

IPAWS National Test

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Goals of National Tests



Public Law 114-143

IPAWS Modernization Act of 2015

“To provide timely and effective warnings regarding natural disasters, acts of terrorism, and other man-made disasters or threats to public safety, the Administrator shall ensure that training, tests, and exercises are conducted for the public alert and warning system, including by conducting, not less than once every 3 years, periodic nationwide tests of the public alert and warning system.”

- The IPAWS Office, in coordination with the Federal Communications Commission, tests IPAWS’ emergency communication pathways – including the WEA and EAS.
- State and Local Alerting Authorities occasionally conduct WEA and EAS tests in their localities.

The IPAWS Modernization Act of 2015 calls for **upgrading IPAWS** to ensure the President can communicate to the public under all conditions.



Goals of National Testing

Evaluate the effectiveness of the FEMA public alert and warning systems to distribute an emergency message nationwide and the operational readiness of the infrastructure for distribution of a national message to the public.

Ensure an effective and reliable system exists to provide timely and accurate alerts to the public and provide information to help determine whether technological improvements are needed.

Test the capability for the President to communicate with the public during national emergencies.



How We Test EAS

RWT: Required Weekly Test

- Consists of the header and end-of-message tones.
- Scheduled by stations on random days and times during weeks when there is no RMT.

RMT: Required Monthly Test

- Pre-scheduled and coordinated with State Alerting Authorities.
- Region-wide on an annual basis.
- Must be relayed by broadcast stations and cable channels.

IPAWS National Test

- Occur, at minimum, every 3 years.
- Must be transmitted by all EAS Participants immediately.
- Collect data for assessing whether dissemination of emergency alerts is in a timely manner.

IPAWS conducts weekly and monthly tests of EAS and conducts the National Periodic Test, at minimum, every 3 years.



How We Test WEA

RWT: Required Weekly Test

- The RWT Event Code is the approved event code used to test WEA.
- An Alerting Authority may use the event code RWT to test WEA **but should not perform live WEA tests on a weekly basis.**

Monthly Required Proficiency Demonstration

- Each authorized Alerting Authority must demonstrate their ability to compose and send a message through the IPAWS-OPEN system at least once a month.

IPAWS National Test

- Occur, at minimum, every 3 years.
- All major U.S. wireless providers participate in WEA and will transmit the national test to their subscribers.
- Phone must be turned on and within range of an active cell tower.

IPAWS Alerting Authorities test WEA through Monthly Required Proficiency Demonstrations and conduct additional tests at their discretion using the RWT Event Code. IPAWS conducts the National Periodic Test, at minimum, every 3 years.



Elements of the EAS and WEA National Test



WEA National Tests

IPAWS started **conducting National Tests of WEA on October 3, 2018.**

Features of WEA National Tests include:

- ✓ National Alerting Event Code
- ✓ Phones set to Spanish will display the alert in Spanish
- ✓ The WEA test message would state: “THIS IS A TEST of the National Wireless Emergency Alert System. No action is needed.”
- ✓ Cell towers broadcast the WEA test for approximately 30 minutes.
- ✓ All WEA-compatible cell phones that are switched on and within range of an active cell tower should be capable of receiving test messages.
- ✓ Help FEMA determine if carrier WEA configuration systems and networks will process WEAs sent to all cellular devices in the U.S.
- ✓ Phones will only receive the test message once.



The graphic above shows the IPAWS National Test on a phone



EAS National Tests

IPAWS started **conducting National Tests of EAS on November 9, 2011.**

Features of EAS National Tests include:

- ✓ Distributed to radio and television broadcasters, cable systems, satellite radio and television providers, and wireline video providers.
- ✓ All radio and television broadcasters are required to re-distribute IPAWS National Tests.

- ✓ EAS Participants that broadcast in Spanish will broadcast the Spanish translation of the alert.
- ✓ Interrupts programming for approximately 1 minute.
- ✓ Disseminated as a CAP message via IPAWS-OPEN.

The EAS message will read:

“This is a nationwide test of the Emergency Alert System, issued by the Federal Emergency Management Agency, covering the United States from 2:20 p.m. to 2:50 p.m. Eastern Time. This is only a test. No action is required by the public.”



