NEW YORK CITY EMERGENCY MANAGEMENT
165 CADMAN PLAZA EAST BROOKLYN, NEW YORK 11201

718-422-4616 FAX 718-422-8453

JOSEPH J. ESPOSITO
COMMISSIONER

December 29, 2015

Ms. Marlene Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

[Submitted via FCC Electronic Comments Filing System]

Re: Comments on Notice of Proposed Rule Making on the Matter of Improving Wireless Emergency Alerts and Community Initiated Alerting (Proceeding 15-91)

Dear Secretary Dortch and Members of the Federal Communication Commission:

The New York City Department of Emergency Management (NYCEM) has been providing emergency public notifications since the pilot launch of our Notify NYC (www.nyc.gov/notifynyc) program in 2007. We have a strong history with the Wireless Emergency Alert (WEA) system and had the privilege of having the WEA system (then the Personal Localized Alert Network) announced at the site of the World Trade Center by former Mayor Bloomberg and former FCC Chairman Genachowski in 2011.

Prior to the system's launch, we piloted this technology in conjunction with the Federal Emergency Management Agency (FEMA), the wireless industry, and this Commission. As Hurricane Sandy was moving up the east coast, New York City became the first local or state alerting authority in the country to issue a WEA message ordering a mandatory evacuation of our vulnerable coastal communities. In total, we have activated the WEA system four times.

Use of the WEA system continues to be a key component of our emergency public information strategy as we have full-time on-duty personnel who can activate the system. We believe that key enhancements to the system are needed to fully capitalize on WEA as a tool and are encouraged by the majority of the Commission's proposed rules. We are pleased to provide our comments on the proposed rules and welcome the opportunity to work with the Commission on the future of this lifesaving emergency alert system.

Respectfully,

Joseph J. Esposito
Commissioner
New York City Emergency Management

Comments from the New York City Department of Emergency Management (NYCEM)

III(A)(1)(9) – Expanding the maximum permissible length of WEA messages from 90 to 360 characters where technically feasible and continuing to allow delivery of 90-character messages on 2G and 3G networks and devices

NYCEM strongly supports expanding the maximum permissible length of WEA messages to 360 characters as proposed by the Commission. It is NYCEM's position that 90-character messages are wholly insufficient to provide the level of information needed by the public in order to understand the scope of the emergency and take necessary precautions. Further, the inability to direct the public to a location to receive additional information (e.g., a URL or telephone number) further enforces our position that additional characters are necessary.

As a matter of context, most of NYCEM's emergency notifications distributed via the Notify NYC system do not generally exceed more than 500 characters in length. Increasing the length of WEA messages to 360 characters, along with the ability to direct the public to additional sources of information (further comments on this below), will greatly enhance our ability to provide critical, potentially lifesaving information to the general public.

With respect to permitting legacy networks and devices to continue broadcasting 90-character messages, this should be continued as long as those networks and devices are supported. It is likely that some of the most vulnerable populations (seniors, people on fixed incomes, economically disadvantaged, or persons with disabilities and other access and functional needs) still rely on 2G and 3G devices and it is NYCEM's position that receiving some critical information is far better than receiving none at all. However, we strongly encourage the Commission to work with the wireless industry on determining alternate ways that these legacy consumers can receive the full 360 characters. NYCEM does not support only sending the first 90 characters of a 360-character message as suggested in III(A)(1)(14) of this Notice, as this could be confusing and provide the improper information to recipients. Instead, we offer two potential alternatives for consideration:

1. Permit legacy providers to distribute the full 360-character messages in up to four time-phased 90-character messages (similar to concatenated SMS messages). This option would allow alert originators the ability to craft a single message and recipients on legacy networks the ability to receive the full message. Time-phasing the four messages is key as it is important that the various sections of the message arrive in order to promote comprehension of the entire message by recipients.
2. Permit alert originators to craft two messages, a 90-character message for legacy networks/devices and a 360-character message for advanced networks/devices. IPAWS and alert origination software vendors would need to update their systems to support both receipt and distribution of this information.

III(A)(1)(10) – Will expanding WEA messages to 360 characters promote public understanding and swifter action in response to an emergency?

With the 90 characters presently available, our messages are able to provide an emergency instruction to the public (e.g., evacuation order, major road closure, transportation shutdown) but are unable to underscore the reason for the emergency direction due to space limitations. Additionally, 90-character messages do not provide sufficient space to describe incident boundaries often requiring the use of landmarks or nebulous statements like "in this area". In addition, using landmark locations may not be helpful to residents or visitors to an area who may not be familiar with such locations. More detail is needed.

