Common Alerting Protocol (CAP) Implementation

Background

- The Common Alerting Protocol (CAP) allows emergency messages to be simultaneously disseminated over a wide variety of existing and emerging public alerting systems.
- CAP is an international technical data specification developed by the Organization for the Advancement of Structured Information Standards (OASIS).
- In addition to the basic CAP standard, a supplemental IPAWS Profile technical specification was developed to ensure compatibility with existing warning systems used in the United States.
- FEMA has formally adopted CAP and the IPAWS Profile to implement the Integrated Public Alert and Warning System (IPAWS).

What Systems Will Use CAP?

- Emergency Alert System (EAS) participants (radio, television, cable, broadcast, satellite, and wireline providers) were required to upgrade their equipment to be capable of receiving CAP-formatted alerts under Federal Communications Commission (FCC) rules.
- Wireless Emergency Alerts (WEAs) are transmitted to the IPAWS-Open Platform for Emergency Networks (OPEN) in CAP format. The major cellular companies implemented the capability to broadcast Presidential, imminent threat and AMBER alerts to cell phones in April 2012.

- The National Weather Service (NWS) uses a form of CAP to receive Non-Weather Emergency Messages (NWEMs) from authorized public officials for relay over its family dissemination systems, including NOAA Weather Radio.
- NWS also uses CAP to relay NWS-originated warnings via IPAWS.
- Additional public and private sector systems can incorporate CAP and the IPAWS Profile standards to be interoperable with IPAWS.

What Are the Benefits of CAP?

- As more systems are built or upgraded to CAP, a single alert can trigger a wide variety of public warning systems, increasing the likelihood that intended recipients receive the alert by one or more communication pathways.
- CAP provides the capability to include rich content, such as photographs, maps, streaming video and more.
- CAP provides the ability to geo-target alerts to a defined warning area, limited only by the capacity of the delivery system used.
- Although IPAWS does not provide translation services, CAP does provide the capability to issue alerts in multiple languages.
- Because CAP provides the capability to incorporate both text and equivalent audio, CAP alerts can better serve the needs of hearing or visually impaired persons.