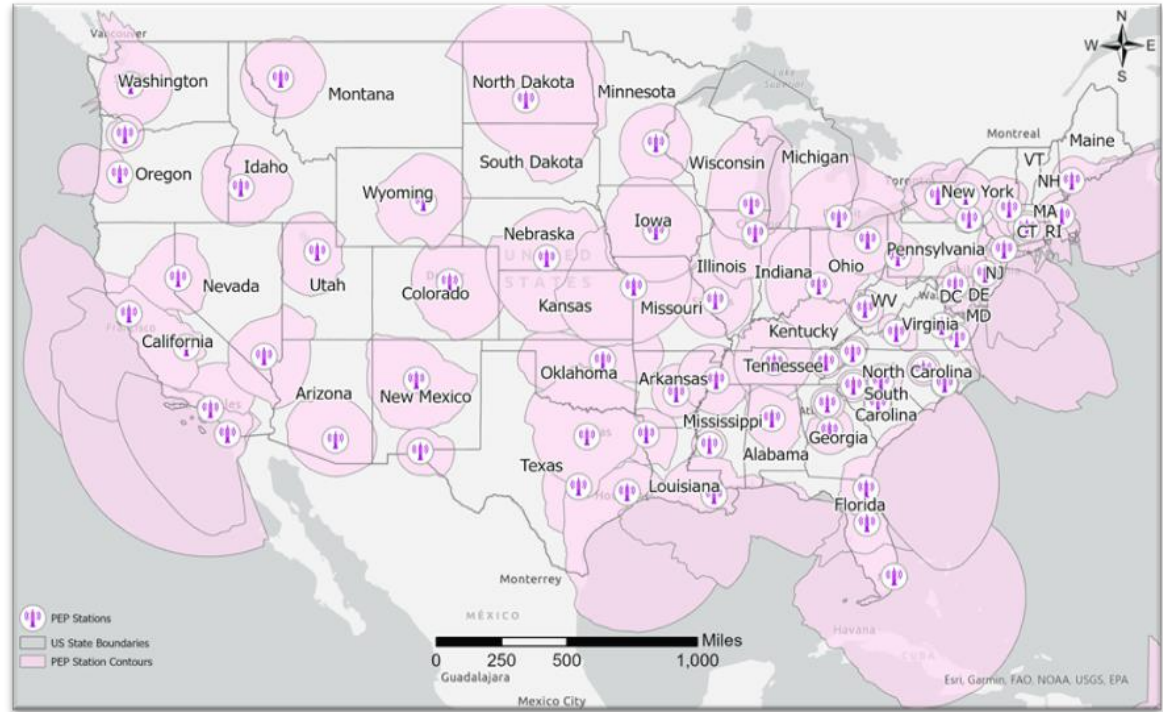
NPWS = National Public
Warning System
PEP = Primary Entry Point



EAS NPWS PEP Stations

There are **77 PEP stations** across the U.S. that can **reach 90% of the US population** during emergencies.

PEP stations are co-located with existing radio stations and provide backup in an emergency. They are hardened to withstand natural disasters and acts of terrorism and deliver a resilient emergency alert system



EAS CAP-Formatted Alerts

CAP is a **digital format** for exchanging emergency alerts, allows a **consistent alert message** to be **disseminated simultaneously** over multiple communications pathways.

CAP-Formatted alerts are distributed through IPAWS-OPEN.

The 2023 IPAWS National Test will be CAP-Formatted alerts.



Reach of the National Test



Who Receives the National Test

IPAWS National tests reach **all people in the U.S. at the time of the test.**

The IPAWS National Test is an opportunity to educate and enhance general awareness of emergency alert and warnings.

The IPAWS National Test requires collaboration with:

- ✓ Broadcasting Community
- ✓ Cellular Carriers
- ✓ Agencies across the Federal Government



2023 IPAWS National Test



IPAWS National Test - 2023

On October 4, 2023, IPAWS will conduct the seventh IPAWS National Test. Sending the WEA test message will begin at 2:18 p.m. EDT. The EAS message will be sent at 2:20 p.m. EDT.

What are we testing?

The 2023 IPAWS National Test will evaluate CAP-formatted EAS alerts and WEAs using the EAN “Imminent Threat” Event Code for WEA and NPT for EAS. This will read as National Alert on phones.

Who will receive the test?

