

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

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

**REPLY COMMENTS OF CTIA**

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**I. INTRODUCTION AND SUMMARY.**

CTIA hereby files these reply comments in response to the Commission’s Further Notice of Proposed Rulemaking (“*FNPRM*”) seeking comment on proposed rules pertaining to the Wireless Emergency Alerts (“WEA”) program. The wireless industry has worked diligently to develop the WEA system through a voluntary and collaborative partnership with the Commission, Federal Emergency Management Agency (“FEMA”), and alert originators. The result has been an alerting system that provides countless benefits to the public. CTIA and the wireless industry wish to continue their commitment to enhancing public safety through voluntary participation in the WEA program and are dedicated to assisting in the development and deployment of feasible improvements to WEA. The record in this proceeding, however, demonstrates a consensus that several of the Commission’s proposed rules pose technical and economic challenges that render implementation infeasible or premature.

The hallmark of the WEA process has been to develop consensus-based solutions that are practical and deployable by the wireless industry rather than subject affected stakeholders to aspirational requirements that have not been rigorously vetted or demonstrated to be achievable

from an operational standpoint. To maintain participation in the voluntary WEA system and ensure its continued success, the Commission should:

- Utilize the successful framework that allows for reasonable and technically feasible enhancements to WEA based on consensus recommendations of stakeholder bodies;
- Defer requirements for multimedia content in Alert Messages until after feasibility testing is complete;
- Not attempt to utilize the WEA system to deliver latency-dependent earthquake-related Alert Messages;
- Not provide any mandate to preserve Alert Messages via a universal storage mechanism;
- Refrain from adopting requirements for multilingual alert support until after the implementation of Spanish-language Alerts; and
- Not attempt to implement requirements for a many-to-one functionality in the WEA system that requires a return communication to the alert originator due to technical infeasibility.

WEA has been a highly effective system because it has been developed through a consensus-based methodology that ensures that new capabilities can be employed in a seamless fashion. Participating CMS Providers have been willing participants in this program, which has been successful due to the development of technically and economically feasible requirements. CTIA asks that the Commission avoid jeopardizing participation by CMS Providers and exercise caution as it considers applying new requirements on the WEA system.

## **II. THE RECORD DEMONSTRATES SIGNIFICANT CHALLENGES ASSOCIATED WITH THE COMMISSION'S PROPOSALS.**

While strongly supportive of efforts to enhance and improve the WEA system, commenters suggest that many of the Commission's proposed rules either require additional study or could lead to unintended consequences that undermine the functioning of WEA.

AT&T, for example, notes that “imposing, and enforcing, unrealistic duties at exorbitant cost will [ ] jeopardize future voluntary commitments.”<sup>1</sup> Similarly, T-Mobile is concerned that “unrealistic technology mandates, tight timeframes, and potentially high compliance costs run the risk of undermining the program.”<sup>2</sup> Microsoft asserts that the Commission’s proposals raise “technical issues that should be studied further or considered by standards bodies before the Commission can determine their feasibility or whether it would be in the public interest to include them as WEA requirements.”<sup>3</sup> Verizon argues that the Commission should “defer considering other capability mandates until FEMA, the Commission’s Communications Security, Reliability and Interoperability Council (“CSRIC”) V and other stakeholder efforts have made enough progress to enable meaningful comment.”<sup>4</sup> Meanwhile, the Alliance for Telecommunications Industry Solutions (“ATIS”) suggests that “the Commission task ATIS, the industry, and FEMA with developing a roadmap for the deployment of WEA functionality that would consider the existing work efforts on this matter and other industry priorities.”<sup>5</sup>

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<sup>1</sup> Comments of AT&T Services, PS Docket Nos. 15-91 and 15-94, at 2 (filed Dec. 9, 2016) (“AT&T Comments”).

<sup>2</sup> Comments of T-Mobile, PS Docket Nos. 15-91 and 15-94, at 2 (rel. Dec. 9, 2016) (“T-Mobile Comments”).