Expanding WEA messages to 360 characters will allow us to provide the rationale/reason for the emergency direction and incident boundaries. For example:

> *Due to an active shooter incident at 42nd Street and 7th Avenue in Manhattan, all individuals between West 45th Street and West 35th Street between 6th Avenue and 9th Avenue should move indoors now and stay indoors until further notice.*

is a much clearer message than

> *Shooter near 42St/7Ave, MN. People nearby should go indoors and wait for more info.*

As these protective actions are often disruptive to individuals and businesses, the public is prone to consider the reasons for the emergency direction prior to taking action. Therefore, when providing emergency notifications via NYCEM's Notify NYC system, our Public Warning Team always tries to provide the reason for the directive or activity to promote public acceptance of the request.

III(A)(1)(10) – How will an increase in the length of WEA messages affect the accessibility of such messages by individuals with disabilities, seniors, and persons with limited English proficiency?

While WEA messages are designed to provide lifesaving information in a rapid format, considerations must be made for populations that may be excluded by the current 90-character format. This includes seniors, people with disabilities, access and functional needs, and those with limited English proficiency.

The use of acronyms, abbreviations, and other shorthand can be difficult for these populations to process. For example, WEA recipients who use "talkback" features to access alerts on their devices may not be able to effectively interpret what the message is trying to communicate.

Additionally, the expansion of character use can allow those leveraging the WEA system to send targeted messages in multiple languages or in more clear, simple language. Recent data show that 50% of New Yorkers speak languages other than English at home, and 23% are limited

English proficient. What's more, nearly half of NYC adults read at an eighth-grade reading level or lower.

III(A)(1)(11) – Is 360 characters the optimal maximum number of characters that should be supported for WEA?

As noted earlier in our comments, New York City strives to keep most of our messaging at a maximum limit of 500 characters. Occasionally our messages do exceed 1,000 characters – particularly when conveying detailed, descriptive information about missing individuals and abducted children to seek the public's assistance in locating the person. NYCEM respects the analysis conducted and presented in the START report and in certain situations does see the benefit of messages in excess of 360 characters.

To this end, we recommend that the final rule adopted by the Commission be reflective of the maximum number of characters that are technically feasible based on the comments sought from the wireless industry in III(A)(1)(12) of the Notice and **not** based solely on social science research or existing social media platforms. After the maximum number of characters that is technically feasible is identified by the wireless industry it should be left to alert originators at the local level to issue messages of a length they deem appropriate for the emergency situation being managed based on their expert knowledge of their local community. To be clear, the adopted rule should set the technical ceiling for characters, not the floor.

III(A)(1)(13-14) – Coexistence of 90- and 360-character messages.

See comments on this topic offered in III(A)(1)(9) above.

III(A)(1)(15) – Proposal that wireless providers come into compliance within one year of the adoption of the final rules and duration that "legacy" networks and devices be permitted to continue to deliver 90-character messages?

It is NYCEM's position that one year from the adoption of final rules is a reasonable timeframe for wireless providers who are technically capable to handle the increased message length to achieve compliance. NYCEM believes that one year is a sufficient timeframe for alert origination software providers to make the necessary updates to their systems to support the increased message length.

With respect to how long 90-character messages should continue to be permitted, we encourage the Commission to let technical feasibility, rather than the final rule, drive this timeframe. As noted previously, NYCEM strongly believes that some information (a 90-character message) is better than no information and as long as wireless providers continue to support their legacy networks, those networks should continue to support WEA messaging with the maximum number of characters that is technically feasible. Loss of such WEA messaging capability may leave the most vulnerable populations without a mechanism to receive critical emergency messaging.

If the Commission discovers through testimony or research that legacy networks can support the increased message length adopted in the final rule, then we recommend that legacy providers be given 180 days from adoption of the appropriate ATIS/TIA standard.

Last, while it may be beyond the scope of this Notice, NYCEM encourages the Commission to require wireless providers to take affirmative steps to migrate consumers of legacy devices and networks to more advanced devices and networks in order to ensure all consumers have the ability to receive the expanded messages. This is of particular importance if a carrier makes the business decision to sunset support for certain devices and networks.

III(A)(2)(18) – Creation of an additional class of WEA message, "Emergency Government Information".

