

INTEGRATED PUBLIC ALERT AND WARNING SYSTEM (IPAWS)

I. PURPOSE

On June 26, 2006, George W. Bush signed Executive Order 13407 (Public Alert and Warning System) stating, "It is the policy of the United States to have an effective, reliable, integrated, flexible, and comprehensive system to alert and warn the American people....and to ensure under all conditions the President can communicate with the American people." In response to this order Federal Emergency Management Agency (FEMA) has established the IPAWS Program.

II. SITUATION

A. IPAWS, an acronym for Integrated Public Alert and Warning System, utilizes the current alert and warning infrastructure to save time when time matters the most, allowing the priority to remain with protecting life and property. This is not a mandatory system and it does not replace existing alert methods, it adds new capabilities to a number of already operational systems. Some added capabilities with IPAWS are:

1. IPAWS will allow the President of the United States to speak to the American people under all emergency circumstances, including situations of war, terrorist attack, natural disaster, or other hazards.
2. IPAWS will enable Federal, State, Territorial, Tribal, and Local alert and warning emergency communication officials to access multiple broadcasts and other communications pathways for the purpose of creating and activating alert and warning messages related to any hazard impacting public safety and well-being.
3. IPAWS will reach the American public before, during, and after a disaster through as many means as possible.
4. IPAWS will diversify and modernize the Emergency Alert System (EAS).
5. IPAWS will create an interoperability framework by establishing or adopting standards such as the Common Alerting Protocol (CAP).
6. IPAWS will enable alert and warning to those with disabilities and to those without an understanding of the English language.

7. IPAWS will partner with National Oceanic and Atmospheric Administration (NOAA) to enable seamless integration of message transmission through national networks
- B. Nebraska Emergency Management Agency (NEMA) will be the main Memorandum of Agreement (MOA) holder and all local county license holders will apply for IPAWS approval through NEMA. This application process will include an FEMA, State and County MOA initial application, a Public Authority Application, the COG MOA, FEMA IS 247 Certification, as well as documented proof of a County IPAW's Communication Plan and Standard Operating Procedures (SOP's) for the utilization of all messages, respectively.
- C. If events or circumstances necessitate the release of a Statewide message(s) under the authority of the Governor, the message will be coordinated through the Nebraska Emergency Management Agency and supported by the Nebraska State Patrol.

III. CONCEPT OF OPERATIONS

The following are the individual components of IPAWS that must be recognized.

- A. Common Alerting Protocol (CAP): is a digital format for exchanging emergency alerts that allows a consistent alert message to be disseminated simultaneously over many different communications systems.
 1. In order to meet the needs of the devices intended to receive alerts from the United States Integrated Public Alert and Warning System (IPAWS) System of Systems (SoS), this CAP v1.2 IPAWS Profile constrains the CAP v1.2 standard for receipt and translation with and among IPAWS exchange partners.
 2. The use of this profile is not necessarily limited to the initial IPAWS Exchange Partners. It is available to all who might want to use the particular concepts defined in this specification.
 3. The Common Alerting Protocol (CAP) provides an open, non-proprietary digital message format for all types of alerts and notifications. It does not address any particular application or telecommunications method. The CAP format is compatible with emerging techniques, such as Web services, as well as existing formats including the Specific Area Message Encoding (SAME) used for the United States' National Oceanic and Atmospheric

Administration (NOAA) Weather Radio and the Emergency Alert System (EAS), while offering enhanced capabilities that include:

- a. Flexible geographic targeting using latitude/longitude shapes and other geospatial representations in three dimensions;
 - b. Multilingual and multi-audience messaging;
 - c. Enhanced message update and cancellation features;
 - d. Template support for framing complete and effective warning messages;
 - e. Compatible with digital encryption and signature capability; and,
 - f. Facility for digital images and audio.
4. The Common Alerting Protocol (CAP) v1.0 and v1.1 were approved as OASIS standards before the Emergency Data Exchange Language (EDXL) project was developed. However, this profile specification shares the goal of the EDXL project to facilitate emergency information sharing and data exchange across the local, state, tribal, national and non-governmental organizations of different professions that provide emergency response and management services. Several exchange partner alerting systems of the IPAWS SoS are identified by this profile for specific accommodation. However, the CAP v1.2-IPAWS Profile is not limited to systems. It is structured to allow inclusion of other alerting systems as deemed appropriate or necessary.
- B. Primary Entry Point Stations (PEP): private or commercial radio broadcast stations that cooperatively participate with FEMA to provide emergency alert and warning information to the public prior to, during, and after incidents and disasters.
- C. IPAWS Open Platform for Emergency Networks (IPAWS-OPEN): the federal alert aggregator that receives and authenticates messages transmitted by alerting authorities and routes them to existing and emerging public alerting systems.
- D. Emergency Alert System (EAS): message dissemination pathway that sends warnings via broadcast, cable, satellite, and wireline services.
- E. Commercial Mobile Alert System (CMAS): message dissemination pathway that sends warnings via cell phones and other mobile devices.

- F. Nebraska currently utilizes Paraclete software, which is IPAWS compatible and accessible under our current state contract with Interop Solutions. However, if a local entity chooses another IPAWS compatible program, the application process will remain the same, with plans and procedures being submitted to NEMA for approval, before implementation occurs.

- G. After the initial application of the IPAWS system, the state is responsible for the initial training and testing of the Paraclete driven IPAWs software and support of the Paraclete System, to include; software updates and technical assistance. All other purchased IPAWS platforms must be supported by selected contracted vendors. All counties retain the responsibility for regularly scheduled training, testing and maintenance of their IPAWS systems. IPAWS messages, local guidelines and standard operating procedures (SOP's) must remain current at all times