<sup>3</sup> Comments of Microsoft Corporation, PS Docket Nos. 15-91 and 15-94, at 8 (filed Dec. 9, 2016) (“Microsoft Comments”).

<sup>4</sup> Comments of Verizon, PS Docket Nos. 15-91 and 15-94, at 6 (filed Dec. 9, 2016) (“Verizon Comments”).

<sup>5</sup> Comments of ATIS, PS Docket Nos. 15-91 and 15-94, at 9 (filed Dec. 9, 2016) (“ATIS Comments”).

As previously noted by CTIA in its comments, the WEA system has been successful due to the collaborative efforts of FEMA, alert originators, the FCC, and the wireless industry.<sup>6</sup> This framework has led to the development of a voluntary program that delivers extensive benefits to the public while remaining technically feasible.<sup>7</sup> Stakeholder bodies such as the ATIS and the CSRIC have worked with CMS Providers, alert originators, and public safety entities to advance and enhance the existing system in a realistic and achievable fashion. CTIA recommends the Commission maintain the same approach that has allowed for a robust delivery of life-saving alerts to the public. Allowing the continuation of a consensus-based approach will permit improvements to WEA in an effective and efficient manner that delivers attainable progress without threatening participation by affected CMS Providers.

### **III. PARTIES SUPPORTING THE COMMISSION’S WEA PROPOSALS FAIL TO ADDRESS THE ASSOCIATED IMPLEMENTATION AND NETWORK ISSUES.**

A number of parties in the record have supported specific improvements to the WEA system. Missing from this general support, however, is any record evidence that these new functionalities are deployable by the existing WEA infrastructure or are economically achievable. These proposals include:

- Incorporation of multimedia capabilities in WEA,<sup>8</sup>

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<sup>6</sup> Comments of CTIA, PS Docket Nos. 15-91 and 15-94, at 1 (filed Dec. 9, 2016) (“CTIA Comments”).

<sup>7</sup> *Id.*

<sup>8</sup> Comments of NYCEM, PS Docket Nos. 15-91 and 15-94, at 7-10 (filed Dec. 9, 2016) (“NYCEM Comments”); Comments of the Department of Emergency Management, Nassau County, PS Docket Nos. 15-91 and 15-94, at 1 (filed Dec. 9, 2016) (“Nassau County Comments”); Comments of the Department of Emergency Management, City and County of San Francisco, PS Docket Nos. 15-91 and 15-94, at 1 (filed Dec. 9, 2016) (“San Francisco Comments”); Comments of APCO, PS Docket Nos. 15-91 and 15-94, at 3 (filed Dec. 9, 2016) (“APCO Comments”).

- Delivery of earthquake alerts in three seconds or less using the WEA system,<sup>9</sup>
- Promulgation of alert message preservation requirements,<sup>10</sup>
- Deployment of multilingual WEA messages,<sup>11</sup> and
- Creation of a many-to-one functionality.<sup>12</sup>

CTIA addresses each of these issues separately below, but urges the Commission to reject proposals that are guided by aspiration – however well-intended – rather than practical considerations of technological and economic feasibility.

***Multimedia Alerts.*** The Commission proposes to require support for certain multimedia content, including thumbnail-sized images and hazard symbols, in Public Safety Messages on 4G LTE and future networks.<sup>13</sup> Commenters supporting this proposal note some limited potential benefits to implementation, but fail to address the efficacy of deploying this capability.<sup>14</sup> Indeed, other commenters explain that the record does not demonstrate a reason to mandate multimedia alerting. As AT&T notes, there is a “thin record of the public benefits of multimedia alerting....”<sup>15</sup> Moreover, multimedia alerting will be extremely costly and require the development of technology solely to support multimedia WEA alerts.<sup>16</sup> Verizon and T-Mobile

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<sup>9</sup> NYCEM Comments at 4; San Francisco Comments at 1.

<sup>10</sup> APCO Comments at 2; NYCEM Comments at 3-4.

<sup>11</sup> NYCEM Comments at 10-11; San Francisco Comments at 2; Nassau County Comments at 1.