While alert originators could already send the message types mentioned by the Commission in this Notice (e.g., boil water advisories, shelter locations, etc.) under the existing rules, NYCEM supports the Commission's affirmative efforts to extend the use of the powerful technology to other types of emergency messaging. If alert originators were previously hesitant to use the WEA system because of the real or perceived restrictions for "extreme" or "severe" message categories than NYCEM fully supports the introduction of this new message category as a means of encouraging further adoption and use by alert originators. The adoption of this new message class in concert with the proposed rule changes addressing geo-targeting (comments follow below) will certainly enhance adoption and use of the WEA system.

That being said, the proposed definition of "[as] an essential public safety advisory that prescribes one or more actions likely to save lives and/or safeguard property during an emergency," will not promote the adoption or use that the Commission appears to be seeking by creating this new class of WEA message. Information from public safety entities that can save lives and/or safeguard property are already adequately covered in the existing rule.

Instead, NYCEM proposes this broader definition for the Commission's consideration: "Emergency Government Information messages are advisories that, in the opinion of the alert originator, provide time-sensitive information about an emergency condition or situation to promote the public's situational awareness." Widening the definition will allow alert originators the freedom to use WEA for a broad range of emergency conditions/situations while still adhering to the intention of the WARN Act.

III(A)(2)(19) – Ensuring that Emergency Government Information messages are used appropriately and in circumstances where they would be most effective.

While NYCEM respects the opinion of CSRIC IV, it is our position that if the Commission's intention is to limit use of this new message class to the immediate protection of life and property, the existing message classes are sufficient. Broadening the definition of Emergency Government Information, as proposed in the aforementioned section of our comments, will

permit local government leaders and emergency managers to use this technology to more effectively promote the public's situational awareness about emergency conditions, including individual and economic recovery.

With respect to guidelines on use of this new message class, the Commission should **not** require that such use be predicated on supplementing Imminent Threat Alerts. Instead, the Commission should develop guidelines that permit alert originators to use this message class if, in its opinion, a condition requires an acute level of individual awareness or action as a result of an emergency condition. Some considerations that alert originators can use to evaluate the appropriateness of this message are:

- Is your emergency operations center activated?
- Has a competent, authorized party declared a state of emergency and/or are emergency orders being issued?
- Is there a need for broad public action or awareness of a condition that is occurring or likely to occur?
- Will the message prevent public fear or serve to preserve critical public safety functions that are (or could be) overwhelmed (e.g., inappropriate use of 911)?

Within the guidelines, we also recommend that the Commission encourage alert originators to target their messaging to the smallest geographic area necessary to achieve the intent of their message.

Upon contemplation of this new message class, there were several prior emergency incidents in New York City where WEA would have supported broad public awareness; potentially calmed fears; allowed for data collection to promote community recovery; and reduced the burden on limited public safety resources, such as NYCEM's 911 System.

- Following earthquake tremors in 2010 and 2011, NYCEM's 911 system was overwhelmed with people seeking information and conceivably delayed those with a need for emergency response (e.g., fires, medical emergencies, motor vehicle collisions, etc.) from promptly speaking with a 911 operator. A message reassuring the public that the cause of the shaking was an earthquake (and not a bomb) would have allowed the public to receive trusted government information about the cause and, in turn, returned our public safety systems to normal activity levels.
- Following a series of tornadoes in 2010, NYCEM needed the public's assistance to collect information on building damage and downed trees to support community recovery and restore access to critical roadways. A WEA message soliciting the public's assistance in this regard would have allowed NYCEM to collect needed information more quickly, deploy resources more effectively, and restore use of obstructed roadways that impeded efficient emergency response.

- Following a major power outage during a heat wave in 2015, NYCEM would have used the new message class to communicate the availability of special overnight shelters and cooling locations that were activated to support the community.
- Following a scheduled but unpublicized low altitude flyover by Air Force One over Lower Manhattan in April 2009, NYCEM would have used the new message class to provide public information to allay concerns the public had in a location that has been very sensitive to unusual air traffic since 9/11.

NYCEM does not have a strong opinion as to whether or not the Commission should limit use of the new message class to a subset of alert originators. If the Commission elects to go in this direction, we feel strongly that local level governments should be authorized to use this message.

III(A)(2)(21) – Amending the rules to allow consumers to opt-out of the Emergency Government Information message class and considering if, instead, it should be offered on an "opt-in" basis.

