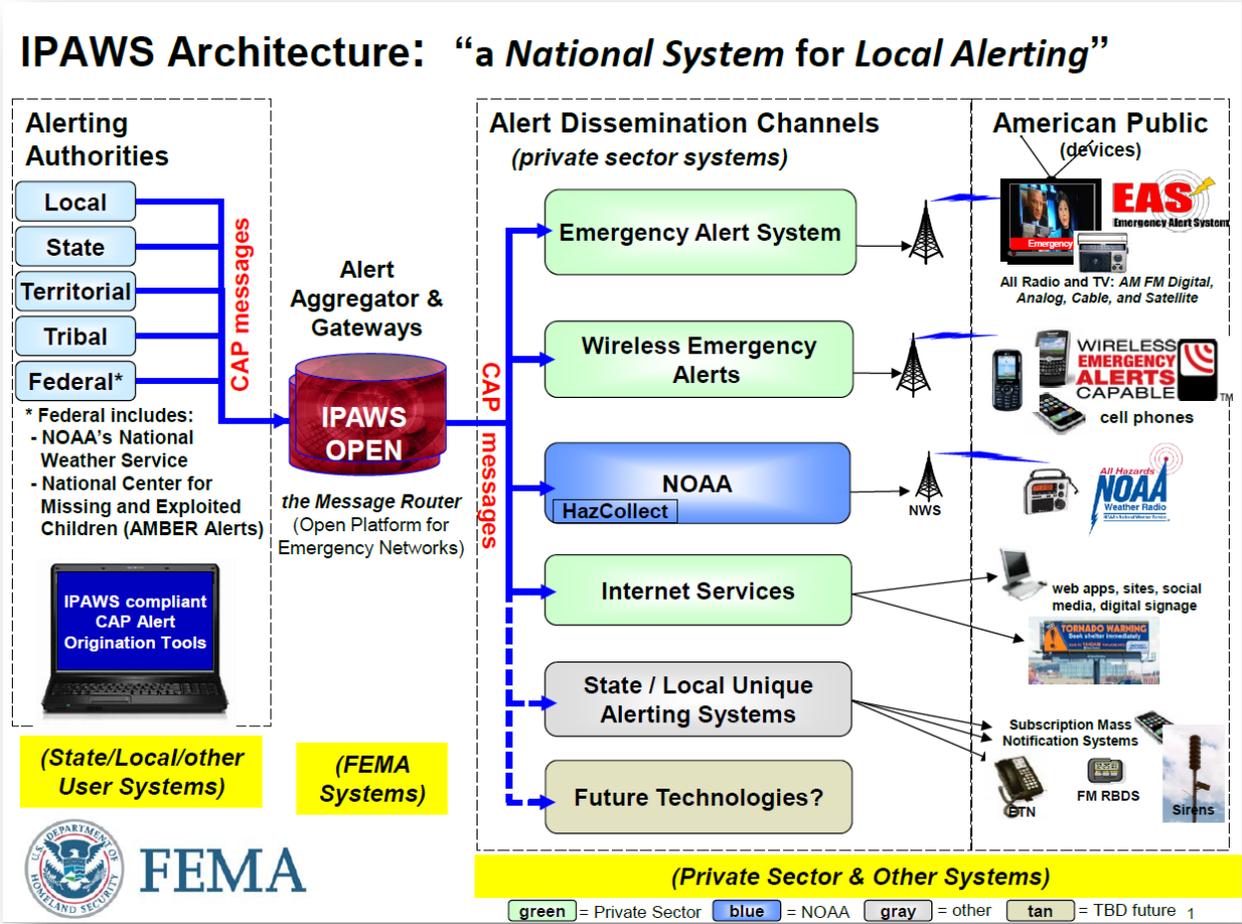


Public alert and warning organizations that originate public warning messages use IPAWS-compliant Common Alerting Protocol (CAP) Alert Originating Tools to create and transmit warning messages. These Alert Originating Tools use software to send messages from alert and warning originators to a FEMA “IPAWS Server” that aggregates and disseminates the messages to the nation’s Public Alert and Warning Systems, which then distribute them to the general public.

For full details of how the system works, see the IPAWS Architecture graphic below.

The IPAWS Architecture – Standards Based Alert Message data exchange format, alert message aggregation, shared, trusted access & distribution networks, alerts delivered to more public interface devices.



Every Alert Origination Tool has the ability to disseminate alert messages using “Text to Speech” software. This technology can automatically read the message text in a “computer voice”. Text to Speech can be a powerful tool – but it comes with significant challenges that the alert message originator needs to understand and mitigate using the guidelines provided by the software platform vendor. If the guidelines are not followed exactly, the effectiveness of the alert message can be greatly diminished.

Alert Origination Tools typically also provide the originator the means to make an audio recording of the alert message to distribute via the CAP server. Experience shows that the **HIGHLY PREFERRED METHOD is to record the alert message and attach it as an MP3 file to the alert message for dissemination through IPAWS**. Recording the message brings numerous benefits, including:

1. Adding credibility to the message
2. Ensuring that local names and locations are properly pronounced
3. Making the message much more understandable to the audience
4. Lending increased urgency to any instructions provided

In order to remain compliant with FCC rules, text to speech cannot be disabled in your IPAWS software, since not all alerts have attached audio files. Harold Price, President of Sage Alerting Systems, points out that when CAP alerts do *not* contain recorded audio, the text-to-speech feature automatically ‘reads’ all elements of the message: the EAS Originator, the EAS Event, the Location Codes, and the valid Time Period of the alert. The exact format produced varies by IPAWS software manufacturer and affects both audio dissemination and TV crawls.

However, an alert produced by Text to Speech almost invariably represents a compromise. **We re-emphasize: for an alert message to be properly aired, understood, and acted upon by your target audience, it needs to be recorded and attached to the alert message as an mp3 sound file for dissemination through IPAWS**. Doing so will provide **profoundly** more effective communication with the public.

Attached are guidelines from software platform vendors on how to properly develop text to speech output. Key examples include techniques on how to properly pronounce phone numbers, individual’s names, license plate numbers, and unique geographic names. Some vendor software platform packages also include multi-language options.

Attachments:



Alert Sense - Text to Speech Guidelines.pdf