



November 21, 2019

**VIA ELECTRONIC FILING**

Lisa Fowlkes, Chief  
Public Safety and Homeland Security Bureau  
Federal Communications Commission  
445 Twelfth Street, SW  
Washington, DC 20554

**Re: Ex Parte Presentation, *Improving Wireless Emergency Alerts and Community-Initiated Alerting*, PS Docket No. 15-91.**

Dear Chief Fowlkes,

The Wireless Emergency Alerts (“WEA”) system is one of our nation’s most effective emergency alerting tools for federal, state, and local alert originators. WEA is premised on the successful public-private partnership among alert originators, the Federal Emergency Management Agency (“FEMA”), and participating wireless providers. Since the system’s first launch in 2012, over 49,000 WEAs have been sent throughout the United States to warn and inform millions of wireless consumers about imminent threats (such as tornados, wildfires, and hurricanes), abducted children (AMBER alerts), and various other emergencies. As such, CTIA and its member companies support the Federal Communications Commission’s (“FCC” or “Commission”) efforts to enhance the WEA system through new features, such as expanded message content and enhanced geographic targeting.

Last year, the FCC set an ambitious goal to deploy enhanced geo-targeting within 18 months.<sup>1</sup> Implementing enhancements to the WEA system requires significant collaboration among participating wireless providers, equipment manufacturers, and FEMA. CTIA and its member companies are pleased with the substantial progress that has been made to deliver on the Commission’s directives to expand WEA message content and enhance geo-targeting capabilities. Given outstanding testing with FEMA’s Integrated Public Alert and Warning System (“IPAWS”) that is necessary to reliably complete the

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<sup>1</sup> See *Wireless Emergency Alerts; Amendments to Part 11 of the Commission’s Rules Regarding the Emergency Alert System*, PS Docket Nos. 15-91, 15-94, Second Report and Order and Second Order on Reconsideration, 33 FCC Rcd 1320 ¶14 (2018) (“*2018 WEA Order*”).



implementation of these new WEA features, CTIA encourages the Commission to accommodate a minimal period of at least 14 days beyond the November 30<sup>th</sup> deadline for service providers and FEMA to complete final testing necessary to ensure that new WEA capabilities are implemented reliably.<sup>2</sup> Further, as described below, CTIA encourages the Commission to acknowledge the current status of FEMA's IPAWS WEA implementation and take steps to ensure that all WEA system stakeholders, including CMS Providers, FEMA, and alert originators, are aware and take care to mitigate any potential risks to the WEA system.

CTIA's member companies have worked diligently since the Commission directed participating wireless providers to work with FEMA to enhance WEA by expanding character content minimums and supporting Spanish language and public safety test messages ("WEA 2.0") by May 1, 2019, as well as enhanced geo-targeting ("WEA 3.0") by November 30, 2019.<sup>3</sup> Wireless providers and equipment manufacturers have:

- Created and adopted new standards through ATIS and 3GPP;<sup>4</sup>
- Developed compliance test plans to test the C-Interface between the Federal Alert Gateway and the Commercial Mobile Service ("CMS") Provider Gateway Interface;
- Worked with equipment vendors to develop new devices (with chipsets, drivers, and software) necessary for enhanced geo-targeting;
- Integrated new interfaces into handsets and software; and
- Updated core networks to support the WEA system enhancements.

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<sup>2</sup> The Alliance for Telecommunications Industry Solutions ("ATIS") Best Practices highlight the "highly important" nature of adequate and thorough planning, testing, evaluation, and implementation of major network changes. See ATIS No. 12-10-0600, Industry Best Practices, [https://bp.atis.org/best-practice-detail/?bp\\_id=2761](https://bp.atis.org/best-practice-detail/?bp_id=2761) (last visited Nov. 19, 2019) (noting Network Operators and Service Providers should establish and document a process to plan, test, evaluate and implement major change activities in their network).