In accordance with the WARN Act, NYCEM supports the Commission's proposal to amend Section 10.280 of the rules requiring mobile service providers to give consumers the ability to opt-out of such messages.

With respect to the question of making this message class an "opt-in" category, the WARN Act does not permit such an option. In the interest of consistency in public education, we strongly advise the Commission to adopt rules that make the new message class opt-out (consistent with the existing message classes).

While NYCEM respects consumer choice in most matters, we feel strongly that the Commission should take additional action related to the WARN Act's requirement that consumers be granted the authority to opt-out of messages other than those issued by the President of the United States:

1. The Commission should seek legislative relief from Congress with respect to the opt-out requirement and adopt rules that do NOT permit such consumer action. While NYCEM supports the President's need to alert the entire country unimpeded, and understands that there are national threats that would require such action, we believe such unimpeded messaging is similarly required at the local government level. The Commission (and Congress) must recognize that all emergencies begin and end locally and, despite the Emergency Alert System (and its predecessor systems) which have been in existence since establishment by President Truman in 1951, there has only been one national activation of the system, which was for testing purposes. Local alert originators need to rely upon the unimpeded ability to reach their entire population – even those who would prefer not to be reached – in order to save lives, particularly for extreme and severe threats.

2. Until such time as Congress acts, the Commission should adopt rules requiring mobile device manufacturers to require that consumers affirmatively acknowledge the risk in

opting out of imminent threat, severe threat, and, if adopted, emergency government information message classes. The Commission should develop, with participation from the emergency management community, standard language that is displayed after a consumer elects to opt-out of one of those message classes but before such opt-out is effective.

III(A)(2)(22) – Are there other classes of alerts that the Commission should consider making available through WEA?

With respect to FEMA's recommendation for a Local Threat Alert message, that "may not meet criteria for an imminent threat alert…but may still be appropriate for a WEA Alert.", NYCEM wholeheartedly agrees and believes that the broadened definition that proposed in support of the emergency government information message class can be applied here as well, and strongly encourage the Commission to adopt rules in support of this concept.

NYCEM is encouraged that the Commission is considering allowing other, less grave, message classes to be transmitted using WEA infrastructure and fully supports such action for several reasons:

1. **National Interoperability for Emergency Notifications** – Adopting such rules would permit consumers to select the messages that they are interested in on their personally-owned devices with which they are familiar and those notifications would follow them wherever they go. Individuals would not need to register for multiple emergency notification systems (e.g., where they live, where they work, where family members live, where they travel) to receive locally relevant information. For major cities like New York, which receives 54 million visitors every year, it will allow NYCEM to keep visitors just as informed as residents.

2. **Increased Consumer Adoption Through Registration Simplicity** – In our city of 8.4 million people, less than 400,000 individuals have elected to receive our Notify NYC messages. And while we have reduced the barriers to registration, we believe that any registration process is a barrier to consumer adoption of these emergency notification systems. Global selection and setting management on an individual's mobile phone would eliminate a registration barrier and lead to a more informed public. Emergency messaging would become as ubiquitous as selecting a ring tone and that will save lives.

3. **Reducing Costs on Local Governments** – Mass notification systems are expensive to build and maintain. The Commission, through applicable rules, could place the power of these systems in the hands of local governments across the country without major impacts to increasingly constrained local budgets.

Should the Commission elect to adopt rules that support additional messaging categories, NYCEM agrees, in concept, with FEMA that there should be different alert tones and vibration cadence for each message type. We feel strongly that emergency message classes: extreme

threat, severe threat, and, if adopted, emergency government information messages, should carry with them the current EAS Tone. With respect to other categories, NYCEM does not see any reason for the Commission to restrict consumer choice beyond requiring the EAS Tone **not** be used. Phone manufacturers should be permitted to allow the consumer to set the tone/vibration cadence for these messages as they would for any other application.

For the Commission's consideration of these future rules, NYCEM provides our current category of messages that offered to our opt-in subscribers to Notify NYC:

- **Emergency Alerts** – messages about life-threatening events that may require immediate action. All registrants are automatically added to this list.
- **Significant Event Notifications** – important information about emergency events, utility outages and other types of high-impact events in your area code.
- **Public Health Notifications** – information about important public health issues in your community.
- **Public School Closing/Delay Advisories** – updates about unscheduled public school closings, delays, and early dismissals.
- **Unscheduled Parking Rules Suspensions** – updates about unscheduled suspensions of citywide parking rules.
- **Major Mass Transit Disruptions** – messages about large or widespread mass transportation disruptions.
- **Major Traffic Disruptions** – messages about significant roadway closures, disruptions, or detours.
- **Waterbody Advisories** – messages about combined sewer overflow (CSO) activity in New York City's waterbodies.
- **Beach Notifications** - information from the NYC Department of Health and NYC Department of Parks and Recreation regarding the status of NYC beaches.

