



Federal Communications Commission



2007 Cable Systems (including Digital Cable) Handbook

Post at All Operator Stations

INTRODUCTION



The Emergency Alert System (EAS) is a national public warning system that requires broadcasters, cable television systems, wireless cable systems, wireline video providers, satellite digital audio radio service providers and direct broadcast satellite service providers to make their communications facilities available to the President during a National emergency. The system also may be used by state and local authorities to deliver important emergency information such as AMBER alerts and severe weather warnings targeted to specific geographical regions or areas.

This handbook provides EAS participants summary instructions for conducting EAS notifications and tests of national, state and local alerts.

It should be located at each operator position and should be immediately available to staff responsible for authenticating and initiating emergency action notifications, termination notices, alerts and tests.

For more detailed information, refer to the FCC's EAS rules and regulations at 47 C.F.R. Part 11.

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HELPFUL INFORMATION

Attention: Cable System Managers

EAS Requirements for Cable Television Systems (including Digital Cable)		
Cable System Size	EAS Requirements	Small Cable Systems Requirements Under Option B
Cable Systems with fewer than 5,000 subscribers per headend must comply with either Option A or Option B	<p><u>Option A</u></p> <p>Provide National Level EAS Message on all Programmed Channels, including the required testing.</p>	
	<p><u>Option B</u></p> <p>Install EAS equipment that is capable of providing:</p> <ol style="list-style-type: none"> 1) The Audio Alert Messages on all Programmed Channels. 2) Video Interrupt on all channels. 3) Audio and Video EAS Messages on one Programmed Channel. 	<p>Video Interruptions</p> <p>Must include a statement telling listeners on which channel the EAS video and audio message is displayed.</p> <p>Must flash a blank or black television screen simultaneously with, and of the same duration, as the EAS message.</p>
Cable Systems with 5,000 to 10,000 subscribers, per headend	Install EAS equipment that is capable of providing Audio and Video EAS Messages on all Programmed Channels.	
Cable Systems with 10,000 or more subscribers, per headend	Install EAS equipment that is capable of providing Audio and Video EAS Messages on all Programmed Channels.	

HELPFUL INFORMATION

EAS Designation

EAS instructions vary for each particular designation. Cable systems are designated as either participating or non-participating sources. Most cable systems have elected to participate in EAS and are designated as Participating National (PN) sources. However, cable systems that elect not to participate in the national level EAS, must hold an FCC authorization letter. Non-participating systems are designated as Non-Participating National (NN) sources.

The EAS transmissions of national, state and local emergencies by PN sources are intended for direct public reception. (47 C.F.R. Section 11.18(e)). All systems, including NN sources, are required to install and test EAS equipment. Upon activation of the national level EAS, NN sources are required to broadcast the EAS codes, Attention Signal, and the sign-off announcement in this handbook, and then stop operating until the end of message code is received. (47 C.F.R. Section 11.18(f))

Monitoring Requirements

All EAS Participants must monitor two EAS sources. The monitoring assignments are specified in the EAS State Plans and are determined according to FCC monitoring priorities. If the required EAS sources cannot be received, alternate arrangements or a waiver may be obtained by written request to the FCC. In an emergency, a waiver may be issued over the telephone with a follow-up letter to confirm temporary or permanent reassignment. (47 C.F.R. Section 11.52)

EAS Equipment Readiness

EAS participants are required to test their ability to receive and distribute EAS messages and to keep records of all tests. EAS participants are responsible for ensuring that encoders, decoders and signal generating equipment used as part of the EAS are installed so that the monitoring and transmitting functions are available during the times that the station is in operation. In addition, EAS participants must determine the cause of any failure to receive the required tests or activations specified in Section 11.61(a)(1) and (a)(2) and indicate in the station's EAS log why the tests were not received. These logs must be retained for three years at the EAS participant's headquarters.

In the event the EAS equipment becomes defective, a cable system may operate without the equipment pending its repair or replacement for a period not to exceed 60 days. If repair or replacement of defective equipment is not completed within 60 days, participants must submit an informal request for additional time to their assigned FCC field office. The request must include an explanation of what steps have been taken to repair the equipment. (47 C.F.R. Section 11.35(b) & (c)). Entries must be made in the participant's logs showing the date and time the equipment was removed and restored to service.

National Activation Procedures (All Systems)

(47 C.F.R. §11.54)

1 Receive the Emergency Action Notification (EAN) message

Automatic and Manual Operation

You will **see the words** “Emergency Action Notification” on the EAS decoder display.

