



GUIDANCE DOCUMENT FOR WISCONSIN COUNTIES CONDUCTING IPAWS TESTING

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Issued by Wisconsin EAS Committee (State Emergency Communications Committee)

For updates to this guidance document, check Wisconsin Emergency Alert System (EAS) webpage at: www.sbe24.org/eas/CountyIPAWStesting.asp

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I. INTRODUCTION

This guidance document was created by the Wisconsin EAS Committee to assist Wisconsin counties in conducting tests of their alerting capabilities via FEMA’s Integrated Public Alert and Warning System (IPAWS).

This document is for use by counties that are already up and running on IPAWS. If your county has not yet acquired IPAWS alert origination software, completed the FEMA authorization process and received a Collaborative Operating Group (COG) ID, then you must first complete that FEMA process before IPAWS testing can be conducted. For more information, see: www.fema.gov/ipaws. Current contact information for IPAWS alerting in Wisconsin can be obtained from FEMA at: ipaws@fema.dhs.gov, or 202-212-2040.

II. IPAWS EAS TESTING

Wisconsin counties are encouraged to conduct regular weekly or monthly IPAWS EAS tests for the acuity of their alerting staffs, as well as the awareness of broadcasters and cable operators who receive these tests that the county has IPAWS alerting capabilities.

IPAWS EAS tests will not be broadcast on the air by broadcast stations or cable systems. The tests will merely be printed out on the broadcast or cable facility’s EAS unit log.

A. Preparing for IPAWS EAS Testing

Day-of-Week and Time: The County will need to choose a repetition rate (weekly or monthly), the day of the week, and the time. The Wisconsin EAS Committee requests that counties not schedule their test at the exact same time as a time already being used by another county in their area. Please pick a test time not already in use on the list “County IPAWS Test Times”, on this webpage of the Wisconsin EAS Committee: www.sbe24.org/eas/CountyIPAWStesting.asp

Use of Templates: The County may wish to create an EAS Test template within their IPAWS origination software for ease in calling up the test each time it is used.

Check your COG Profile: Within your IPAWS origination software, check your COG Profile to be certain that it shows “EAS Authorized” and under EAS Event Codes Permitted it shows “RWT”. Your software vendor can help you locate and interpret your COG Profile.

Establish a Relationship with a Broadcaster in your County: In order to verify that your test was successful, before beginning testing you should establish a relationship with a broadcaster in your county. After each test, you can contact that broadcaster to be sure your test was received. The person to search out at these stations is the Chief Engineer, who maintains the EAS unit.

B. Software Selections for the IPAWS EAS Test message

Dissemination Channel: The test should only be sent to the IPAWS or CAP Emergency Alert System (EAS) channel, not to IPAWS/CAP choices WEA or NWEM. It can also be sent to the IPAWS Public Feed, if that choice is available.

Event Code: The Event Code you must use for all EAS tests is “RWT - Required Weekly Test”, regardless if you are doing your test weekly or monthly. *(Never use the RMT-Required Monthly Test code, as this test would be aired immediately by all broadcasters. If your software is set up properly, the RMT code should not be available to you – but if you do see it, don’t use it.)*

Note: If EAS or RWT can’t be selected: Your software vendor controls what you see on your screen. If the software does not offer EAS dissemination or the RWT event, or does not allow you to select them, consult with your vendor. If your COG Profile referred to on the previous page shows EAS Authorized and shows RWT under EAS Event Codes Permitted, then your software vendor should allow you to select them for your template and test alert. For further assistance from FEMA, contact them at the email or phone in the Introduction paragraph above.

Time Duration/Expiration: This setting is not critical, but most users set it for 15 minutes.

Message Type: This field should be set to “Alert”, not “Update” or “Cancel”. (Some software may not offer this selection, but simply sends all messages as “Alert” type.)

Message Status: This field should be set to “Actual”, not “Test” or “Exercise”. (Some software does not offer this selection, but simply sends all messages in “Actual” status.)

Scope: This field should be set to “Public”, not “Restricted” or “Private”. (Some software may not offer this selection, but simply sends all messages as “Public” scope.)

Must Use “Live” Operational Mode: Most IPAWS origination software has two modes, a “Test” mode and a “Live” mode (the actual terms describing these modes in your software may vary). In “Test” mode, messages are only sent to an off-line FEMA test lab allowing you to practice without those messages going out over IPAWS. In “Live” mode, messages are actually sent out on the IPAWS system. This IPAWS EAS test you are conducting must be sent in the real “Live” mode (not “Test” mode). Sending in the “Live” mode, and selecting “Alert”, “Actual”, and “Public” in the steps above, will allow your test to be received by broadcasters and cable operators.

If you are unsure of any of these settings, consult your alert origination software vendor support.

C. Text included in the IPAWS EAS Test message

You will need to include text in your IPAWS EAS test message. There are three fields that can contain text in an IPAWS message: Headline, Description, and Instruction.

Headline text field: In a real alert, this would be a short title, like “Toxic Chemical Spill in Downtown Milwaukee”. This field is ignored for both EAS real alerts and tests, but may be used by other systems that monitor IPAWS. You can ignore Headline for your EAS test.

Description text field: In a real alert, this would be an expanded paragraph describing the emergency, and would appear in the TV crawl message at the bottom of the screen in a real emergency. For your EAS test, you should put text in this field, as it will be printed out on broadcaster EAS logs. (See WEM example text below.)

Instruction text field: In a real alert, this statement would be the “call to action”, and would appear in the TV crawl message at the bottom of the screen immediately following the Description text. For your EAS test, you should put text in this field, as it will be printed out on broadcaster EAS logs. (See WEM example text below.)

IPAWS EAS Test Sample Text: As an example, when Wisconsin Emergency Management (WEM) does an IPAWS test, this is the text they use...

