

# Integrated Public Alert and Warning System (IPAWS)

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During an emergency, alert and warning officials need to provide the public with life-saving information quickly. FEMA's Integrated Public Alert and Warning System (IPAWS) is a modernized national system for local alerting and will save time when time matters most, protecting life and property.

## Background

The Integrated Public Alert and Warning System provides public safety officials with an effective way to alert and warn the public about serious emergencies using the Emergency Alert System, Wireless Emergency Alerts, the National Oceanic and Atmospheric Administration Weather Radio, and other public alerting systems from a single interface. Federal, state, local, tribal and territorial (SLTT) Alerting Authorities can use IPAWS and integrate local systems that use Common Alerting Protocol standards with the IPAWS infrastructure.

<http://www.fema.gov/ipaws>

[IPAWS@fema.dhs.gov](mailto:IPAWS@fema.dhs.gov)

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## General IPAWS Information

### What is IPAWS?

IPAWS provides public safety officials with an effective way to alert and warn the public about serious emergencies using the Emergency Alert System, Wireless Emergency Alerts, the National Oceanic and Atmospheric Administration Weather Radio, and other public alerting systems from a single interface.



**FEMA**

**Available resources include:**

- IPAWS for the American People Fact Sheet<sup>1</sup>; and
- Overview of IPAWS Video<sup>2</sup>.

## Who can access IPAWS? How?

Federal and SLTT authorities can access IPAWS to issue critical public alerts.

To access IPAWS, you must become an Alerting Authority. It is a simple, four-step process:

- Complete IPAWS web-based training;
- Select an IPAWS-compatible alerting software;
- Apply for a Memorandum of Agreement with FEMA; and
- Apply for public alerting permissions.

**Available resources include:**

- [Sign Up to Use IPAWS to Send Public Alerts and Warnings](#)<sup>3</sup>

## Who is eligible to send alerts through IPAWS?

Any FEMA IPAWS approved Alerting Authority is eligible to send alerts through IPAWS.

## What devices can IPAWS transmit to?

IPAWS can transmit to a variety of devices, including radio and television stations, cellular carriers, internet services, NOAA Weather All-Hazards radios and other public warning devices that are integrated with IPAWS. Existing state or locally owned and operated warning systems – such as sirens, highway signs or emergency telephone notification systems – may be configured to receive alerts from IPAWS-OPEN.

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<sup>1</sup> Federal Emergency Management Agency. “IPAWS for the American People Fact Sheet.” FEMA, 2011, [https://www.fema.gov/pdf/emergency/ipaws/american\\_people\\_ipaws\\_factsheet.pdf](https://www.fema.gov/pdf/emergency/ipaws/american_people_ipaws_factsheet.pdf). Accessed 13 August 2020.

<sup>2</sup> Federal Emergency Management Agency. “Overview of the IPAWS Video.” FEMA, 2016, <https://www.youtube.com/watch?v=fJnTyuBFKZ4>. Accessed 13 August 2020.

<sup>3</sup> Federal Emergency Management Agency. “Sign Up to Use IPAWS to Send Public Alerts and Warnings.” FEMA, 2020, <https://www.fema.gov/emergency-managers/practitioners/integrated-public-alert-warning-system/public-safety-officials/sign-up>. Accessed 13 August 2020.

**Available resources include:**

- [IPAWS Open Platform for Emergency Networks \(IPAWS-OPEN\)](#)<sup>4</sup>

## What are the benefits of using IPAWS?

There are many benefits to using IPAWS, including:

- Richer, more accessible content;
- Support of audio, images, multiple languages, and is accessible by assistive devices and services;
- Simultaneous dissemination through multiple alerting pathways (e.g., EAS, WEA, Weather Radio, Public Feed Redistributors); and
- Technological advantages including high quality, reliable service, redundant methods of alerting, security, and interoperability.

**Available resources include:**

- IPAWS Helps State Local Tribal Territorial Authorities Fact Sheet<sup>5</sup>

## How do I build an alerting plan?

In addition to other resources on FEMA’s website, an Alerts, Warnings, and Notifications Program Planning Tool is in development and will offer a step-by-step process for creating an alerting plan.

## What are some best practices for IPAWS?

- Identify opportunities for partnerships;
- Utilize templates for alerting; and
- Test within your agency as frequently as possible to ensure all staff are up-to date on protocol and procedures.