You will **hear the following** Emergency Action Notification message from the EAS decoder.



Emergency Action Notification Audio Message

This is an Emergency Action Notification requested by the White House. All EAS participants will follow activation procedures in the EAS Operating Handbook for a national level emergency. The President of the United States or his representative will shortly deliver a message over the Emergency Alert System.

National Activation Procedures (All Systems)

2 Interrupt normal programming

For Manual Operation

Cease all programming and prepare to transmit the following announcement.

3 Transmit this announcement:



Broadcast this Announcement

This announcement may be made in the primary language of the station.

We interrupt our programming; this is a national emergency.

National Activation Procedures (All Systems)

4 Transmit the EAS header codes followed by the attention signal.

Cable systems must visually and aurally transmit header code data.

For Automatic Operation

EAS equipment will retransmit header codes and the attention signal.

For Manual Operation

Use the EAS encoder to retransmit the header codes and the attention signal.

National Activation Procedures (All Systems)



**Participating
Cable Systems:**

Follow Steps 5 - 9 of the National Activation Procedures.

**Non-Participating
Cable Systems:**

Follow Steps 10 - 11 of the National Activation Procedures.

National Activation Procedures (All Systems)

5 Participating Cable Systems



Broadcast this Announcement

This is an Emergency Action Notification. All broadcast Systems and cable systems shall transmit this Emergency Action Notification Message. This cable system has interrupted its regular programming at the request of the White House to participate in the Emergency Alert System.

During this emergency, most cable systems will remain on the air providing news and information to the public in assigned areas. This is (cable system name). We will continue to serve the (EAS Local Area name) area. If you are not in this Local Area, you should tune to cable systems providing news and information for your Local Area. You are listening to the Emergency Alert System serving the (EAS Local Area name) area.

Do not use your telephone. The telephone lines should be kept open for emergency use.

National Activation Procedures (Participating Systems)

6 Monitor the following sources for further instructions

Select your monitoring source in the following order:

1. Local Primary Source (LP)

- **LP-1** and **LP-2** of your EAS Local Area

(if unavailable)

2. State Relay Source (SR)

- **SR** source for the State Relay Network
(next)

3. Any other broadcast station or any other available source

National Activation Procedures (Participating Systems)

7 Transmit emergency messages as soon as they are available

The priorities for EAS messages are:

During a national emergency, the facilities of all EAS participants must be reserved exclusively for distribution of Presidential Messages.

First Presidential messages take priority over any other message

Second Local Area messages

Third State messages

Fourth National Information Center (NIC) messages

(47 C.F.R. §11.44)

National Activation Procedures (Participating Systems)

8

Transmit this standby script until emergency messages are available

Manual Operation



Broadcast this Announcement

We interrupt our programming at the request of the White House. This is the Emergency Alert System. All normal programming has been discontinued during this emergency.

This is (cable system name). This cable system will continue furnishing news, official information and instructions for the (EAS Local Area name) area.

If you are not in (EAS Local Area name) area, you should tune to stations providing news and information for your area. It is important that you listen carefully to announcements from the station or cable system in your local area.

REPEAT

National Activation Procedures (Participating Systems)

9 *After the Presidential message:*

Transmit the End of Message Code

Log



Monitor



For Automatic Operation

The EAS encoder is programmed to automatically transmit the End of Message (EOM) code.

For Manual Operation

Manually transmit the End of Message (EOM) code with the EAS encoder.

1. Log the time and date the Emergency Action Notification is received at your system;
2. Monitor your EAS source for the Emergency Action Termination Message;
3. When the Emergency Action Termination message is received on the EAS decoder, follow the National Termination Procedures included in this handbook.

National Activation Procedures (Non-Participating Systems)

10 Transmit this announcement

This Announcement should be pre-recorded if automatic operation is used.

For Manual Operation transmit the following:



Make this Announcement

This is an Emergency Action Notification. This cable system has interrupted its regular programming at the request of the White House to participate in the Emergency Alert System.

During this emergency, most cable systems will remain on the air providing news and information to the public in assigned areas.

This is (cable system name). We will be discontinuing programming. You should now tune to stations providing news and information for your local area.

This cable system will be discontinuing programming.

Do not use your telephone. The telephone lines should be kept open for emergency use.

REPEAT ANNOUNCEMENT

National Activation Procedures (Non-Participating Systems)

11 Transmit the End of Message (EOM) code

For Automatic Operation

The EAS encoder is programmed to automatically transmit the EOM code.

For Manual Operation

- Manually transmit the EOM code with the EAS encoder.
- Sign Off.
- Remove all programming from the Cable System.