<sup>12</sup> NYCEM Comments at 5-7; San Francisco Comments at 2; Nassau County Comments at 1.

<sup>13</sup> *FNPRM* ¶ 124.

<sup>14</sup> NYCEM Comments at 7-10; Nassau County Comments at 1; San Francisco Comments at 1; APCO Comments at 3.

<sup>15</sup> AT&T Comments at 14.

<sup>16</sup> *Id.*

also note that alert originators should be required to demonstrate that they will have the capability to generate multimedia content in a proper format for delivery to mobile devices prior to any WEA requirement.<sup>17</sup> As CTIA explained in its comments, this necessitates a period for feasibility testing and the Commission should, at minimum, decline to mandate multimedia alerts until feasibility testing is complete.<sup>18</sup> Additionally, wireless providers note that commercial broadcasting technologies – *i.e.*, evolved Multimedia Broadcast Multicast Service – capable of handling multimedia without adversely affecting network operations have not been deployed, making this proposed requirement technologically premature.<sup>19</sup>

***Earthquake Alert Delivery.*** The Commission proposes to require Participating CMS Providers to deliver earthquake-related Alert Messages to the public in fewer than three seconds.<sup>20</sup> Although certain commenters have suggested support for this Commission proposal,<sup>21</sup> the feasibility of such a latency-dependent requirement has been strongly questioned by several commenters involved in deployment of such a capability.<sup>22</sup> Indeed, commenters generally note that the WEA has not been designed for earthquake alerts<sup>23</sup> and it is impossible to

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<sup>17</sup> *Id.* at 15.

<sup>18</sup> CTIA Comments at 13.

<sup>19</sup> *Id.*; Verizon Comments at 4; T-Mobile Comments at 9.

<sup>20</sup> *FNPRM* ¶ 120.

<sup>21</sup> NYCEM Comments at 4; San Francisco Comments at 1.

<sup>22</sup> AT&T Comments at 3; Verizon Comments at 7; T-Mobile Comments at 5; ATIS Comments at 5.

<sup>23</sup> T-Mobile Comments at 5 (“In fact, the Commission already has uncontroverted evidence that WEA is *not* a suitable platform for earthquake alerts.”); Verizon Comments at 3 (“But the WEA system is not even the appropriate platform to deliver such alerts...); ATIS Comments at 4 (“ATIS strongly urges the Commission not to adopt requirements related to earthquake-related



mandate performance rules for a “non-existent alert system” until it has been developed.<sup>24</sup>

Moreover, the record shows that WEA *may* be acceptable for less time-sensitive earthquake alert messages only after an initial non-WEA early alert delivered through some other architecture designed for earthquake warnings.<sup>25</sup>

***Alert Message Preservation.*** The Commission proposes to require WEA-capable mobile devices to preserve Alert Messages in an easily accessible format and location until the Alert Message expires.<sup>26</sup> While two commenters support the Commission proposal,<sup>27</sup> there is no recognition that Alert Message storage is not managed by CMS Providers. Indeed, one commenter suggests that Alert Messages should be stored until deleted by the consumer.<sup>28</sup> However, as the record demonstrates, retention of Alert Messages is not a CMS Provider function as device storage is managed by manufacturers of those products and is outside the purview of CMS Providers.<sup>29</sup> Furthermore, other commenters argue that mandating a uniform storage mechanism for alert preservation would lessen the uniqueness of mobile devices, dampen innovation, and hamstring the evolution of a feature over time.<sup>30</sup> Finally, as commenters note,

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messages as crucial work on this issue continues by the industry and other key stakeholders, including public and private sector seismology experts.”).

<sup>24</sup> AT&T Comments at 7.

<sup>25</sup> T-Mobile Comments at 7; Verizon Comments at 10; ATIS Comments at 5.

<sup>26</sup> *FNPRM* ¶ 115.

<sup>27</sup> APCO Comments at 2; NYCEM Comments at 3-4.

<sup>28</sup> NYCEM Comments at 3.

<sup>29</sup> AT&T Comments at 6.