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<sup>4</sup> Federal Emergency Management Agency. “IPAWS-OPEN.” FEMA, 2020, <https://www.fema.gov/emergency-managers/practitioners/integrated-public-alert-warning-system/technology-developers/ipaws-open>. Accessed 13 August 2020.

<sup>5</sup> Federal Emergency Management Agency. “IPAWS Helps State Local Tribal Territorial Authorities,” FEMA, 2020, <https://www.fema.gov/emergency-managers/practitioners/integrated-public-alert-warning-system/public-safety-officials/alerting-authorities>. Accessed 13 August 2020.

## How often do I need to renew my alerting certification?

Your alerting certification, known as the Memorandum of Agreement, must be renewed every three years. The digital certification expires after three years<sup>6</sup>.

## How is my new alerting certification installed?

Either the vendor or the Alerting Authority will reinstall the certification. If the digital certificate expires, the software will not allow you to use IPAWS.

## Grant Guidance

### Are there FEMA grants available to help me get access to IPAWS?

Yes. See information here<sup>7</sup>.

### What can I use the grant money for?

Grant money can be used for planning, training, exercises, and equipment, depending on the grant program.

### How do I apply for IPAWS grants?

To apply for IPAWS grants, consider these steps:

- Read Executive Order 13407 for national program guidance and responsibilities<sup>8</sup>;
- Read your state's communication interoperability plan to understand its communication goals and priorities;
- Coordinate alert and warning projects/proposals with statewide interoperability coordinators to ensure that projects align to needs identified in the SCIP; and
- Grants funding public alert and warning may be administered by various federal agencies and are subject to various statutory and other requirements. Grantees are encouraged to read grant guidance carefully to ensure the application meets all grant requirements.

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<sup>6</sup> Federal Emergency Management Agency. "Alerting Authorities." FEMA, 2020, <https://www.fema.gov/emergency-managers/practitioners/integrated-public-alert-warning-system/public-safety-officials/alerting-authorities>. Accessed 13 August 2020.

<sup>7</sup> Federal Emergency Management Agency. "IPAWS Supplemental Grant Guidance." FEMA, 2020, [https://www.fema.gov/sites/default/files/2020-06/fema\\_preparedness-grants-manual.pdf](https://www.fema.gov/sites/default/files/2020-06/fema_preparedness-grants-manual.pdf). Accessed 13 August 2020. (This was replaced by the "FEMA Preparedness Grants Manual – 2020").

<sup>8</sup> U.S. Government Publishing Office. "Executive Order 13407—Public Alert and Warning System." GPO, June 2006, <https://www.govinfo.gov/content/pkg/WCPD-2006-07-03/pdf/WCPD-2006-07-03-Pg1226.pdf>. Accessed 13 August 2020.

## Vendor Guidance

### How do I pick an alert origination vendor, and which vendors are available?

- In order to send a message using IPAWS, your organization must procure its own IPAWS compatible software<sup>9</sup>. Pre-planning will assist in selecting a vendor. Every Alerting Authority will have different demographics and risks that drive the alert and notification systems that are needed to notify various audiences. Another consideration when selecting alerting tools is whether a physical system or a hosted solution best meets your needs. Both options are effective but will not work for all organizations.

#### *Available resources include:*

- Information on available vendors can be found [here](#)<sup>10</sup>.
- System developers are also invited to participate in monthly webinars. Subscribe to the [Developer Email List](#) to receive webinar invitations.

## IPAWS Training Information

### Where can I find materials to help me know when to send an alert or use IPAWS vs. other tactics?

There are many helpful resources on FEMA's website. Additionally, consider using the DHS resources below as a starting point.

- [Best Practices in Wireless Alerts](#)<sup>11</sup>; and
- [Reporting on Alerting Tactics](#)<sup>12</sup>.

### What types of alerts can be sent using IPAWS?

The following alerts can be sent using IPAWS:

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<sup>9</sup> Federal Emergency Management Agency. "Sign Up to Use IPAWS to Send Public Alerts and Warnings." FEMA, 2020, <https://www.fema.gov/emergency-managers/practitioners/integrated-public-alert-warning-system/public-safety-officials/sign-up>. Accessed 13 August 2020.