Under the current rules, only Emergency Alerts would meet criteria for issuance of a WEA message. Under the proposed rule, particularly the adoption of the emergency government information message class, certain significant event notifications and public health notifications would be considered for issuance via WEA.

On a daily basis, the vast majority of messages that are issued by Notify NYC would be considered "quality of life messaging". NYCEM issues these messages as a public service and to promote enrollment in the system for emergency alert messaging (subscribers cannot opt-out of our emergency alerts). NYCEM believes that adoption of similar messaging categories by the Commission would have a similar outcome on a national level.

III(A)(3)(25-26) – Proposed removal of ban against embedded phone numbers and URL in WEA messages.

NYCEM strongly supports removing Section 10.440 of the WEA rules to allow alert originators to embed telephone numbers and URLs in WEA messages but only if adopted along with the improved geo-targeting capabilities as described in the Notice. While NYCEM concurs with the

Commission that mobile provider's technology has drastically improved since the original WEA rules were adopted, there is no guarantee that each website that an alert originator may direct the public to obtain more information will be able to support the instantaneous increase in network traffic (even if the mobile carriers can support such traffic). The Commission should caution alert originators to ensure that the website and/or telephone number that they are directing people to for more information (e.g., government websites, 311 systems, etc.) are prepared to handle the rapid influx of network and/or telephony traffic.

We concur with CSRIC IV, START, and FEMA that further study is needed and would add that, if the proposed rule is adopted, educational material for alert originators to make an informed decision about if and when to include a URL or telephone number in WEA messages should be put into place.

III(A)(3)(27) – Proposal to allow embedded URLs and Telephone Numbers in AMBER Alert WEA messages.

We strongly support the inclusion of URLs and telephone number in AMBER Alert WEA messages with the same caveats noted in our comments to III(A)(3)(25-26) above with respect to website capacity, particularly when multiple, highly-populated AMBER Alert regions are activated simultaneously.

III(A)(3)(28) – Possibility of including interactive links in WEA messages, such that an alert recipient could provide real-time feedback to alert originators.

NYCEM finds this proposal interesting and believes that additional study and discussion with stakeholders will be necessary to develop the rules needed to support this concept. For example, alert originators would need to ensure that they were prepared to receive, analyze, and take action on all of the responses from the WEA message.

Along similar lines, NYCEM strongly encourages the Commission to adopt rules that require mobile service providers to return real-time data on the number of devices that receive a WEA message. Such data would be extremely valuable to alert originators in determining an estimated number of people within an alert area. Further, in the case of evacuation messaging, such feedback would provide emergency managers with intelligence on the progress of an evacuation. If such data was available, New York City would operationalize it by issuing a WEA message to the relevant coastal evacuation zones multiple times prior to a tropical system's landfall. If repeat messaging revealed the same number of devices receiving a WEA, we would: (1) increase our outreach effort to promote the public's evacuation compliance and (2) evaluate the need for, and likely request, additional search and rescue resources to return to the evacuation zone(s) post-storm. Similarly, in a post-evacuation scenario the same delivery data could be used to evaluate the number and relative location where survivors may be located. Such feedback is likely more feasible as a short-term measure more so than the example proposed under the Notice.

III(A)(3)(29) – How can embedded URLs enhance accessibility of WEA for people with disabilities, seniors, and persons with limited English proficiency?

Similar to increasing the number of characters allotted for WEA messages, the ability to add/embed a URL in a WEA message can provide an avenue for recipients to better understand the nature of the emergency and protective actions that are required (if any).

NYCEM is in the process of translating our 80 most common emergency messages into the 12 most commonly spoken languages in New York City an effort to improve public information to people with limited English proficiency (this program is expected to go live in early 2016). Since these messages are pre-translated, the specific aspect of each message (e.g., street(s) affected, subway station impacts, etc.) would need to be referenced from the English version while all of the other information (e.g., preparedness information, follow-up instructions, etc.) would appear in languages other than English. Each of the 80 most common messages will have its own website, which will also include the message in an American Sign Language video format with audio and subtitles. The ability to link to the appropriate message page via a WEA message would certainly improve access for persons with limited English proficiency.

