

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

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

COMMENTS OF HYPER-REACH/SAM ASHER COMPUTING SERVICES
January 13, 2016

Sam Asher Computing Services, Inc, dba Hyper-Reach is a major provider of mass emergency notification services for county and municipal public safety, emergency management and other public agencies. We serve state, county, and local governments from New York to Washington state, California to Florida and many states in between.

Among emergency alert service providers, Hyper-Reach is unique in its promotion of the IPAWS system. More than 2/3rds of eligible Hyper-Reach clients are approved Alerting Authorities, more than twice the proportion of the next largest among major emergency alert service vendors.

As background for our comments, we would like to review some elements of the existing use of emergency alert systems in the United States, using data from our market intelligence database.

1) Most county and many municipal governments in the US have access to a commercial mass emergency notification service (MENS), which typically provides the ability to deliver a pre-recorded audio message as well as a text message, and send that message to geographically selected households using the PSTN, SMS/text messaging, email and social media. Most of the vendors providing these services have integrated IPAWS and WEA into their service offerings. Many of the comments that the Commission has received for this NPRM are from local public agencies who use such systems.

2) We estimate that almost 1,900 counties and more than 2,500 municipalities have access to such a MENS system. Collectively we believe these systems cover more than 80% of the US population.

3) The primary method of message delivery for the vast majority of these systems is pre-recorded voice messages delivered by PSTN, otherwise known as "reverse 911".

4) The effectiveness of voice message delivery via PSTN has been steadily eroded as consumers have shifted from landline telephones to mobile phones, a phenomenon the commission is well aware of. Hyper-Reach projects that by 2020, less than half of the US population will be reachable by a landline telephone call.

5) While almost every provider of mass emergency notification has a method for citizen subscription to emergency alerts, these are typically opt-in systems, which rarely exceed a subscription rate of 10%. Indeed, we are aware of some vendors whose published statistics imply that their citizen subscription rate is closer to 2%.

6) While “reverse 911” telephone messages serve a vital function, there are significant advantages to WEA messages when compared to “reverse 911”, including:

- WEA messages are broadcast, rather than being delivered in a serial fashion, and therefore theoretically capable of much faster delivery than either telephone calls or SMS/text;
- WEA message delivery is based on the location of the handset, and therefore potentially able to deliver messages that are more relevant to the location of the citizen receiving those messages;
- Most importantly, because WEA messages do not depend on subscriber opt-in, coverage is potentially much higher than for other available emergency alert message delivery mechanism;
- As evidence of the increase in effectiveness, we note the example of Australia, which has adopted the use of “location-based services” (“LBS”) for the delivery of emergency alerts. Although different in the specifics, LBS services share these characteristics with IPAWS/WEA: (1) the message is delivered to the subscriber based on the handset’s location and (2) the process automatically includes all subscribers. At least one study comparing the effectiveness of alerts delivered by LBS concluded that the LBS-based alerts had a delivery success rate of 94% compared with an overall delivery rate - including technology similar to “reverse 911” - of 64%. If those results held for the US, this suggests that IPAWS/WEA could be as much as 50% more effective than existing “reverse 911” services.

With these points in mind, here are our comments with regard to some of the Commission’s proposals:

1....extend the character limit ...to deliver and process 360-character messages, ...while continuing to allow the delivery of 90-character messages on 2G and 3G networks and devices.

Hyper-Reach strongly supports the expansion of the number of characters that can be used in a wireless emergency alert. A sample of recent messages sent via the Hyper-Reach system showed a minimum of 84 characters and a maximum of 759 with an average of 252. We believe that local emergency management and public safety people have the expertise to self-limit the number of characters used to

avoid confusion and apathy. We suggest that the FCC allow the maximum technically feasible number of characters, and note the START report's suggestion of 1000+ characters. While we would encourage the Commission to go beyond the 360 character limit proposed, we believe 360 characters is sufficient for the vast majority of messages, especially if the proposed rule to include a URL is adopted.

Hyper-Reach discourages allowing legacy carriers to use 90 character messages, since we believe that the technical requirements associated with this scheme would be too difficult for most alerting originators to support.

2. ...create an additional class of WEA message, "Emergency Government Information." We propose to define an Emergency Government Information message as an essential public safety advisory that prescribes one or more actions likely to save lives and/or safeguard property during an emergency.

Hyper-Reach supports the additional "Emergency Government Information" class of WEA messages proposed by the commission. We would encourage the Commission to clarify that permitted messages include those designed to prevent sickness and promote public safety in general, in addition to saving lives and safeguarding property. We believe that the new class of WEA messages will encourage public safety officials to use the IPAWS system more frequently.

3. ...remove Section 10.440 from our Part 10 WEA rules, in order to allow embedded phone numbers and URLs to be included in WEA messages...