Log



1. Log the time and date the Emergency Action Notification is received at your Cable system.

Monitor



2. Monitor your EAS source for the Emergency Action Termination message.

When the Emergency Action Termination message is received on the EAS decoder, follow the National Termination Procedures included in this handbook.

National Termination Procedures (All Systems)

1 Receive the
Emergency
Action
Termination

Automatic and Manual Operation

You will see the words “Emergency Action Termination” on the EAS decoder display.

You will hear the following Emergency Action Termination message from the EAS decoder.

Emergency Action Termination Message

This concludes operations under the Emergency Alert System. Normal programming operations may now resume.



**Non-
Participating
Systems:**

Resume normal programming and go to Step 2

National Termination Procedures All Systems

2 Transmit the EAS header codes and attention signal.

Cable systems must visually and aurally transmit header code data.

For Automatic Operation

The EAS equipment will automatically transmit your EAS header code and attention signal.

For Manual Operation

Use your EAS equipment to transmit the EAS header code.

EAS Header Codes

Attention Signal

Use your EAS equipment to transmit the EAS attention signal.

National Termination Procedures (All Systems)

3 Transmit this announcement

For Manual Operation

Use the EAS encoder to transmit this announcement:



Broadcast this Announcement

This concludes operations under the Emergency Alert System. All cable systems and normal programming operations may now resume.

REPEAT ANNOUNCEMENT

National Termination Procedures (All Systems)

4 Transmit the
End of
Message (EOM)
code

For Automatic Operation

The EAS encoder will automatically transmit the EOM code.

For Manual Operation

Use the EAS encoder to transmit the EOM code.

5 Resume
programming

Resume normal programming.

6 Log 

Log receipt of emergency message.

Record the time that the Emergency Action Termination Notice was received in records/logs.

State and Local Activation Procedures (All Systems)

(47 C.F.R. §11.55)

The EAS may be activated at management's discretion in connection with day-to-day emergency situations posing a threat to life and property. These activations may be performed at the State or Local Area level by any EAS participant.

All State and Local procedures must follow dictates of State plans and FCC rules.

EMERGENCY:

A situation posing an extraordinary threat to the safety of life and property. Examples include, but are not limited to: 1) natural situations such as tornadoes, flash floods, icing conditions, heavy snows, fires, and; 2) man-made situations such as discharge of hazardous materials, power failures, industrial explosions, civil disorders, and nuclear incidents.

SEVERE WEATHER WATCH:

A severe weather WATCH indicates that the probabilities of a particular severe weather storm are high, and is an alert to the public of such severe weather conditions.

SEVERE WEATHER WARNING:

A severe weather WARNING indicates that a particular severe weather storm actually has been sighted in an area or is indicated by radar, and serves notice to the public that severe weather conditions are almost certain to occur.

State and Local Activation Procedures (All Systems)

1 Receive requests for EAS activation by any of these methods:

STATE LEVEL OFFICIAL: A request for activation may be directed to the State Primary (SP) source by the Governor, his designated representative, the National Weather Service, or the State Office of Emergency Services. Other designated government officials may be found in your State EAS Plan.

2 Authenticate EAS message

State Primary (SP)
or the Local
Primary (LP)
sources

LOCAL LEVEL OFFICIAL: A request for activation may be directed to the Local Primary (LP) source by the National Weather Service, Local Emergency Management or Public Safety Officials. Other designated government officials may be found in your Local EAS Plan.

EAS Decoder Display

You will see the emergency message on the decoder display.

Authenticate the request for activation according to the EAS State or Local Area Plan.

The following sources do not require authentication:

- National Weather Service
- NOAA Weather Radio
- NOAA Weather Wire

State and Local Activation Procedures (All Systems)

3 Transmit State/ Local EAS opening message

For Automatic Operation

Programming may be interrupted shortly after you hear the incoming message. Procedures may vary according to station policy.

For Manual Operation

Record or store the message unless programming is interrupted to allow the emergency message to be transmitted live.



Broadcast this Announcement

**We interrupt this program because of a
(State or Local) emergency.**

Important information will follow.

State and Local Activation Procedures (All Systems)

4 Transmit the EAS header codes followed by the attention signal

For Automatic Operation

EAS equipment will retransmit header codes and the attention signal.

For Manual Operation

Use the EAS encoder to retransmit the header codes and the attention signal.

Cable systems must visually and aurally transmit header code data.

5 Transmit the emergency message

For Automatic Operation

EAS equipment will transmit the emergency message.

