

January 12, 2016

Via FCC Electronic Comment Filing System

Ms. Marlene Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554
Re: Wireless Emergency Alerts (WEA) – Proceeding 15-91

Dear Ms. Dortch:

WEA is an important life-saving tool that makes up part of our nation's larger warning network. NOAA National Weather Service (NWS) activation of WEA has been credited by the general public, emergency management officials, and news media with saving many lives. NOAA would like to thank the FCC for taking a leadership role in regard to rule making for Wireless Emergency Alerts (WEA) and the opportunity to comment on the proposed rules in FCC 15-91.

Since the original rules for WEA were recommended by the Commercial Mobile Service Alert Advisory Committee in the 2007, there have been significant advances in weather-related warning capability, social science, wireless technology, and mobile device technology. The rules for WEA should reflect these advances. Also, third party applications which redistribute emergency alert information should be allowed to leverage WEA and the associated Common Alerting Protocol (CAP) messages to enhance the life-saving information provided by these applications.

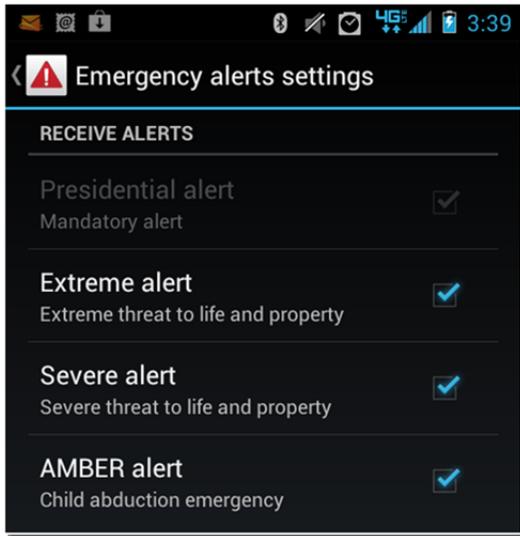
To facilitate the FCC's review of our comments, we've organized our comments in key areas below.

Subscribers' right to opt out of WEA notifications

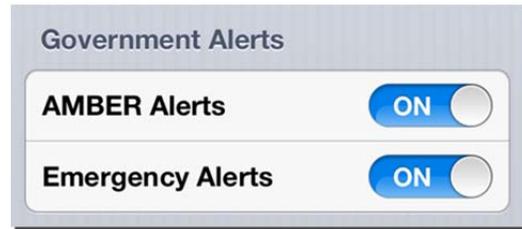
There are inconsistencies in opt-out options across mobile device types. Opt-out menus should have the same title and offer the same options across devices in order to avoid user confusion and increase consistency and flexibility of WEA for the user.

The screen captures below show the difference between iPhone and Android devices. The Android example is entitled "Emergency alerts settings" and breaks out the imminent threat options into "Extreme alert" and "Severe alert". In contrast, the iPhone example is entitled "Government Alerts" and bundles imminent threat alerts into a single category called "Emergency Alerts". Thus, iPhone users must make an "all or none" opt-out decision for imminent threat messages, whereas Android users have flexibility in choosing the extremity of imminent threat alerts they wish to receive.

Android



iPhone



NOAA prefers “Emergency Alert” language in the menu title and a breakout of imminent threat options for “Extreme” and “Severe” alerts.

Also, the Android has a greyed out Presidential alert option which conveys that there is a Presidential alert category in which the user cannot opt-out. In contrast, the iPhone does not display a Presidential alert option. NOAA doesn’t have a strong preference in regard to display of a Presidential alert option since the user cannot opt-out of it.

WEA testing and proficiency training requirements

NOAA strongly supports emergency alerting authorities and the proposed rule allowing for opt-in “State/Local WEA Tests”. However, the language in the proposed rule is too loose. The proposed rule says, “CMS Providers may provide their subscribers with the option to opt in to receive State/Local WEA Tests.” The word “may” should be replaced with “shall” to ensure that device users have the ability to opt-in. The opt-in option should be implemented in a consistent fashion across WEA-capable devices.

NOAA agrees with the FCC position in Section 3.C.1 that the 24-hour delivery window which currently applies to the Routine Monthly Test should not apply to State/Local WEA Tests.

Classification

NOAA shares FEMA’s concern that communities need the ability to share information about how to respond to an emergency. However, NOAA is concerned that the proposed addition of a new alert class called “Emergency Government Information” would cause confusion. Extensive ongoing outreach by all WEA stakeholders may be necessary to convey the difference between the Presidential Alert, Imminent Threat and “Emergency Government Information” classes.

NOAA believes that if such information is critical enough to warrant notification of people in the threat area, then the WEA message should be in the Imminent Threat classification or under a

new classification that takes on a name which more clearly describes the nature of the public safety information.

