

Primary Entry Point

A Primary Entry Point (PEP) Station is a radio broadcast station that provides public information prior to, during, and after a national or local emergency. They are equipped with emergency generators to ensure broadcasting of warning and safety information to the public. FEMA, through cooperation with station owners and operators of communication facilities, will maintain, and if necessary, restore facilities and capabilities necessary for the public alert and warning system. The PEP Expansion Project and support from FEMA to the broadcasters will help ensure that under all conditions the President of the United States can alert and warn the public.

By the end of September 2011, a total of 74 Primary Entry Point System (PEP) stations will be operational throughout the United States, the U.S. Virgin Islands, and Puerto Rico. The direct coverage of the nation's populations will expand from approximately 67 per cent to over 90 per cent when these additional stations become operational.

Common Alerting Protocol (CAP) and Conformity Assessment Program

The Common Alerting Protocol (CAP) Standard is a format for exchanging emergency alerts allowing a consistent warning message to be disseminated simultaneously over many different warning systems. Over the past year, IPAWS has been working with OASIS—an independent standards body—to develop a profile, based on CAP, which will meet the needs of the emergency alerting community. In October 2009, OASIS voted to approve the OASIS CAP v1.2 USA IPAWS Profile as a technical specification.

IPAWS has put the Conformity Assessment Program in place to test manufacturer devices for CAP compliance and provide Emergency Alert System participants with a list of compliant CAP products. The IPAWS CAP Profile's open standard will facilitate manufacturing by multiple suppliers and will ensure interoperability among alert and warning systems at the Federal and state levels as well as across different alert delivery systems. FEMA has contracted with a third party independent lab to conduct objective analyses of alert and warning products to ensure adherence to the IPAWS CAP Profile.

“Our goal is simple -- to give one message over more devices to more people for maximum safety.”

FEMA Administrator Craig Fugate



FEMA

For more information on the
Integrated Public Alert and Warning System (IPAWS),
please contact the

Department of Homeland Security (DHS)
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Email: info-ipaws@fema.gov

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Integrated Public Alert and Warning System



FEMA

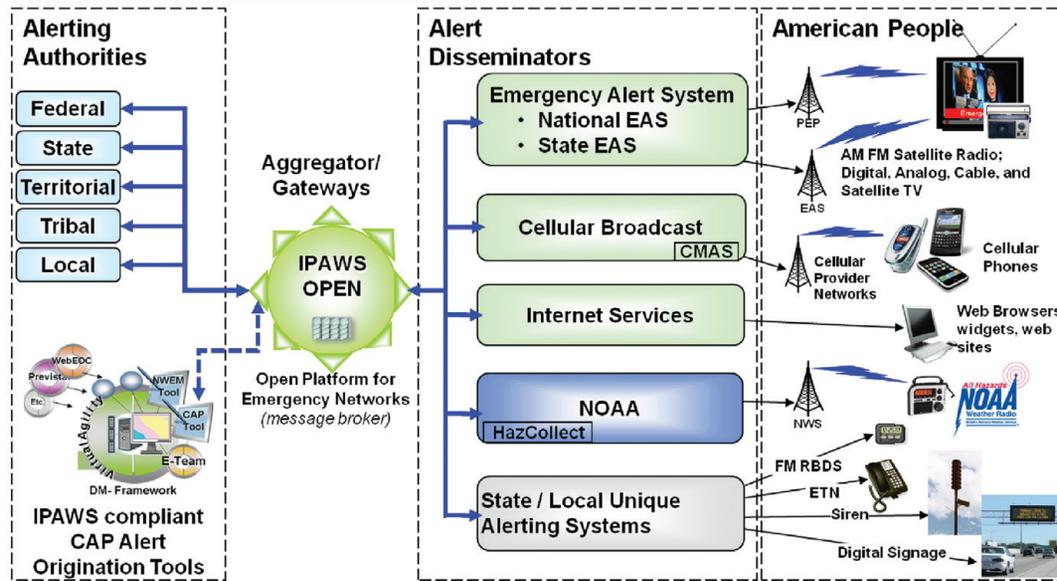
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Geo-Targeting Alert System (GTAS)