<sup>3</sup> There are two WEA enhancement efforts underway. The first (WEA 2.0) includes: (1) increasing the maximum Alert Message length from 90 to 360 characters; (2) support of Spanish-language Alert Messages; (3) requiring WEA-capable mobile devices to present WEA Alert Messages as soon as they are received; and (4) support for State/Local WEA tests. See *Wireless Emergency Alerts; Amendments to Part 11 of the Commission's Rules Regarding the Emergency Alert System*, PS Docket Nos. 15-91, 15-94, Report and Order and Further Notice of Proposed Rulemaking, 31 FCC Rcd 11112 (2016) at ¶85 ("2016 WEA Order"). The second (WEA 3.0) is focused on enhancing geo-targeting for WEA Alert Messages. See *2018 WEA Order*.

<sup>4</sup> See *New ATIS Standards Advance Geo-Targeting Capabilities of the Wireless Emergency Alerts System*, ATIS (May 23, 2019), <https://sites.atis.org/insights/new-atis-standards-advance-geo-targeting-capabilities-of-the-wireless-emergency-alerts-system/>.



Testing with FEMA’s IPAWS gateway is a critical and final step that is necessary to complete the implementation of new WEA features and to ensure the WEA system can reliably support the enhancements.<sup>5</sup> Recently, FEMA notified the Commission and wireless providers that testing with IPAWS is ready to begin the week of November 18<sup>th</sup>, which is a significant achievement in light of unexpected delays that FEMA’s staff has diligently worked to resolve.<sup>6</sup> FEMA also expressed their intention to conclude testing with participating CMS Providers by November 29<sup>th</sup> and launch the new platform over the Thanksgiving holiday in order to meet the Commission’s November 30<sup>th</sup> deadline. In prior filings, CTIA has noted that the end-to-end testing required to deploy WEA enhancements typically requires approximately six months.<sup>7</sup>

Wireless providers are working diligently and collaboratively with FEMA to expedite the testing and implementation of the connectivity as quickly as possible. However, the two-week testing period that FEMA has proposed—which would limit lab testing to as little as four hours per provider and test individual service providers sequentially—leaves inadequate time to ensure that the new WEA features are implemented without undue risk to the WEA system.<sup>8</sup> For this reason, CTIA strongly encourages the

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<sup>5</sup> See *Emergency Alert Testing Matters*, FCC (Oct.2, 2018), <https://www.fcc.gov/news-events/blog/2018/10/02/emergency-alert-testing-matters> (acknowledging that testing is an “essential part of ensuring that emergency alert systems work, both by validating operational readiness and by uncovering areas for improvement”).

<sup>6</sup> The Commission has acknowledged that FEMA’s IPAWS system was not available to support the WEA 2.0 enhancements when it issued a Public Notice on June 7, 2019 tolling the May 1, 2019 WEA 2.0 requirements until FEMA’s IPAWS gateway is available to fully support these WEA enhancements and further guidance could be provided by PSHSB. See *Public Safety and Homeland Security Bureau Announces Delay In Availability Of Certain Improvements to Wireless Emergency Alerts*, PS Docket Nos. 15-91, 15-94, Public Notice, DA 19-534 (rel. June 7, 2019); see also *Advisory Regarding May 1 Deadline for Improvements to Wireless Emergency Alerts and Guidance for State/Local Alert Originators*, PS Docket Nos. 15-91, 15-94, Public Notice, DA 19-358 (PSHSB Apr. 30, 2019) (providing guidance on IPAWS’ availability to support certain WEA enhancements and listing WEA 2.0 enhanced features including 360 character, Public Safety Messages, Spanish-language alerts, immediate presentation, and State/Local WEA tests) (“April WEA Advisory”); see also *Ex Parte* Presentation of CTIA, PS Docket Nos. 15-91, 15-94 (filed Apr. 24, 2019) (noting participating Commercial Mobile Service (CMS) Provider member companies have taken the necessary steps to meet the May 1, 2019 deadline, but cannot deploy the new WEA 2.0 capabilities until FEMA’s IPAWS has the capability in place to support and complete its required testing for these new features).

<sup>7</sup> See, e.g., *Ex Parte* Presentation of CTIA, PS Docket Nos. 15-91, 15-94 at 3 (filed Dec. 21, 2017). Indeed, the Commission had presumed that the deployment of 360-character alerting by May 1, 2019 would facilitate the testing and deployment of precise geo-targeting but recognized the need for further testing by providing six months after the May 1, 2019 WEA 2.0 deployment deadline to support enhanced geo-targeting by November 30, 2019. See *2018 WEA Order* ¶15. Further, the initial launch of WEA 1.0 entailed a 60-day period for implementation. See 47 C.F.R. §10.260 (establishing precedent for a 60-day notice following an announcement that the Gateway system is operational and capable of delivering emergency alerts).