<sup>10</sup> Federal Emergency Management Agency. "Alert origination software providers that have successfully demonstrated their IPAWS capabilities." FEMA, 2020, [https://www.fema.gov/sites/default/files/2020-07/fema\\_ipaws\\_alert-origination-software-providers.pdf](https://www.fema.gov/sites/default/files/2020-07/fema_ipaws_alert-origination-software-providers.pdf). Accessed 13 August 2020.

<sup>11</sup> Department of Homeland Security Science and Technology Directorate. "Best Practices in Wireless Alerts." DHS S&T, 2013, [https://www.dhs.gov/sites/default/files/publications/Wireless%20Emergency%20Alerts%20Best%20Practices\\_0.pdf](https://www.dhs.gov/sites/default/files/publications/Wireless%20Emergency%20Alerts%20Best%20Practices_0.pdf). Accessed 13 August 2020.

<sup>12</sup> Department of Homeland Security Science and Technology Directorate. "Report on Alerting Tactics." DHS S&T, 2018, [https://www.dhs.gov/sites/default/files/publications/1051\\_IAS\\_Report-on-Alerting-Tactics\\_180807-508.pdf](https://www.dhs.gov/sites/default/files/publications/1051_IAS_Report-on-Alerting-Tactics_180807-508.pdf). Accessed 13 August 2020.

- Emergency Alert System;
- Wireless Emergency Alerts;
- National Oceanic and Atmospheric Administration;
- Internet services;
- State/local alerting systems; and
- Future technologies.

### How do I learn how to send alerts?

Use the IPAWS Lab or your vendor resources.

### When geo-targeting, how do I draw a polygon?

Geo-targeting will vary across vendor platforms. The shape format allowed for successful launches across all IPAWS dissemination channels is very restrictive. The IPAWS tool requires that all single polygon shapes must be less than 100 nodes; no two shapes must overlap; and the Collaborative Operating Group must be permitted to send alerts in the given area<sup>13</sup>. For platform specific geo-targeting questions, contact your vendor.

### What do I do if I have trouble logging into IPAWS?

- If IPAWS OPEN is down, you should still be able to log in.
- FEMA IPAWS does not currently have 24-hour support at this time. If you cannot log-in, you should contact your vendor.
- Contact your vendor for any other non-IPAWS related questions.

## Testing and Exercises

### What General Testing Guidance is there?

The FEMA IPAWS Program Management Office is available to help public Alerting Authorities with the testing process. Please contact the IPAWS PMO to coordinate guidance at [IPAWS@fema.dhs.gov](mailto:IPAWS@fema.dhs.gov).

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<sup>13</sup> Federal Emergency Management Agency. "IPAWS TIP #21: WEA Enhanced Geo-targeting." FEMA, 2019, [https://www.fema.gov/media-library-data/1576528361487-aab5db7c437ea4b8fa1a8af58c69f2a8/December\\_2019\\_IPAWS\\_Tip.pdf](https://www.fema.gov/media-library-data/1576528361487-aab5db7c437ea4b8fa1a8af58c69f2a8/December_2019_IPAWS_Tip.pdf). Accessed 13 August 2020.

## What are the opportunities to test?

Testing is available through the IPAWS Lab and your vendor.

## Why are alerting tests important?

Alerting tests are important because training will increase the confidence of Alerting Authorities. Testing also ensures that your agency will be able to send an actual alert quickly and effectively.

## Who should test the system?

Every Alerting Authority is required to test monthly with the IPAWS Lab<sup>14</sup>. Regular testing ensures alert originators are familiar with the alerting systems before an incident occurs.

## Who should be involved in testing and exercises?

- IPAWS should be integrated into any and all existing public safety related exercises.
- Involving as many people within an organization as possible will ensure redundancy in case of an emergency in which the alert originator is not available to send the message.
- FEMA's [National Exercise Program](#) supports SLTT exercises to include alerts, warnings, and notifications. Fill out the National Exercise Program Nomination Form to request support from FEMA's National Exercise Division for your exercise.

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<sup>14</sup> Federal Emergency Management Agency. "Alerting Authorities." FEMA, 2020, <https://www.fema.gov/emergency-managers/practitioners/integrated-public-alert-warning-system/public-safety-officials/alerting-authorities>. Accessed 13 August 2020.