



Interoperable Message Exchange (IPAWS)

BACKGROUND

- FEMA's Integrated Public Alert and Warning System (IPAWS) Open Platform for Emergency Networks (IPAWS-OPEN) serves as a message broker that receives and authenticates messages transmitted by alerting authorities and routes them to public alerting systems, including radio, television, cell phones and other mobile devices, NOAA weather radio, internet-based systems, and other dissemination systems.
- In addition to the services provided by IPAWS-OPEN for public alerting, the system also enables the interoperable exchange of messages between government organizations to enhance situational awareness and collaboration.
- Government organizations are able to choose incident management software that best fits their needs. Organizations using different software can exchange messages as long as each system is compatible with IPAWS and each organization has established an IPAWS account.

IPAWS ACCOUNT REQUIREMENTS

- In order to obtain an IPAWS account, federal, state, territorial, tribal, and local government organizations who have IPAWS-OPEN compatible software must execute a Memorandum of Agreement (MOA) with FEMA, governing system security.
- An application to initiate the MOA process is available on the IPAWS website.

MESSAGING FORMATS

- IPAWS-OPEN uses the Common Alerting Protocol (CAP), an international data standard developed by the Organization for the Advancement of Structured Information Standards (OASIS), and adopted by FEMA.
- CAP alerts may be used to provide notice to response and/or mutual aid partners of actual or potential emergency incidents.
- IPAWS also implements the Emergency Data Exchange Language Distribution Element (EDXL-DE), another 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.
- EDXL-DE is designed to route information in other EDXL messaging formats, including Resource Messaging (EDXL-RM) and Hospital Availability Exchange (EDXL-HAVE).

SOFTWARE CONFORMANCE

- Commercial software system developers may voluntarily submit their products to the Preparedness-Technology, Analysis, and Coordination (P-TAC) Center's Supporting Technologies Evaluation Program (STEP) for independent testing of conformance to the CAP, EDXL, and IPAWS specifications. Evaluation reports are published on the Responder Knowledge Base Website, <https://www.llis.dhs.gov/knowledgebase>.