III(A)(3)(30) – Would the public interest be served by adopting rules that allow for multimedia-based alerts?

It is NYCEM's position that the public interest would very much be served by the Commission adopting rules that support multimedia-based alerts. New York City regularly distributes Notify NYC messages in an effort to locate missing persons, including children and vulnerable adults, and have adjusted our policies to require that photos of the missing individuals be obtained and attached to the message prior to its dissemination to the public. This policy change was the result of overwhelming feedback from our subscribers that a text-based list of physical descriptors was insufficient when soliciting the public's support to locate a missing person.

Beyond missing person messages, NYCEM strongly believes that the ability to transmit maps of affected areas, exclusion and/or frozen zones, road closures, or even video messages from elected leaders would improve understanding of emergency conditions and subsequent compliance with emergency directives.

While we appreciate CSRIC IV's conclusion that the distribution of multimedia messages within existing cell broadcast technology is impractical, we remind the Commission that millions (if not tens of millions) of photos, videos, and audio messages are shared among consumers every single day and believe that these existing mechanisms can be modified to be sent via the context of cell broadcasting technology. As such, we strongly encourage the Commission to work with the wireless industry to study the feasibility for such advancement and adopt rules requiring the wireless industry to incorporate this important technology.

III(A)(4)(31-33) Feasibility of Providing Multilingual WEA Messages

As noted previously in our comments, New York City is already taking steps to make messages available in languages other than English by pre-translating commonly issued messages and posting them on a website that can be accessed when a particular message is issued. Acknowledging that not all alert originators will always have the capacity – especially during a developing emergency – to offer WEA messages in multiple languages, NYCEM suggests the Commission adopt rules that:

1. Allow alert originators, if they choose, to issue WEA messages in multiple languages via alert origination software;
2. Require device manufacturers to allow consumers to select their preferred language for WEA messaging;
3. Require device manufacturers to display the English version of the message if the version of the message the consumer prefers is not offered by the alert originator;
4. Require device manufacturers, on appropriately equipped models (e.g., smartphones) to place a "translate" button/link at the bottom of received WEA messages so the consumer, at his discretion and as long as data service is available, can be linked to a commercially available translation tool (or local application) to assist in their understanding of the message; and
    a. It is important to note that abbreviated text is very difficult to translate using machine translation and should be avoided to the maximum extent possible.
5. Require mobile carriers to collect and share with alert originators in aggregate fashion the preferred languages of their consumers based on handset selection. Such data would be very helpful in directing alert originators to the languages other than English which should be the priority for either pre-incident translation or real-time translation during an emergency.

III(B)(37-38, 41) – Should mobile service providers be required to transmit any alert to a more defined area as indicated by an alert originator?

New York City appreciates the voluntary efforts already exhibited by several mobile service providers to geotarget messages more finely than a county area as required by the current rules. NYCEM strongly encourages the Commission to adopt rules that require mobile service providers to distribute WEA messages within the confines of the target area (geocode, circle, or polygon) as specified by the alert originator. Such targeting is even more essential given a number of the other proposals under consideration by the Commission and do **not** believe compliance with this rule should be voluntary; it should be required.

With respect to the Commission's question as to whether mobile service providers can cite "network constraints" as a mechanism to transmit alerts to any area, we agree that such an exception within the rules would weaken the WEA system. Instead, NYCEM offers that the Commission should continue to allow such approximation for legacy networks as described earlier in the Notice. For more advanced networks, particularly LTE networks that have the ability to employ sectorization, the Commission should require such technological advances to support highly targeted WEA alerting.

III(B)(37) – Other approaches to improve geo-targeting, including device-based geo-targeting solutions.

As noted above, NYCEM strongly supports efforts to require improved geo-targeting of WEA messages. NYCEM supports further study of such technology and encourages the Commission to consider what, if any, risks to message delivery exist with dependence on additional, device-based applications.

III(C)(1)(47-54) – WEA proficiency testing and public distribution of these messages.

NYCEM concurs with CSRIC IV's assertion that alert originators need the ability to maintain proficiency by regularly testing the system, sending messages to the aggregator, and receiving acknowledgment codes. New York City's Public Warning Team is required to test distribution of WEA messages (via the test development lab COG) monthly. City personnel have also practiced sending messages (and viewing received messages) by working with the Defense Information System Agency's Joint Interoperability Testing Command. These practice sessions have been extremely useful and improved City personnel's skills and confidence level with the development and execution of WEA messaging. NYCEM encourages the Commission to work with its stakeholders and promote use of this valuable training avenue.