The WEA portion of this test will reach all cellphones that are turned-on and within range of a participating cellular service.

Activities:

Before: Development of Test Implementation Guide, Test Execution Planning

Test Execution

After: EAS Participants are required to submit responses to the FCC’s ETRS (EAS Test Reporting System)

The 2023 IPAWS National Test on October 4 will test WEA and EAS and reach the entire public in the U.S. at the time of the test.



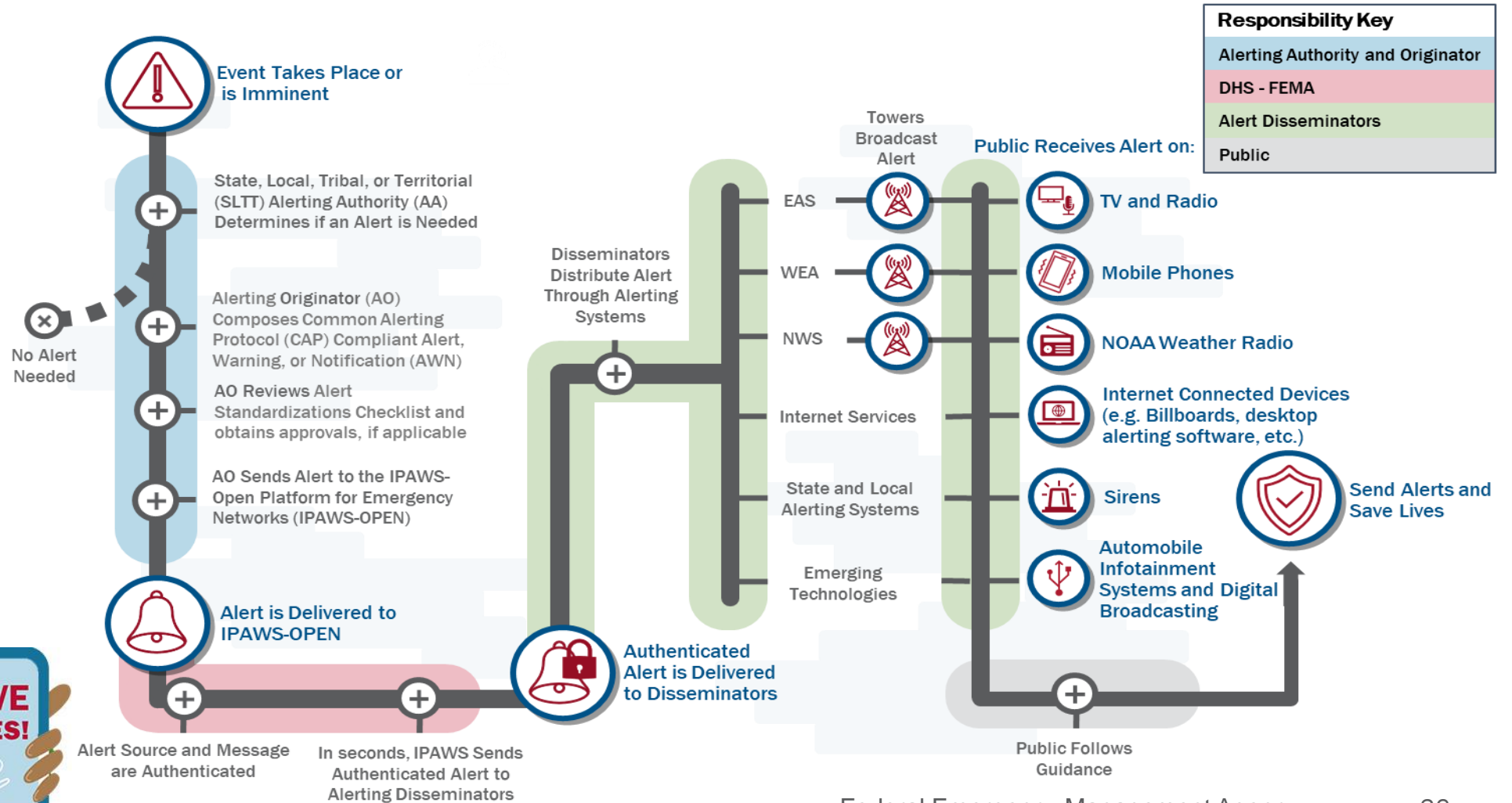
On October 4, 2023, WEA will be sent at 2:18 p.m. EDT. EAS will be sent at 2:20 p.m. EDT

The 2023 IPAWS National Test will be conducted on **October 4, 2023**. If the October 4, 2023 test is postponed due to widespread severe weather or other significant events, the **backup testing date is October 11, 2023**.