<sup>30</sup> Microsoft Comments at 5; ATIS Comments at 4.

mobile device capabilities and requirements are best established through industry standards efforts, rather than through Commission mandates.<sup>31</sup>

***Multilingual Alert Support.*** The Commission seeks comment on the potential benefits of requiring Participating CMS Providers to support Alert Messages in languages other than English and Spanish.<sup>32</sup> Parties supporting this proposal fail to discuss the practical implementation difficulties associated with it and focus instead on potential benefits that may or may not be achievable.<sup>33</sup> With no criticism of the aspirational goal, the record is replete with indications that mandating multilingual language support would be premature at this time. Commenters have noted that standards bodies need to establish how a device determines in which language an alert should be displayed and the Commission should recognize that this will create a delay in displaying an Alert Message.<sup>34</sup> Depending on what languages are supported, commenters suggest that a switch in the character set for the new language could significantly impact the maximum number of display characters for an alert.<sup>35</sup> Commenters also note that the technological feasibility of such a requirement should be evaluated only after recently adopted WEA changes (to allow for Spanish-language alerts) have been implemented.<sup>36</sup>

***Many-To-One Communication.*** The Commission seeks comment on the potential for WEA to serve as a secondary messaging tool for emergency managers during disaster relief

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<sup>31</sup> AT&T Comments at 6.

<sup>32</sup> *FNPRM* ¶ 134.

<sup>33</sup> NYCEM Comments at 10-11; San Francisco Comments at 2; Nassau County Comments at 1.

<sup>34</sup> Microsoft Comments at 9.

<sup>35</sup> ATIS Comments at 7-8; T-Mobile Comments at 10.

<sup>36</sup> T-Mobile Comments at 9.

efforts.<sup>37</sup> Entities who support this proposal suggest it will be helpful during crises and commit to continuing to work with stakeholders to develop the capability.<sup>38</sup> However, the record demonstrates that WEA is not an appropriate mechanism to provide this functionality as there is no technical capability for information to be communicated “back” to the originator.<sup>39</sup> Commenters note that creation of such functionality would duplicate what is already available to the public through calls or texts to 911 during crisis situations while requiring significant development and implementation costs.<sup>40</sup> Furthermore, commenters assert that CSRIC V recently issued a number of recommendations that focused on enhancing FEMA’s IPAWS functions and other non-regulatory measures independent of the WEA program – which should be the appropriate forum for reviewing the dissemination of information in this fashion.<sup>41</sup> CTIA encourages the Commission, as suggested by the majority of commenters, to await the results of the CSRIC V activity prior to attempting to adopt any requirements associated with many-to-one communications.

In sum, the few commenters that have expressed support for the Commission’s infeasible and duplicative proposals have provided no evidence that they could be implemented in a reasonable manner. Instead, the record is replete with data and information highlighting the significant issues associated with these proposals that must be addressed by the appropriate stakeholder groups (such as ATIS and CSRIC) prior to any mandates by the Commission. CTIA

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<sup>37</sup> *FNPRM* ¶ 124.

<sup>38</sup> NYCEM Comments at 5-7; San Francisco Comments at 2; Nassau County Comments at 1.

<sup>39</sup> ATIS Comments at 6; T-Mobile Comments at 7; AT&T Comments at 10.

<sup>40</sup> T-Mobile Comments at 7.

<sup>41</sup> Verizon Comments at 5.

recommends that prior to moving forward with any of these proposals, the feasibility of each proposal, both from a technical and economic standpoint, should be reviewed and vetted. Only then can all affected stakeholders be certain that these potential enhancements to the WEA are achievable.

#### **IV. CONCLUSION.**

CTIA supports continued improvements to the WEA system that are based on consensus, collaborative efforts involving all interested stakeholders. However, many of the *FNPRM* proposals have not been demonstrated to be feasible or studied in any fashion and risk the loss of voluntary participation in the voluntary WEA program. The Commission should continue with its tradition of engaging all stakeholders prior to adoption of WEA requirements so as to avoid an unfortunate breakdown of the voluntary system.

Respectfully Submitted

*/s/ Brian M. Josef*

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