

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

In the Matter of	)	
	)	
Improving Wireless Emergency Alerts and	)	PS Docket No. 15-91
Community-Initiated Alerting	)	

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**REPLY COMMENTS OF THE HARRIS COUNTY OFFICE  
OF HOMELAND SECURITY & EMERGENCY MANAGEMENT**

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## **Introduction**

The Harris County Office of Homeland Security & Emergency Management respectfully offers reply comments on Proceeding No. 15-91.

Harris County, Texas is the third largest county by population in the United States. Our nearly 4.5 million residents live in one of the nation's most dynamic threat environments. Our geography and climate mean that we are exposed to natural threats like flooding, hurricanes, and wildfires. Our vast petrochemical and transportation networks open the door to a myriad of man-made threats, including terrorism.

For more than a decade, we have been at the forefront advocating for better communications technologies and stronger local partnerships among public information officers. Our need for clear, authoritative emergency information is great and our commitment to delivering it runs deep.

This reply is intended to address the comments made by AT&T, Verizon and Sprint. This is in no way meant to slight our colleagues in the emergency management community or any others who have taken the time to express their opinions on the issues at hand. Rather we recognize that they shoulder a significant responsibility for developing and maintaining the technical capabilities of the WEA system.

## **Enhancements Intended to Improve the Effectiveness of WEA Message Content**

### **A. Increasing Maximum WEA Character Length**

HCOHSEM heartily endorses the propose increase in character length from 90 to 360 characters.

Both AT&T and Verizon expressed concern that the change could be successfully implemented in the one year following rule adoption. Given the changes required in both the IPAWS interface by FEMA, the carriers, and the user interface systems, this may be a valid concern and we would support additional time for deployment. AT&T has suggested that 24-30 months would be required and we feel the change must be implemented sooner. We agree with Sprint that “the implementation deadline should be no sooner than one year after standards are completed plus six months after FEMA and DHS have certified that the Federal Alert Gateway is in compliance with the standard” (Sprint, pg.4).

All three major wireless carriers have argued for a dual broadcast standard where newer, 4G and greater networks broadcast the 360 character messages with older “legacy” networks transmitting only to the 90 character limit. Given the current and near future technological capabilities of the various service providers, we agree that this is the best stance for the FCC to take.

### **B. Creation of the Category “Emergency Government Information”**

The proposed amendment of Rule §10.280 create a new category of alerts, Emergency Government Information (EGI), seems appropriate to us. The sentiment expressed below by AT&T is consistent with the intent expressed in the recommendations from CSRIC IV.

Emergency Government Information should be a standalone message generated from credentialed, authorized, and trained alert originators, but directly related to a WEA Alert. Because emergencies are local, it should be left to the local emergency management authorities to determine whether an “Emergency Government Information” is related to an imminent threat to life and property. Trying to codify a strict definition will only serve to limit the effectiveness of this tool. There should be no conditions set in FCC rules, or in FEMA policy. That said, best practices should be developed with guidelines on what constitutes an

Emergency Government Information message and how it relates to an imminent threat. (AT&T, pg. 9)

C. Content in WEA Messages

We find arguments against the inclusion of maps, URLs, and phone numbers to be unconvincing. While there is no doubt that there are technical challenges inherent in expanded content, these items add context and additional meaning to messages.

Quite frankly, it seems premature to quantify the capabilities of future communications systems in such absolute terms. If we have learned nothing in the past two decades, we should have learned that technological advancement frequently exceeds what we anticipate. As AT&T, Verizon, Sprint, and others have cautioned that future technology may not be able to meet the demands placed on the system by these new mandates, our question is: Why not? Providers have the opportunity, now, to plan for the additional system capacity necessary to include phone numbers, graphics, and URLs in WEA messages without undue stress on the data network. Certainly cost is a legitimate issue but the wireless industry has been singularly successful in monetizing innovation in the past and that is one trend that seems likely to continue.

Concerns that permitting the inclusion of URLs could jeopardize network security are not unjustified. However, concise messaging demands that recipients be able to access more information than can be transmitted in even a 360 character message. Arguments that the data network could well be stressed are also valid. But in both cases, we would say that a way must be found to make the technological accommodations necessary.