For Manual Operation

Transmit the emergency message (live or from storage) over the air.

If the emergency is ongoing, advise your audience to stay tuned for more messages.

State and Local Termination Procedures (All Systems)

6 Transmit the End of Message (EOM) code & resume regular programming

For Automatic Operation

The EAS equipment will switch to normal programming when the EOM is received.

For Manual Operation

Transmit the EOM and follow the procedures to resume normal programming.

7 Log 

Log receipt of emergency message.

Record the time that the Emergency Action Termination notice was received in records/logs.

Monthly and Weekly EAS Tests (All Systems)

(47 C.F.R. §11.61)

EAS tests are required by FCC Rules and must follow FCC Rule requirements

Weekly Tests

Weekly tests consist of transmitting the EAS digital header codes and end of message (EOM) codes, once each week.

Weekly tests must be conducted by EAS participants on different days and at different times.

Monthly Tests

Monthly tests consist of transmitting:

- EAS digital header codes;
- the two-tone attention signal;
- a brief test script and EOM code;
- a visual display of header code data.

Monthly tests must be retransmitted within 60 minutes of receipt.

Odd/Even Months:

- In odd months, monthly tests must be conducted between 8:30 a.m. to local sunset.
- In even months, monthly tests must be conducted between local sunset to 8:30 a.m.

Monthly and Weekly EAS Tests (All Systems)

Substitution of weekly and monthly tests

NO WEEKLY TEST IS NECESSARY during the week that a monthly test is conducted or when there is an EAS activation for a State or Local emergency.

NO MONTHLY TEST IS NECESSARY during a month when there is an EAS activation that includes a two-tone alert signal and an audio message.

Failure to receive an EAS test

IF YOU DO NOT RECEIVE A TEST EACH WEEK from your two assigned monitoring sources, take the following actions:

- Determine why no test was received.
 - Check your EAS equipment
 - Call your monitoring source(s)
- Take appropriate corrective action.
- Document your findings in the EAS record logs.

Failure to send an EAS test

IF YOU ARE UNABLE TO SEND WEEKLY TESTS, take the following actions:

- Determine why no test was sent.
 - Check your EAS equipment
- Take appropriate corrective action.
- Document your findings in the EAS record logs.

IF YOU ARE UNABLE TO SEND A MONTHLY TEST received from your assigned monitoring sources, take the following actions:

- Determine why no test was sent.
 - Check your EAS equipment
 - Call your monitoring source(s)
- Take appropriate corrective action.
- Document your findings in the EAS record logs.

Monthly and Weekly EAS Tests (All Systems)

Weekly Tests

1. Receive test

Receive and log the weekly test from all of your EAS monitoring assignments.

2. Transmit weekly test

Weekly tests must be conducted by EAS participants on different days and at different times.

3. Discontinue normal programming

Sample Audio Message

This is a test of the Emergency Alert System.

Transmit weekly tests codes and transmit EOM codes.

Use the cable system EAS encoder to transmit the EAS header code and the EOM code. For headends with less than 5,000 subscribers using Option A - see chart on page two of this handbook.

4. Resume normal programming and log

Resume normal programming and log receipt and transmission of the test.



Monthly and Weekly EAS Tests (All Systems)

Monthly Tests

1. Receive the test from your EAS monitoring assignment

2. Transmit this optional announcement

Sample Audio Message
This is a test of the Emergency Alert System.

3. Discontinue normal programming

Cable Systems

Over 5,000 subscribers must visually and aurally transmit header code data on all channels.

Less than 5,000 subscribers - see chart on page two of this handbook.

4. Retransmit

Use the EAS encoder to retransmit the header codes and attention signal within 60 minutes of receipt.

NOTE: Only authorized stations may initiate a monthly test.

Monthly and Weekly Tests (All Systems)

Monthly Tests

5. Monthly Tests

Retransmit the monthly test script as received from your source

Sample Test Script

This is a coordinated monthly test of the broadcast stations and cable systems of your area. We are testing equipment that can quickly warn you during emergencies. If this had been an actual emergency such as (insert types of emergencies that may occur in the geographic area), an official message would have followed the alert tone.

This concludes this test of the Emergency Alert System.

Monthly and Weekly Tests (All Systems)

Monthly Tests

6. Transmit the End of Message (EOM) codes

Use the EAS encoder to transmit the EAS header code and the EOM code.

7. Resume normal programming and log



Resume normal programming.

Log receipt and transmission of test.

Steps 3 through 7 of the monthly tests may be performed automatically.