In Section 3.A.2, the FCC seeks comment on FEMA’s recommendation to create alert classes for “Federal Alerts (authorized by the President), AMBER Alerts, Severe Weather Alerts, and Local Threat Alerts, each of which would have its own unique attention signal and vibration cadence.” Similarly, section 3.D asks if “a greater range of consumers (would) decide not to disassociate completely from WEA if they had a more nuanced range of choices in how they could receive alerts”. NOAA would support these concepts if outcomes from accessibility/disability and sociological studies show these are effective techniques to improve the effectiveness of WEA.

NOAA understands that local public safety officials may activate WEA for NWS generated warnings, even for those in which the NWS doesn’t activate WEA. Local public safety officials know their communities best and societal pre-conditions, preparedness levels, rarity, or timing of an event may make a community particularly vulnerable to a given weather-related threat.

Character limit

NOAA fully supports an increase to 360 characters. However, the wording of the proposed rule is awkward and subject to misinterpretation. NOAA suggests the rule be as follows.

“A participating CMS provider must support WEA messages containing up to 360 characters of alphanumeric text. If, however, it is not technically feasible for a participating CMS provider to support a WEA message containing 360 characters, then the participating CMS provider must support a WEA message containing up to 90 characters of alphanumeric text. “

At a minimum, the NWS would construct WEA messages using a number of displayable characters comparable to that of traditional text messaging (e.g. 160 characters). The NWS would like to use a portion of the 360 characters for incorporation of hidden coded data which could be leveraged by the WEA application or third party applications to improve geographical targeting, generate graphics, and/or improve accessibility in ways which maximize the life-saving potential of WEA. See comments on Geographic Targeting and Content in WEA alerts, below, for details.

Remove prohibition of URLs

NOAA supports removal of the embedded reference prohibition. We believe that embedding a URL in the WEA message for weather and non-weather alerts could improve the effectiveness of WEA if properly implemented. Provision of additional information via URL may also be important to the disability community. By allowing for embedded URLs, alerting officials would have the ability to continually improve the life-saving information provided at the targeted link as social science and accessibility capabilities continue to advance.

Geographic Targeting

NOAA agrees with changing §10.450 to reflect that CMS Providers must geographically target to the greatest level of granularity (i.e. the polygon, when provided) as specified by the alert originator.

NOAA recognizes that cell broadcast geo-targeting is subject to overshoot “given the constraints of Participating CMS Provider infrastructure topology, propagation area, and other radio and network characteristics.” However, the NWS receives feedback from the general public and emergency managers expressing concern over WEA which are rendered on cell phones outside the NWS warning polygon. Given advancements in cell phone technology, NOAA believes that the granularity of geo-targeting should be improved. For example, the device could attempt to determine if it is inside the actual threat area before rendering the alert.

Content in WEA Alerts

NOAA believes WEA messages should include coded data which is hidden from display and made available to the WEA application as well as third party applications. Public safety would benefit from the already competitive market forces among third party alerting applications. These forces would drive usage of the WEA and CAP information to bring increasingly innovative alerting services to communities.

There may be concern that providing additional information to the recipient would delay protective action taking. However, post-storm assessments and social science studies suggest that many people don't take protective action until they've validated the alert information. Thus, proactively guiding the recipient to validating information may increase public response.

For example, the WEA message could include the identifier of the CAP message which activated WEA and/or the polygon vertices of the alert area. The WEA application or third party applications on the mobile device could use the identifier to obtain more information about the alert from the IPAWS, NWS, or other CAP server and then render critical life-saving information in textual, graphical, audio and/or disability-friendly formats as well as multiple languages. Another example would be using the polygon vertices to display a map of the threat area along with the device location.

NOAA believes that third party applications should not be allowed to pre-empt delivery or rendering of the original WEA.

Common audio attention signal

In section 3.F, the FCC asks if PSAs about WEA and EAS should be limited to those developed by FEMA. The NWS conducts extensive outreach from Weather Forecast Offices (WFOs) across the United States and its territories. This outreach includes interviews about WEA and EAS with television, radio, and electronic media. The NWS and other alerting authorities recognized by FEMA should be allowed to use the WEA or EAS Attention Signal in PSA and media interviews as long as they are clearly intended to educate the public about WEA or EAS and do so in a non-misleading manner.

WEA Prioritization

Rule changes may be necessary to ensure timely delivery of WEA messages. Ideally, data sessions would not preclude rendering of a WEA message. The NWS has been increasingly fielding questions from the general public regarding situations where some cell phones render a WEA while adjacent ones don't. We've been told by CMS Providers that usage of a cell phone as a personal hotspot constitutes a data session which precludes rendering of a WEA message.

Also, some smartphone applications consume data on an ongoing basis “in the background”. We speculate that this is also a contributor to the reported problems. As a first step, clarification from wireless industry is necessary regarding what constitutes a data session that precludes rendering of a WEA message.

Participating CMS Provider Election Process

NOAA fully agrees with the FCC opinion in paragraph 79 of Section 3.H which states that participating CMS Providers should continue to provide WEA service in a manner consistent with WEA rules, including any amendments which might be adopted.