In addition, it would seem prudent to begin taking advantage of some of the technology that is present on nearly all mobile devices to facilitate delivery of visual information. Applications such as Apple Maps and Google Maps are pre-loaded on nearly every mobile device produced. It would seem only a small stretch, particularly with open source platforms like Android, to begin harnessing this technology to enhance mobile alerting. This approach has the potential to spur innovation that would have the desirable effect of driving down the cost of developing new technology.

There must be a recognition, as was pointed out repeatedly by the telecommunication providers, that WEA was intended to be a “bell ringer” that prompts immediate action upon receipt. AT&T, in their comment, suggests that the goal is “make WEA service easy to use in the support of public safety and not to give users reasons to opt out because of confusing messages” (AT&T, pg. 5). We could not agree more. But we would caution that messages that are insufficient or difficult to decipher can have catastrophic negative impact. Maps or links to additional information can add context and meaning to otherwise dry, or repetitive, material. They can make confusing instructions easier to understand. Because individuals choose who to receive messages from based on their previous experiences, originators must have the tools to establish and maintain public credibility.

That there may be difficulties in meeting a 30 month deadline for implementing these capabilities is understandable. We would argue, however, that the FCC should be prepared to offer some flexibility on the timeline if expanded capabilities is the net result.

On the issue of multimedia inclusion, we are inclined to accept that current and even near-future technologies are unlikely to be able to support this. This should not preclude carriers and software developers from working towards superior compression methods that will make this possible.

#### D. Multilingual WEA Messages

We endorse and applaud the recognition by Verizon Wireless that translation of WEA messages into Spanish is feasible and in the public interest. We are equally dismayed by the attitude expressed by Sprint that “Carriers are not involved in composing the content of WEA alerts and there should be no expectation that carriers would be involved in translating messages” (Sprint, pg.8) and by AT&T, “language translation is not and should not be a function of the CMSP infrastructure or mobile devices” (AT&T, pg. 17).

Clearly there are technical hurdles inherent in the translation of WEA messages into non-English-languages, particularly character driven languages such as Mandarin Chinese and Vietnamese. But, as Sprint points out, “most smartphones already have the capability of device-based translation” (Sprint, pg.8). If this is true, then the issue of technical insufficiency is moot. If the solution is that the carriers insist that smartphone manufacturers work to develop the means to automatically translate incoming CAP messages, so be it. As nearly all carriers have now passed the full cost of devices on to the consumer, the issue of cost is similarly moot.

### **WEA Geo-Targeting**

We accept the argument made by AT&T, Sprint, and Verizon that the NPRM proposal to transmit geo-coded messages to an “area not larger than the specified geocode, circle, or polygon” (Verizon, pg. 11), however well intentioned, has the potential to exclude some individuals in an alerting area. We concur with Sprint that the last sentence of proposed rule §10.450 should be changed to state: “A Participating CMS Provider shall transmit an Alert Message to an area that at least closely approximates the target area, but in any case does not exceed the propagation area of a single transmission site” (Sprint, pg.9)

The long-term success of WEA as a publicly accepted alerting tool depends on the development of highly accurate geo-targeting. We support efforts to build technology that allows targeting to as small an area as possible.

In counterpoint to their concerns about “undershooting” an at risk populace, AT&T points out that television stations routinely alert populations not at risk because their broadcast radius spans several counties. In essence, it is better to alert too many than too few.

In our view, however, the goal should be alerting that reaches the at-risk population and de minimis others who may be static or in motion near the target area. Alerts that bleeds slightly beyond the intended audience have life-saving potential as they may cause changes in planned travel or spur protective actions for others who may not have been thought of at-risk.

### **Conclusion**

HCOHSEM stands in favor of all proposed rule changes excepting portions of the mandate on geo-targeting. In order to be effective over the long term, IPAWS and WEA must be living concepts that can adapting to changing emergency public information needs. While we recognize that every new capability presents technical challenges, the public interest is best served by

moving forward to make the system more flexible for originators and authoritative for message recipients.

AT&T warns that “WEA should not be overburdened with an expanded mission for which it was not created” (AT&T, pg. 24). While caution is always advisable, we should remember that WEA is a very young system and it was conceived prior to the development of many technologies we now take for granted. It is only natural that end-users will see greater potential for a tool once they have had a chance to use it. We should not resist calls for innovation based on an ancient intent. Rather we should embrace individual proposals that further and improve WEA’s capabilities consistent with that intent.