<sup>8</sup> Notably, FEMA’s proposed testing and deployment timeframe includes the Thanksgiving holiday during which changes to wireless providers’ networks are typically prohibited to minimize risks of service disruptions during periods of high usage, particularly in relation to the widely recognized retail sales days of Black-Friday and Cyber-Monday. See *Public Safety and*



Commission to accommodate a minimum of 14 additional days for FEMA and participating CMS Providers to complete testing.

Further, it is important for the Commission to recognize that FEMA has indicated the upcoming implementation of IPAWS WEA system update will not include all WEA 3.0 features, including the verification that alert message polygons adhere to no more than 10/100 vertices.<sup>9</sup> Until FEMA has addressed this issue, there is the potential that non-conforming WEA messages will be delivered to the CMS Providers' networks from IPAWS, which in turn may prevent CMS Providers from transmitting these WEA messages. CMS Providers will nonetheless enable FEMA's current implementation of the IPAWS WEA software, but the Commission should encourage FEMA to educate alert originators and their vendors of this limitation and have a mechanism to inform alert originators when such messages do not adhere to the 10/100 vertices parameter.

As Chairman Pai has noted “[t]he American people want, expect, and deserve the best possible public safety services—including the most precise targeting available for wireless alerts.”<sup>10</sup> CTIA and its member companies appreciate Chairman Pai's dedication to this issue and are very pleased with the progress that wireless providers and FEMA have made on delivering new WEA features. A minimal extension of the upcoming deadline will provide sufficient opportunity to complete the testing necessary to ensure that the WEA system can maintain the same level of reliability that alert originators and the public have come to expect. Further, by acknowledging the current status of FEMA's IPAWS WEA implementation, the Commission can ensure that all WEA system stakeholders, including CMS Providers, FEMA, and alert originators, are aware and take care to mitigate any potential risks to the WEA system.

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*Homeland Security Bureau Encourages Communications Service Providers to Implement Important Network Reliability Practices*, Public Notice, DA 19-1039 (rel. Oct. 15, 2019) (“Network operators and service providers should perform work on in-service equipment during maintenance windows (thus during low traffic periods). These entities may wish to implement this practice, especially when making network configuration changes or scheduling procedures that could affect service to a significant number of subscribers.”).

<sup>9</sup> The 2018 WEA Order specified that FEMA's IPAWS will only accept targeted polygons with up to 100 vertices. See *2018 WEA Order* at ¶18 (“FEMA states that the IPAWS platform will only accept targeting polygons with up to 100 vertices, and that it will work with alerting authorities to encourage them to use the polygon with the fewest vertices adequate to describe the intended target area and to encourage discipline with regard to vertex coordinate precision.”) This requirement was implemented in the ATIS Wireless Emergency Alert 3.0 Federal Alert Gateway to CMSP Gateway Interface Specification. See *Wireless Emergency Alert 3.0 Federal Alert Gateway to CMSP Gateway Interface Specification*, ATIS-07000037.v002, Section 6.1.1 (limiting vertices to a maximum of 100 and polygons to a maximum of 10 and requiring an error message be sent from the CMSP gateway back to FEMA if these values were exceeded).

<sup>10</sup> See *Chairman Pai Calls for Continued Progress in Improving Accuracy of Wireless Emergency Alerts*, FCC (rel. Feb. 6, 2019), <https://docs.fcc.gov/public/attachments/DOC-356092A1.pdf>.



Pursuant to Section 1.1206 of the Commission's rules, a copy of this letter is being filed in ECFS. Please do not hesitate to contact the undersigned with any questions.

Sincerely,

*/s/ Matthew Gerst*

Matthew Gerst  
Vice President, Regulatory Affairs

cc: Chairman Ajit Pai  
Commissioner Michael O'Rielly  
Commissioner Brendan Carr  
Commissioner Jessica Rosenworcel  
Commissioner Geoffrey Starks  
Zenji Nakazawa  
Erin McGrath  
Will Adams  
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