Description: Wisconsin Statewide Required Weekly Test

Instruction: This is a test message from the Emergency Alert System originating from the State of Wisconsin Emergency Operations Center. If this had been an actual emergency, you would have been given official information, news, or instructions. This test is now concluded.

D. Audio included in the IPAWS EAS Test Message

You are not required to put an audio message into your EAS test, but it would be good practice for your alert origination staff to become familiar with inserting an audio message. WEM does include an audio message with their EAS tests; they simply read the message that is contained in the Instruction text above. In a real alert, it is the FCC’s intent that the audio message match the text message.

Text-to-Speech Synthesized Voice Option: In lieu of recording your own voice message, your software may offer a “text-to-speech” option, where the software converts your alert text to a synthesized computer-generated voice announcement to send with your test alert. If the option is offered, be sure to listen to the synthesized voice announcement to be certain that the computer pronounced everything correctly. You cannot easily change pronunciations by the computer voice, so if the announcement is not really understandable then you should record your own announcement with a microphone.

Formats for Recording Your Own Audio: If you record your own message on a microphone connected to your computer, be sure it is recorded in one of these two formats or EAS won’t accept it:

- MP3: mono, 64 kbps, preferably sampled at 22.05 kHz, or otherwise 44.1 kHz.
- WAV PCM: mono, 16-bit, sampled at 22.05 kHz.

If your IPAWS software has a recorder for this purpose, one would assume that it is in the proper format. If given a choice, use MP3 rather than WAV, as MP3 files are smaller so will take less time for broadcast station and cable system EAS units to download and begin playing back.

E. Verifying that your Test Worked

Following your IPAWS EAS test, you should check with a broadcaster in your county to be sure the message was received. The message will be received by all broadcasters and cable operators in the county, but it may be best to have prior arrangements to contact a particular station after the test. Cable distribution head-ends where the EAS equipment is located are typically not staffed, so it may be easier to reach a broadcaster than a cable operator for immediate verification.

III. IPAWS WEA TESTING

Effective on May 1, 2019, the FCC WEA rules were updated to allow State and Local IPAWS COGs to issue WEA Test messages, and to now require wireless carriers to pass on those tests and to make notification and display of those tests available to their subscribers who opt in to receive them.

The new rules require that wireless carriers who participate in WEA must immediately transmit a received State or Local WEA test to the geographic area specified by the alert originator, and these carriers must provide their subscribers with the option to opt in to receiving State and Local WEA tests. Carriers may forego the test if it is pre-empted by actual alert traffic or if an unforeseen condition in the wireless carrier's infrastructure precludes distribution of the test. If a carrier foregoes a test, the carrier must send a response code back to IPAWS indicating the reason.

Although this rule became effective on May 1, 2019, FEMA has stated that IPAWS won't begin passing these WEA Test messages until June 10, 2019, and after that date the ability of the various IPAWS alert origination software vendors to generate this WEA Test message and the ability of the various carriers to forward the message will vary. FEMA has stated that they will establish a webpage which will show which IPAWS alert origination software vendors and which carriers are ready with the WEA Test capability.

Note that the WEA Test function is one of several upgrades that became effective as part of "WEA 2.0" on May 1, 2019. Other features being deployed on this same date are the requirements that carriers support 360-character messages on their networks that are capable of doing so, that carriers forward messages that are issued in Spanish or that contain Spanish-language characters, and some other upgrades. Thus with a number of features being added at once, WEA Testing may be delayed and introduced in a package along with the other WEA 2.0 features. Contact your IPAWS alert origination software vendor directly for updates on your software's ability to generate WEA Test messages.

An important caveat with this new WEA Testing is that wireless subscriber cellphones are opted out of these tests by default. Only subscribers who proactively go into their phone's menu and opt in to the State/Local Test option will receive these WEA Test messages.

WARNING: Prior to May 1, 2019, the only way to conduct "WEA tests" was to apply to the FCC for a waiver to send a real alert code (containing a text message saying it is a test). Note

that even under this new rule, IPAWS COGs are still prohibited under FCC rules from sending a real alert code without an FCC waiver. The new rule only allows IPAWS COGs to send a message with the new WEA Test code, which wireless subscribers must opt in on their phones to receive.

For more details, see FCC Public Notice:

<https://docs.fcc.gov/public/attachments/DA-19-358A1.pdf>

More updates on WEA Testing will be provided as they become available from the FCC and FEMA.

IV. DOCUMENT REVISION LOG

Date	Changes	Done By:
3/14/2018	Initial Version	<p><u>Drafted by:</u> Gary Timm Broadcast Chair Wisconsin EAS Committee</p> <p><u>Approved by:</u> Paul Hughes Assistant State Communications and Warning Officer Wisconsin Emergency Management</p>
5/01/2018	<p>II. A.) new paragraph “Check your COG Profile”.</p> <p>II. B.) new paragraph “Dissemination Channel”.</p> <p>II. B.) new paragraph “Note: If EAS or RWT can’t be selected”.</p> <p>II. B.) Time Duration, added “/Expiration”.</p> <p>II. B.) new paragraph “Message Type”.</p> <p>II. B.) new paragraph “Scope”.</p> <p>II. D.) added 2nd and 3rd paragraphs on audio message parameters.</p>	<p>Changes by Gary Timm, after experience with assisting Milwaukee County OEM in building a template for their first test, observing several additional choices available in their software that should be documented. Also added audio recording format parameters, which were not previously documented.</p> <p>Approved by Paul Hughes.</p>
5/01/2019	III. updated language to reflect launch of WEA State and Local test capability	<p>Changes by Gary Timm, based on FCC Public Notice cited in this paragraph.</p> <p>Approved by Paul Hughes.</p>