

June 12, 2024

VIA ELECTRONIC FILING

Marlene H. Dortch, Secretary
Federal Communications Commission
45 L Street NE
Washington, DC 20554

RE: FCC Seeks Comment on Implementation of Multilingual WEA (DA 24-1137)

Dear Ms. Dortch:

The National Oceanic and Atmospheric Administration's (NOAA) National Weather Service (NWS) appreciates the opportunity to comment on the Federal Communications Commission (FCC) Implementation of Multilingual Wireless Emergency Alerts (WEA). The NWS comments are as follows.

WEA in Tagalog and Filipino

For Tagalog, the FCC proposes that support for multilingual WEA templates be satisfied through translations into Filipino and seeks comment on whether WEA-capable mobile devices can enable Filipino as the device's default language. In regard to this proposal, NWS notes that United States Census Bureau data keeps both of these language populations grouped together making it difficult to determine which population has greater need for translation due to Limited English Proficiency (LEP).

WEA in Chinese

The FCC proposes template alerts written in simplified Chinese characters and asks if support for templates written with traditional Chinese characters should be required. There are nuanced differences between simplified and traditional Chinese characters. Therefore, the best approach is to support simplified and traditional characters.

WEA in Portuguese

The FCC proposes template alerts are written in the Brazilian dialect of Portuguese and asks if the European dialect of Portuguese should also be supported. From Census Bureau data, it is hard to tell the country of origin. However, popular language learning software primarily only supports Brazilian Portuguese, suggesting that it is the more "popular" of the two dialects.

All-Clear Messages

The FCC asked if alerting authorities would benefit from an "all-clear" template that would inform the public the danger has passed or the alert is no longer in effect. During a Federal Emergency Management Agency (FEMA) engagement session with representatives from the deaf and hard of hearing Community, NWS heard statements that a cancellation message over WEA is needed to inform people they can leave their shelter. NWS believes that any "all-clear" messaging should convey the extent to which the threat remains because there are times when

a hazard ends and another may occur later. For example, flooding may end but the threat for additional flooding continues.

Accompanying English Version of the Alert

The FCC seeks comment on whether multilingual templates should be displayed on their own or accompanied by the English-language version of the alert. NWS believes the non-English version of the alert should be presented first and accompanied by the English-language version. English is the original language from which the translation was generated and inclusion of the English language version could help eliminate confusion if the translated version were to otherwise be taken out of context. The inclusion of the English-language version may also help educate the public on how weather hazards and alerts are translated in the United States.

Incorporating Event-Specific Information into Fillable Alert Templates

The FCC seeks comment on the incorporation of four fillable elements: Sending Agency, Area Affected, Expiration Time, and (if desired) a URL where the first three elements are drawn from the five mandatory Common Alerting Protocol (CAP) elements required in each WEA message: Event Type, Area Affected, Recommended Action, Expiration Time (with time zone), and Sending Agency. NWS believes WEA templates should be fillable alert templates. NWS wishes to comment about Expiration Time and Sending Agency.

In regard to Expiration Time, NWS CAP messages make a distinction between the time at which the CAP message should no longer be used and the expected end time of the event. NWS uses the CAP <expires> time to convey the time at which the CAP message is considered stale and should no longer be used. The NWS forecaster is expected to update or cancel the alert by the <expires> time. NWS created a CAP <eventEndingTime> parameter which reflects the expected end time of the event in the alert message. For short duration alerts, the <expires> and <eventEndingTime> values are typically the same. For longer duration alerts, the values are not the same. Therefore, plugging the NWS CAP <expires> time into a template for longer duration alerts could provide misleading information about the end time of the alert.

In regard to the Sending Agency, the FCC should take note about the difference between a sending and requesting agency as well as issues observed by NWS in regard to its usage. The Federal Emergency Management Agency (FEMA) Integrated Public Alert and Warning System (IPAWS) advises that the CAP <senderName> element be formatted in such a way to distinguish between the authority that sent the CAP message and the authority that requested the alert be sent. For non-weather alerts, the authority that sent the CAP message and the agency that requested the alert are not always the same (e.g., State Agency sending on behalf of a county agency). Thus, any fillable alert templates should make proper use of the CAP <senderName> element. Otherwise, public confusion may result over the source of the alert message. The FCC should also note that NWS observed that some alert authoring tool software vendors were populating the <sendName> element with incorrect information, such as populating the <senderName> element with a value reflecting that of the vendor's location rather than the name of the alerting authority.

Translation of Expiration Times

The FCC believes that expiration times must not be translated. NWS believe expiration times should be in the language of the alert recipient, so that they will understand important times such as when the alert ends.

American Sign Language

The FCC seeks comment on the illustrative videos of ASL translations, which are hyperlinked in Appendix E. The NWS recommends using a Certified Deaf Interpreter for ASL videos such as these. The videos should be constructed jointly with known deaf and hard of hearing organizations such as the National Association of the Deaf, Gallaudet University, the Hearing Loss Association of America, and others. The NWS can and should be a resource for the weather related content in the message, especially call to action statements. Recommendations from social scientists in the NWS are that if messages need to be short, the content should be focused on the actions the receiving person should take immediately.