While NYCEM supports the Commission's proposal to require mobile service providers to receive and acknowledge state/local WEA tests, we do not believe distribution of the message to handsets is critical to ensuring system proficiency. NYCEM is concerned that public distribution of these alerts, if performed too frequently, could lead to warning fatigue and further un-enrollment from receipt of WEA messages by the public. Such fatigue is a likely outcome in areas with multiple overlapping alert originator jurisdictions (e.g., state, county, city, town, village, etc.) if each level of government elects to distribute test messages.

Instead, NYCEM encourages the Commission to adopt rules that allow system testing by all alert originators, require mobile service providers to receive and acknowledge these messages, and return appropriate acceptance and/or error codes via the federal alert aggregator for alert originators to maintain system proficiency. Further, NYCEM encourages the Commission to work with its stakeholders on encouraging alert origination software providers to build training and validation modules into their software packages that allow alert originators to train and test their skills in a no fault, no risk environment.

NYCEM fully concurs with FEMA that **very occasional** distribution of test messages to the public in an effort to promote awareness of the system, demonstrate the public's ability to receive messages, and assure the public that their government is capable of alerting them is important. NYCEM believes such messaging should occur in concert with recognized preparedness activities, like National Preparedness Month or Nuclear Regulatory Commission exercises. Therefore, NYCEM recommends that the Commission adopt rules to allow alert originators to do the following:

Issue one (1) test WEA message every year that is distributed to the public as long as:

a. *The message clearly indicates that it is a test message;*
b. *Is advertised ahead of time through media and/or other means and such advertisement includes the time range in which the message will be issued; and*
c. *Is coordinated with other alert originators with common/overlapping jurisdiction to prevent warning fatigue.*

Based on the above, NYCEM does not believe that mobile service providers should be permitted to hold such test messages for 24 hours. Instead, such messages should be transmitted immediately upon receipt since the public will be expecting delivery at a prescribed time. A test message should be pre-empted by an actual message.

If technology can support more regular, but very limited distribution of WEA messages for proficiency testing as offered in III(C)(2)(54) of the Notice, to a "single, dedicated end-user device…" we would be highly supportive of the adoption of such rules.

With respect to opt-in testing, where the public can elect to support government alert originators, by receiving messages and, perhaps, completing after-action surveys, NYCEM believes this proposal requires further study and consideration. NYCEM is concerned that without clear and strict standards directing mobile service providers and handset manufacturers on design of the opt-in/opt-out screen, the public may inadvertently opt-out of emergency messages. NYCEM is eager to work with the Commission on further review of this proposal.

III(C)(2)(55-58) – Requiring mobile service providers to log messages and provide feedback with specific error codes in the case of message reduction.

As with any other mission-critical system, mobile service providers should be required to capture and report system errors. Further, NYCEM encourages the Commission to adopt rules that would require mobile service providers to advise alert originators, following a test, when errors with downstream distribution of messages exist to the individual transmitter level. It is important for alert originators to know when this critical tool is impeded so that they can consider the need for alterative messaging.

During one of our WEA activations (January 2015), NYCEM identified that a particular network's devices did NOT receive the message. NYCEM escalated the issue to FEMA, who contacted the mobile service provider. The mobile service provider identified a significant gap in its system that required resolution prior to its consumers being able to receive WEA messages. It is imperative that these issues be identified prior to issuance of an emergency message and the Commission's rules should work to ensure this.

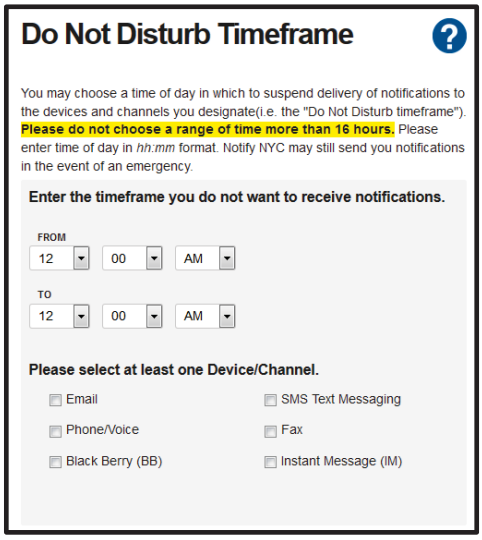
III(D)(61-63) – Promoting mobile service and subscriber adoption of WEA messaging.

