 48 (proposing a reliability performance minimum that requires participating service providers to deliver alerts to all WEA-capable mobile devices within a target area at the time of transmission and to WEA-capable mobile devices that enter the target area after the initial transmission but while the alert message is live).

\(^{17}\) Id. at para. 52 (proposing to require participating service providers to satisfy minimum speed requirements and seeking comment on a requirement that participating service providers present alerts within five minutes on 99% of WEA-capable mobile devices within the target area). APCO would support a shorter timeframe, particularly if speed is measured by the amount of time between receipt of the alert message at the participating service provider’s gateway and presentation of the alert on consumer devices.

\(^{18}\) Id. at para. 51.
sunsetting certain exceptions to the geotargeting requirements.\textsuperscript{19} APCO has expressed concern that the geotargeting requirements have been misinterpreted, given the relatively small percentage of smartphones reported as supporting the requirements\textsuperscript{20} and suggestions that the Commission apply exceptions that are neither in the rules nor technically-justified.\textsuperscript{21} The Commission should eliminate exceptions, correct misinterpretations, and hold participating service providers accountable for compliance with the enhanced geotargeting rules.

C. Support for End-to-End WEA Tests

The Commission proposes to authorize participating service providers to support up to two end-to-end WEA tests per alerting authority each calendar year, provided that the alerting authority complies with the same conditions applied to EAS Live Code Tests, such as including a statement in the test message that the alert is only a test.\textsuperscript{22} APCO supports this proposal, which would enable alerting authorities to perform end-to-end WEA tests without first obtaining a waiver from the Commission. Testing is fundamental to public safety communications and will improve the system’s trustworthiness and effectiveness.

D. Maintaining a Database on WEA Availability and Performance

The Commission proposes to facilitate access to information about WEA availability and performance through the development of a Commission-hosted WEA Database\textsuperscript{23} and to require

\textsuperscript{19} Id. at paras. 49, 50 (describing exceptions for mobile devices that have location services disabled and legacy networks and devices that could not be updated to support geofencing).

\textsuperscript{20} See Comments of APCO International, PS Docket Nos. 15-91, 15-94, at 4 (filed June 21, 2022) (“APCO Comments”) (explaining the expectation that most if not all smartphones would be capable of being upgraded to support enhanced geotargeting in 2019, but industry reporting shows support by only 34% of active smartphones in 2021). More recent WEA performance testing has indicated that less than 50% of mobile devices participating in the testing were capable of supporting the enhanced geotargeting. See Report: September 2022 WEA Performance Exercise, Public Safety and Homeland Security Bureau (rel. Apr. 24, 2023) available at https://docs.fcc.gov/public/attachments/DOC-392829A1.pdf. This is still an unacceptably low percentage.

\textsuperscript{21} APCO Comments at 4 (noting a May 2022 filing from CTIA suggesting the enhanced geotargeting rule doesn’t apply when devices are served by a cell site outside the target area).

\textsuperscript{22} FNPRM at para. 35.

\textsuperscript{23} Id. at para. 37.
participating service providers to submit data regarding WEA’s reliability, accuracy, and speed using the database. APCO supports the creation of the database and presentation of data in a uniform format. Detailed information about WEA will provide public safety stakeholders with important information to use WEA more effectively and will enable them to provide helpful feedback to the Commission and the wireless industry. The Commission should also consider whether the database could include information that allows the Commission and alerting authorities to evaluate the functionality of WEA capabilities that are not described by metrics for reliability, accuracy, and speed such as the extent to which enhancements like embedded links are working as intended.

For the data regarding WEA reliability, accuracy, and speed, APCO continues to support the alternative definitions proposed in the Commission’s 2022 Notice of Proposed Rulemaking on WEA performance metrics. The performance metrics should be presented with sufficient granularity to provide useful operational insights for alerting authorities. For example, in addition to knowing the proportion of alert recipients that received the alert within and further than 0.1 miles from the target area, alert originators might benefit from knowing how far unintended recipients were from the alert area. Ideally, the data would be based on all of the WEA messages transmitted while an alert was active, not just a sample. APCO agrees that data on WEA performance can likely be gathered at the device level and encourages the Commission

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24 Id. at para. 55.
25 Wireless Emergency Alerts, Amendments to Part 11 of the Commission’s Rules Regarding the Emergency Alert System, PS Docket Nos. 15-91, 15-94, Further Notice of Proposed Rulemaking, FCC 22-31, at para. 9 (2022) (defining reliability as “the proportion of devices within the target area while the alert is active that successfully displayed the alert;” defining speed as “the difference between the time that an alert is initiated by an authorized alert originator and the time that the alert is displayed at the mobile device;” defining accuracy as “the proportion of the alert recipients that received the alert within and further than 0.1 miles from the target area.”).
26 FNPRM at para. 56 (seeking comment on whether participating service providers should submit data on the performance for all alerts or from a sample).
to avoid an approach to data collection that depends on the reporting or limited resources of alert originators.27

Respectfully submitted,

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27 Id. at para. 57.