



### Integrated Public Alert and Warning System (IPAWS)

#### **Alert Aggregator**

The Alert Aggregator, known as the IPAWS Open Platform for Emergency Networks (IPAWS-OPEN), is the part of the IPAWS system that collects emergency alerts, authenticates the sender, and makes the alerts available for alert dissemination services.

#### **Alerting Authority**

Alerting Authorities are public safety officials that are granted the authority to alert the public of emergency situations through Federal, State, and local laws.

#### **Alert Origination**

Alert origination is the process of composing an emergency alert and transmitting to alert dissemination services via the IPAWS Open Platform for Emergency Networks (IPAWS-OPEN).

#### **Alert Origination Tool**

Alert origination tools are software products used by emergency managers, public safety officials, and other alerting authorities to create and send critical life saving messages to the public or to other emergency management officials for collaboration.

#### **AMBER Alert**

The AMBER Alert Program is a voluntary partnership between law-enforcement agencies, broadcasters, transportation agencies, and the wireless industry, to activate an urgent bulletin in the most serious child-abduction cases. AMBER alerts are one of the three categories of alerts that can be used to send Wireless Emergency Alerts.

#### **Collaborative Operating Group (COG)**

A Collaborative Operating Group or “COG” is a term used by IPAWS to designate an organization that has been granted access to IPAWS-OPEN. A COG is established with IPAWS when a Federal, State, territorial, tribal, or local alerting authority executes a Memorandum of Agreement (MOA) with FEMA in order to access and use IPAWS.

#### **Commercial Mobile Alert System (CMAS)**

The Commercial Mobile Alert System (CMAS) (also referred to by the participating cellular service providers as Wireless Emergency Alerts (WEA)), was established pursuant to the Warning, Alert and Response Network (WARN) Act under Federal Communication Commission (FCC) rules. CMAS will enable alerting authorities to broadcast emergency alerts to cellular carrier customers with compatible mobile devices who are located in the geographic vicinity of cellular towers serving an affected area.

#### **Common Alerting Protocol (CAP)**

The Common Alerting Protocol (CAP) is an XML-based OASIS data format standard adopted by FEMA for exchanging public warnings between alerting technologies. CAP allows a warning message to be sent simultaneously over many warning systems to many different outlets (such as radio, television, mobile devices, Internet).

For more information: <http://www.fema.gov/ipaws/>

To contact the IPAWS Program Management Office: [ipaws@dhs.gov](mailto:ipaws@dhs.gov)

## **Emergency Alert System (EAS)**

The Emergency Alert System (EAS) is a national public warning system governed by Federal Communication Commission (FCC) rules that requires broadcasters, cable television systems, wireless cable systems, satellite digital audio radio service (SDARS) providers, and direct broadcast satellite (DBS) providers to supply the communications capability to the President to address the American public during a national emergency. EAS is also used by the National Weather Service to relay weather-related warnings, and may also be used by state and local authorities to deliver important emergency information about other types of hazardous situations.

## **Emergency Data Exchange Language - Distribution Element (EDXL-DE)**

IPAWS implements the Emergency Data Exchange Language Distribution Element (EDXL-DE), an OASIS data specification used for routing emergency information. EDXL-DE may be used to exchange content in a wide variety of commonly used digital formats, including text, images, audio, video, and more.

## **FIPS Codes**

Federal Information Processing Standards Codes (FIPS Codes) are a standardized set of numeric or alphabetic codes issued by the National Institute of Standards and Technology (NIST) to ensure uniform identification of geographic entities. The entities covered include: states, counties, American Indian and Alaska Native areas, etc. FIPS codes are used by IPAWS as one method to specify geographic warning areas.

## **HazCollect**

HazCollect is shorthand for the National Weather Service All-Hazards Emergency Message Collection System that allows authorized public officials to use NOAA communication pathways, such as NOAA weather radio, to send pre-and post-disaster alerts and warnings to the public.

## **Imminent Threat Alert**

“Imminent Threat” is one of the three categories of alerts that can be used to send Wireless Emergency Alerts (WEA). Imminent Threat alerts must meet specific criteria for urgency, severity and certainty.

## **Integrated Public Alert and Warning System (IPAWS)**

The Integrated Public Alert and Warning System (IPAWS) was established by Presidential Executive Order 13407. In the event of a national emergency, the President will be able to use IPAWS to send a message to the American people quickly and simultaneously through multiple communications pathways.

IPAWS is also available to United States Federal, State, local, territorial and tribal government officials as a way to alert the public via the Emergency Alert System, Wireless Emergency Alerts (WEA), NOAA Weather Radio and other National Weather Service dissemination channels, the Internet, existing unique warning systems, and emerging distribution technologies.

## **Interoperability**

Interoperability in the context of IPAWS refers to the use of standard data formats to enable the exchange of information between different platforms or software systems.

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## **IPAWS Architecture**

A high level diagram of the components of IPAWS may be found on the FEMA IPAWS website at [http://www.fema.gov/pdf/emergency/ipaws/architecture\\_diagram.pdf](http://www.fema.gov/pdf/emergency/ipaws/architecture_diagram.pdf).

## **IPAWS-OPEN**

IPAWS Open Platform for Emergency Networks (IPAWS-OPEN) is the Alert Aggregator that receives and authenticates messages transmitted by alerting authorities and routes them to alert dissemination services.

## **IPAWS PMO**

The IPAWS Program Management Office (PMO) runs the IPAWS program and is staffed by FEMA employees and other contractor support personnel.

## **Memorandum of Agreement (MOA)**

A Memorandum of Agreement is a cooperative document written between parties to work together on an agreed upon project or meet an agreed objective. FEMA executes MOAs with alerting authorities who would like to use IPAWS to send alerts and warnings as well as system developers who would like to test products in the IPAWS-OPEN test environment.

## **NOAA Weather Radio (NWR)**

NOAA Weather Radio (NWR) is a nationwide network of radio stations broadcasting weather information directly from the nearest National Weather Service (NWS) office. NOAA Weather Radios (NWR) broadcasts official National Weather Service (NWS) warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.

## **Non-Weather Emergency Message (NWEM)**

NWEM refers to emergency messages for the public about hazardous events that are originated by government organizations other than the National Weather Service, but still utilize NWS alert dissemination services.

## **OASIS**

The Organization for the Advancement of Structured Information Standards (OASIS) is a not-for-profit consortium that drives the development, convergence and adoption of open standards for the global information society. The OASIS Emergency Management Technical Committee develops international data standards relating to alerts and warnings as well as other aspects of emergency management.

## **Presidential Alert**

A Presidential Alert is one of the three categories of alert messages that can be used to send Wireless Emergency Alerts (WEA) and is reserved for use of the President of the United States in the event of a national emergency.

## **Primary Entry Point (PEP) Stations**

Primary Entry Point (PEP) stations are private/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.

## **Wireless Emergency Alert (WEA)**

Wireless Emergency Alerts (WEA) is the name used by the wireless telecommunications companies to refer to the Commercial Mobile Alert System (CMAS).

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