NYCEM offers extensive comments on our opinion on consumer opt-outs in response to III(A)(2)(21) above. To reiterate, the Commission should work with Congress to change the law

eliminating consumer's ability to opt-out of imminent threat alerts issued by local and state-level alert originators for the reasons indicated in prior comments.

III(D)(65) – Consideration on offering consumers a greater number of opt-out choices

In addition to the "interest groups" that Notify NYC offers our subscribers (listed III(A)(2)(22) above) our subscribers also have the ability to set "Do Not Disturb" timeframes where they can restrict how they receive messages, if at all (excerpted below). However, NYCEM reserves the right to override the subscriber's preference in the event of a life-threatening emergency (e.g., NWS Tornado Warning, immediate evacuation, etc.).



NYCEM would support the Commission adopting rules that provide additional preferences for certain message classes, including AMBER Alerts as considered in the Notice. However, NYCEM strongly believes that alert originators should retain the ability to override a consumer's settings in the event of a life threatening emergency either by default or on an ad hoc basis. While we appreciate that Presidential-level alerts cannot, as a matter of statute, be blocked there are many local emergencies (including situations similar to what was recently seen in Paris, France) that require immediate public awareness and action long before a Presidential-level alert can be requested and issued.

III(E)(70) – Use of WEA/EAS Attention Signal as part of government-developed PSAs.
NYCEM concurs with FEMA that public awareness is a key aspect to adoption of WEA and public service announcements will be even more important in the event additional message categories area promulgated by the Commission's rules. As such, NYCEM supports the Commission amending the rules to allow use of the WEA/EAS attention tones as part of the public service announcements.

However, we are **concerned** that the language proposed on pages 45-46 of the notice restricts including the WEA attention signal to "…federal Public Service Announcements…" Like many

jurisdictions, New York City often partners with the media to produce and disseminate PSAs on a variety of emergency preparedness topics and would want to be able to include the attention tone in our messaging. NYCEM respectfully requests that the word "federal" be replaced with "government-developed or approved Public Service Announcements".

III(G)(76-77) – Prioritization of WEA Messages

As the Commission adopts additional classes of WEA messaging, including the Emergency Government Information message class proposed in this Notice, NYCEM feels that additional traffic prioritization is also required. A hierarchy of message priorities with Presidential Alerts at the highest level followed by extreme and imminent threat alerts is advisable as WEA adoption increases and message classes expand.

While NYCEM still supports the Commission's original finding that a WEA message should not interrupt an active telephone call, we do think that an active data session should be interrupted for a WEA message. For the ever-growing smartphone consumer community, multiple simultaneous elements of data are continually reaching a device (e.g., social media messages, short message service messages, multimedia messages, etc.). A WEA message should take prominence on the device and, if no action is required by the consumer, they can simply dismiss the alert and continue (or reestablish their data session). Lastly, as 4G/LTE networks presently support simultaneous voice and data sessions, we encourage the Commission to work with the mobile service provider industry to adopt rules that would allow the delivery of a WEA without interrupting an active voice session.

III(H)(78-81) – Consistency of WEA delivery across mobile service providers as the Commission adopts new rules.

While NYCEM appreciates CSRIC IV's opinion and do not wish to burden mobile service providers, we vehemently disagree with the recommendation that mobile service providers may continue to provide WEA under the Commission's original rules and not adhere to the new rules adopted by the Commission in an effort to expand the utility of WEA messages. NYCEM supports the Commission's opinion expressed in the Notice that all service providers should operate under a consistent regulatory framework and such consistency and expansion/improvement over time is squarely in line with the congressional intent under the WARN Act.

NYCEM agrees with the Commission's assertion that such inconsistency could lead to interoperability and challenges by alert originators. More importantly, in NYCEM's opinion, such inconsistency could also lead to confusion by the public receiving the message during an emergency, which could impede implementation of emergency protective actions. Mobile service providers continue to roll out new technology and it is important that the nation's emergency messaging capacity continues to advance along with those upgrades. NYCEM strongly urges the Commission to continue its leadership role in ensuring that WEA keeps up with technological advances.

III(I)(82-88) – Implementation timeline

NYCEM concurs with the Commission's proposed timeline unless the mobile service providers indicate that the rules proposed in this Notice can be achieved sooner.