Hyper-Reach strongly supports the ability for alert originators to include telephone numbers and URLs in their WEA messages. Hyper-Reach has already developed the ability for our clients to create a unique webpage for each emergency alert and to include images and extended text on that webpage, and we know of another vendor who has done this as well. By allowing the use of embedded URLs, the Commission will enable alert originators to include such relevant information as maps outlining the areas affected by an emergency, and extended text that would better conform to the start study recommendations. In addition, it should be obvious that enabling visual information is especially important for situations such as Amber alerts and other missing persons.

4....require that Participating CMS Providers must transmit any alert message that is specified by a geocode, circle, or polygon to a target area not larger than the specified geocode, circle, or polygon. If, however, the Participating CMS Provider cannot broadcast the alert to an area that accurately matches the target area, we propose that a Participating CMS Provider may transmit an Alert Message to an area that closely approximates the target area, but in any case not exceeding the propagation area of a single transmission site.

Hyper-Reach supports action by the commission that will encourage more precise selection of the audience for a given alert message, however, to the extent that such precision may incur a major infrastructural cost, we believe that this should be driven with more input from the CMS providers. Most mass emergency notification service providers already offer their clients the ability to create very precise and detailed geographic selections using map interfaces and other geographic selection tools. The ability to use these tools for WEA messages will reduce confusion among the public, increase the relevance of

the delivered message, and reduce the probability of citizen opt out (because they were selected for an irrelevant message).

5... require Participating CMS Providers to ensure their systems support the receipt of "State/Local WEA Tests" from the Federal Alert Gateway Administrator....

Hyper-Reach supports any methodology that enables state and local message originators to test their ability to send messages appropriately. We would encourage the Commission to create at least two test message methods. One of these should be limited to delivery only as far as the selected CMS towers, while the other would deliver the message all the way to the citizen's device. For example, one test code could be designated that resulted in a message reaching the tower, but not actually being broadcast, and a second, different, test code would result in an actual broadcast. Providing a method that allows for testing without disturbing citizens would enable local and state message originators to test their systems frequently without disturbing citizens as frequently. We note that some local public safety officials test elements of their emergency alert systems at least monthly.

6. ...require Participating CMS Provider Alert Gateways to provide the logging functionality recommended by the CMSAAC Report 179 Specifically, we propose to adopt a new Section 10.320(g) that would require Participating CMS Provider Alert Gateways to:

Provide a mechanism to log messages with time stamps that verify when messages are received, and when the messages are acknowledged or rejected by the Participating CMS Provider Alert Gateway, and if an alert is rejected, to provide the specific error code generated by the rejection;

Maintain an online log of active and cancelled alert messages for 90 days, and maintain archived logs for at least 36 months that should be accessible by Participating CMS Providers for testing and troubleshooting purposes; and

Generate monthly system and performance statistics reports based on category of alert, alert originator, alert area, and other alerting attributes

In general, Hyper-Reach supports any mechanisms that allow local and state emergency management and public safety alert originators to have more confidence in their ability to send WEA messages and to measure their reach, delivery timeframes and other parameters that are relevant to message effectiveness.

However, we feel it is not sufficient to require the providers to maintain the logs without creating a common, interoperable protocol for authorized users to retrieve that information. Therefore, Hyper-Reach would recommend that this proposed change be expanded to include the creation of a common methodology that will work with every CMS provider, for authorized alerting authorities with credentials to retrieve logging information.

We are aware of local agency personnel - including some of our clients - who have expressed their reluctance to use IPAWS/WEA because of the uncertainty of the timing and effectiveness of message

delivery. Providing both testing and logging to enable these personnel to measure the results of IPAWS/WEA will help to overcome these concerns and encourage the use of IPAWS/WEA for alerts.

7...In the event that a Participating CMS Provider cannot accept or deliver a test under these circumstances... require that Participating CMS Providers shall indicate such an unforeseen condition by sending a response code to the Federal Alert Gateway.

To reiterate, any testing and reporting scheme that provides more information, transparency and understanding of the IPAWS/WEA message delivery process is beneficial for the increased adoption of IPAWS.

8...Finally, we propose that Section 10.350(c) state that Participating CMS Providers may provide their subscribers with the option to opt-in to receiving State/Local WEA Tests. We also seek comment on whether we should require State/Local WEA Test messages to be clearly identified as test messages to prevent confusion.

Hyper-Reach does not see the point in providing an opt-in option for subscribers to receive test messages. As noted earlier, current opt-in programs for emergency alerts rarely succeed in getting even 10% participation, and this is for actual emergency alerts. It seems to us that few, if any citizens would be motivated to affirmatively choose to receive test messages, while they may have little objection to actual receipt of such messages. Requiring opt-in for test messages will result in almost no participation on the part of the public in receiving such messages.

As an alternative, by providing a testing mechanism (e.g. a specific test code) that verifies delivery to the selected towers (and, if possible, confirms the geography selected), alert originators could test more frequently without the risk of irritating subscribers.

Last, we doubt the necessity of requiring that test messages be clearly identified as such. In our experience, local officials are capable of identifying the purpose of their messages on their own.