This year, the EAS message will be disseminated as a CAP message via IPAWS-OPEN and is sent from the IPAWS Technical Support Services Facility (TSSF) and distributed to broadcasters and cellular carriers. The WEA portion of the test will also be in CAP format.



Alert Distribution Through Integrated Public Alert and Warning System (IPAWS)



Following the 2023 IPAWS National Test

Immediately following the IPAWS National Test, **the IPAWS Office will deliver preliminary results of the test to key stakeholders.**

Following the 2023 IPAWS National Test, IPAWS is independently conducting a survey to help FEMA capture the geographic reach of the WEA alert message and key parameters outlined in the IPAWS Modernization Act of 2015 (P.L. 114-143)

Following the 2023 IPAWS National Test, IPAWS will evaluate the system performance against requirements documented in their 2023 Test Plan.

All television and radio broadcasters are required to redistribute the 2023 IPAWS National Test and submit information to the FCC's EAS Test Reporting System (ETRS).



Future IPAWS National Tests

FEMA continues to work with partners to **improve IPAWS efficiency and security.**

- ✓ Usage of avatars in addition to American Sign Language provision and captioning
- ✓ Next generation technology
 - Streaming services
 - Gaming platforms
 - Smart kiosks
 - Smart homes and buildings
 - Next generation TV
 - Digital billboards
- ✓ FEMA is working to maintain AM radio in all vehicles



Accessibility of National Test

FEMA IPAWS **continues to enhance accessibility with public alert and warnings.**

Initiatives to enhance accessibility for National testing include:

- ✓ Special alert tones for the Emergency Alert System and Wireless Emergency Alerts to improve accessibility for the hearing impaired.
- ✓ For WEAs, IPAWS also uses a special vibration cadence.
- ✓ IPAWS supports alerts being sent in both English and Spanish.
- ✓ WEA vibration cadence must have temporal tone that must be repeated twice. The vibration cadence must be restricted to use for Alert Messages (§ 10.530).

- ✓ When internet connectivity is available, IPAWS can provide emergency message content in multiple languages, if provided by the alert originator, for connected private sector systems that ultimately deliver the messages to people.
- ✓ The visual message portion of an EAS must be displayed at the top of the television screen and in a manner that is readily readable and understandable (§ 11.51).



The 2023 IPAWS National Test will be available in both **English and Spanish**. Both the WEA and EAS portions **will use special tones** to improve accessibility for the hearing impaired and the WEA portion **will use a special vibration cadence**.

Collaboration to Conduct IPAWS National Tests

IPAWS cooperates with:

- FEMA Office of External Affairs
- FEMA Office of National Continuity Programs
- FEMA Administrator
- FEMA Regional Leadership to conduct IPAWS National Tests

IPAWS Stakeholder Engagement Branch coordinates with:

- Tribal Affairs
- Religious Leaders
- Local Governments
- Education to prepare for and conduct the IPAWS National Test

Inter-Government and Inter-Agency liaising includes:

- Department of State
- Department of Education
- National Weather Service
- Department of Interior
- Federal Communications Commission

IPAWS collaborates across FEMA, government agencies, and State, Tribal, and Local communities to prepare and conduct the IPAWS National Test.



Outreach on National Test - Public

FEMA IPAWS engaged in **external outreach to stakeholders ahead of the National Test.**

Outreach efforts include:

- ✓ Dedicated content on the National Test on FEMA's [website](#), with [FAQs](#)
- ✓ Information shared on [social media](#)
- ✓ Joint [press release](#) with the FCC sent to media (English and Spanish)
- ✓ Public Service Announcement from the FEMA Administrator – Coming soon!

- ✓ Information shared with other government agencies and congressional stakeholders
- ✓ Information shared with Canadian and Mexican governments
- ✓ Presentations at meetings and conferences
- ✓ IPAWS newsletter article as well as FEMA bulletin to 76,000 external stakeholders



Thank You

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