The FCC asks if there are regional variations in ASL that the FCC should take into account in preparing the final ASL videos, and, if so, how can the FCC create the most universally accessible video for an alert to reach the widest range of ASL speakers. NWS is aware that there are regional variations to ASL across the country. This underscores the necessity for designing and constructing these videos with deaf and hard of hearing organizations as mentioned above. Potentially, downloadable video packages could be regionally constructed and based on the user's language and location settings, could be used where appropriate.

The FCC asks if videos for ASL alerts should be accompanied by the English text of the alert as indicated by the demo-only ASL videos linked in Appendix E. During a recent FEMA hosted engagement session in which NWS was a participant, NWS learned from deaf and hard of hearing participants that one idea would be for the user to have the option to select ASL, text, or text-to-voice. In practice, the user could select all of these options so that the alert text is displayed and read aloud. Another alternative would be to show a pre-recorded ASL video and the alert text. The ASL video could include typical call-to-actions of the alert received (i.e., take shelter, move to higher ground) and the text will show the specifics such as start/end time, and areas to be impacted. NWS defers to FEMA and other subject matter experts in the deaf and hard of hearing community on these matters.

The FCC seeks comment on whether and how fillable templates could support ASL alerts. ASL templates will be done with video, which prevents them from being "fillable" in the same sense as text. A different video would need to be created for each type of message, which has already been demonstrated in the FCC demo videos. That allows for some flexibility to include some event-specific information within the video.

NWS also wishes to point out the following for weather-related alerts originating from the NWS:

- The Sending Agency will always be the National Weather Service for weather warnings, so that can and should be included.
- Since the WEA message is geo-targeted, simply stating that the user is within the warning area by receiving the message could be enough information for the user to take appropriate action. This may not be true for some types of non-weather alerts.
- Expiration time or some sort of "all clear" message has been feedback the NWS has received about WEA messages from deaf and hard of hearing populations and the general population. One suggestion could be the generation of a simple, canned "this warning has ended" video that could be displayed upon the cancellation or expiration of the alert. It would need to be carefully crafted for the user to continue to be weather aware as multiple warnings could occur in a weather event, but this could theoretically be constructed once and be applied for all weather warning messages.

- A URL directing the user to the correct information source has also been requested in the past, so including that would be supported by the NWS.

NWS Work on Alert Translation

The NWS analyzed Census Bureau data on those who reported speaking languages other than English at home to determine which languages are most needed for weather related alerts and forecasts. NWS focused first on languages with populations above 200,000 people that reported speaking English “less than very well” (the LEP population). Then, NWS created a ratio of the total language-speaking population to the LEP population in order to better compare the lack of English proficiency among the various languages. In addition to the overall LEP population size, languages of initial focus include those with an LEP-to-total speaker ratio above 35%. The NWS has taken this approach to prioritize the languages spoken by those who will not understand NWS weather alerts in English. The NWS believes that by prioritizing these languages it will be targeting those who need weather alerts and forecasts in their native language.

Based on the above approach, the NWS will be working in the next few years to provide translations in the following languages (listed in alphabetical order):

1. Arabic
2. Chinese (written Simplified Chinese)
3. French
4. Haitian Kreyol/Creole
5. Korean
6. Portuguese
7. Russian
8. Somali
9. Spanish
10. Vietnamese

Future Updates to Alert Types, Templates, and Languages

The NWS suggests there be supplemental criteria for determining the set of languages where translation is needed. There are states and territories with other dominant, non-English languages specific to those states and territories that don't meet the criteria used by either the FCC or NWS. Thus, the NWS would like FCC to consider the addition of: Samoan, to serve the citizens of American Samoa; Chamorro, to serve the citizens in the Commonwealth of the Northern Mariana Islands; and Ilocano, which is the second-ranked ESL language in Hawaii and also has a large population in Guam.

Tornado and Flash Flood Warning Templates

The example templates of NWS alerts in Appendices C and D of the FCC document reflect the Tornado Emergency and Flash Flood Emergency templates used by NWS. Appendices C and D do not include the standard Tornado Warning and Flash Flood Warning WEA templates that alert individuals to prepare for a possible event. The Emergency template language is used to convey the highest threat to life and property because catastrophic damage is occurring, while the Warning template language providing advance notice also is important. All four of these templates are documented by NWS at <https://www.weather.gov/wrn/wea360> and should be included as templates for multilingual WEA.

Consistency of Service

The implementation of multilingual WEA templates does present some risk of consumer confusion due to uneven or inconsistent levels of service. While NWS can establish meaningful and actionable templates for weather-related events, adequate templates cannot be provided for non-weather emergencies due to their uniqueness and the specificity required, as has been pointed out by others and acknowledged by the FCC.

Concluding Remarks

The NWS strongly supports the FCC in its endeavors to improve WEA. We look forward to collaborating with WEA partners in support of WEA-related rules promulgated by the FCC.

Sincerely,

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