The Geo-Targeted Alerting System (GTAS) project is a joint development effort between the National Oceanic and Atmospheric Administration's (NOAA) Earth System Research Laboratory (ESRL) Global Systems Division (GSD) and the FEMA IPAWS program to provide emergency managers the tools they need to quickly and accurately determine the population impacted by the release of a toxic substance or by severe weather. The application provides emergency managers collaboration tools that allow them to leverage and more accurately communicate with their supporting National Weather Service (NWS) Weather Forecast Office (WFO). The application can issue alerts and warnings to the public through a variety of alert dissemination systems using the Common Alerting Protocol supported by many government organizations and vendors. The GTAS can model over 500 types of hazardous substances and integrates with other emergency manager applications, allowing emergency managers to craft a CAP message and distribute a targeted alert to one or more of the over 1,000 NWS transmitters across the nation to alert and warn the affected public.

DM-OPEN and DM-Framework

The IPAWS PMO is partnering with the FEMA Disaster Management Open Platform for Emergency Networks (DM-OPEN) and DM-Framework for the deployment of the IPAWS Aggregator and Alert Gateway capabilities. DM-OPEN is a non-proprietary interoperability service, coupled with shared messaging standards, enabling third party incident management software applications, systems, networks and devices to share information using open interoperability standards. The DM Framework system provides a basic incident management toolset allowing registered emergency management user groups to share and manage local emergency incidents securely. Adoption of the DM-OPEN and DM-Framework systems accelerates the development of a server core that supports aggregation, transformation and routing of alert and warning message formats, including the CAP. The DM-Framework also provides IPAWS with an alert origination capability that



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is already used by state and local emergency management offices for alert origination.

IPAWS General Information

The Integrated Public Alert and Warning System (IPAWS) is the nation's next-generation infrastructure of alert and warning networks. IPAWS ensures the President can alert and warn the public under any condition. Additionally, IPAWS will provide Federal, State, territorial, tribal, and local warning authorities the capabilities to alert and warn their communities of all hazards impacting public safety and well-being via multiple communication pathways. FEMA is upgrading the alert and warning infrastructure so that no matter what the crisis, the public will receive life-saving information via at least one path.

Executive Order 13407

"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 in situations of war, terrorist attack, natural disaster, or other hazards to public safety and well-being (public alert and warning system), taking appropriate account of the functions, capabilities, and needs of the private sector and of all levels of government in our Federal system, and to ensure that under all conditions the President can communicate with the American people."

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Commercial Mobile Alert System (CMAS)

IPAWS will include a wireless mobile alerting capability, the Commercial Mobile Alert System (CMAS), as an additional dissemination method to warn citizens. Providing critical alert information via wireless devices will help the public avoid danger or respond more quickly during a crisis, and thereby save lives and protect property. CMAS may accept messages from authorized Federal, State, territorial, tribal, and local officials and distribute them to participating Commercial Mobile Service Providers (CMSP) for distribution to the public via mobile phones. CMAS will facilitate the dissemination of three types of alerts: (1) Presidential Alerts, (2) Imminent Threat Alerts, (3) AMBER Alerts.

A key differentiator of the CMAS technology versus existing subscription-based text messaging alert services currently available in some areas is that CMAS will enable alert messages to be sent to any cell phone within range of a cell phone broadcasting tower. The CMAS also utilizes different communications channels and protocols which decrease the risk of network congestion during emergencies. The cellular industry, the FCC, and DHS S&T are critical partners with FEMA in developing this new alerting capability.

Alert Aggregator

IPAWS requires a centralized aggregator to perform the following functions: (1) receive alert messages from various message origination/authoring tools which are compliant with the CAP v1.2 IPAWS USA Profile; (2) transform CAP messages to various message formats; (3) send the transformed alert messages through router gateways to IPAWS-affiliated dissemination systems; and (4) apply consistent policies on network security, audit and management to provide a basic assurance level for all messages delivered through the IPAWS system. FEMA is working in conjunction with DHS S&T and the FCC to provide technical solutions for executing all recommended testing, security, and implementation procedures for the Alert Aggregator and Alert Gateway.