EAS

Emergency Alert System

MINNESOTA STATEWIDE PLAN

2021

Introduction

This plan, required by the Federal Communications Commission in 47 C.F.R. §11.21, describes the organization and implementation of the State of Minnesota Emergency Alert System (EAS). It sets forth procedures for EAS Participants (broadcast, cable, wireline) and designated government officials (PSAPs) to issue messages for pending or actual emergencies.

This plan serves three basic purposes:

1. It outlines how the Governor, the National Weather Service (NWS) and authorized State/Local government entities can provide emergency messages for the state of Minnesota, in whole or in part.

2. It provides guidance to EAS Participants for the execution of alerts from all sources.

3. It outlines the framework for how emergency managers, public safety answering points (PSAP) and EAS Participants can work together to assure that Minnesota residents and residents in surrounding states can receive timely information, in an effort to protect life and property.

This plan is an addition to the FCC EAS Rules and is not meant to be a summary, in whole or in part, of those Rules. FCC Rules, Part 11, provide for the Emergency Alert System. This plan, prepared by the SECB equivalent to the State Emergency Communications Committee (SECC) in cooperation with;

- Federal Communications Commission (FCC),
- National Weather Service (NWS) office in Chanhassen, Minnesota,
- Minnesota Department of Public Safety,
- State and local officials and
- EAS Participants.

Provides background data and prescribes specific procedures for EAS Participants to transmit emergency information and warnings to the public, within the EAS Participants coverage area.

Reason for a Plan

The State of Minnesota is subject to major emergencies and disasters, weather, technological and criminal, which can pose a significant threat to the health and safety of the public. The ability to provide citizens with timely emergency information is a priority of emergency managers statewide. The Emergency Alert System (EAS) developed by the Federal Communications Commission (FCC) provides emergency information to the public via television, radio, cable systems and wire line providers.

The Integrated Public Alert and Warning System, (IPAWS) was created by FEMA to aid in the distribution of emergency messaging to the public via the internet and mobile devices. It is intended that the EAS combined with IPAWS be capable of alerting the public reliably and effectively. This plan was written to explain who can originate EAS alerts and how and under what circumstances these alerts are distributed via the EAS and IPAWS.

Purpose

When emergencies and disasters occur, rapid and effective dissemination of essential information can significantly help to reduce loss of life and property. The EAS through IPAWS are designed to provide this type of information. These systems will only work through a coordinated effort. The purpose of this plan is to establish standardized, integrated EAS & IPAWS communications protocols capable of facilitating the rapid dissemination of emergency information to the public.

Objectives

- Provide participating stations with the information they need to be participate in the EAS.
- Describe the EAS administrative structure within Minnesota. (page 1)
- Establish who has the authority to originate an EAS notification. (page 2)
- Identify approved event codes for Minnesota. (page 7)
- Explain EAS integration with IPAWS (page 12)
- Establish standards for training, exercising, and testing of the EAS and IPAWS. (See Annex A)

Legal References

This plan was developed in accordance with Federal Communications Commission requirements, as well as State of Minnesota statutes. Legal bases and references include:

Federal Telecommunications Act of 1996.

Federal Communications Commission, Report & Order FCC 94-288.

FEMA Executive Order 12472: Assignment of National Security and Emergency Preparedness Telecommunications Functions dated April 3, 1984.

FEMA Executive Order 12656: Assignment of Emergency Preparedness Responsibilities dated November 18, 1988.

FEMA Statement of Requirements for Presidential Communications dated September 15, 1995.

Title 47 U.S.C. 151, 154 (I), 303 (r) and 606; 47 CFR Part 11, FCC Rules & Regulations, Emergency Alert System.

Minnesota Statutes, Chapter 12, as amended.

Plan Review Schedule

The Minnesota EAS Statewide plan will be reviewed every two years at a minimum. Beginning in 2021 and every year thereafter, the MN-IPAWS committee will meet and review the plan, updating as necessary. Changes to the plan when needed to address deficiencies identified in reviews, tests and activations.

Revision Number	Date of Revision	Person(s) Responsible for Revision	Changes Made
1.0	4/16/2021		Total Revision

Distribution

Agencies identified in this document will provide updated information about their responsibilities. This will be reflected in plan revisions.

All plan maintenance and distribution conducted by the MN-IPAWS Committee will be coordinated through the Minnesota Division of Emergency Communication Networks (ECN). Additional copies of the plan are available by contacting the ECN representative from the MN-IPAWS. See Annex E for contact names.

Current copies of this plan distributed to:

 a. All EAS participants in Minnesota.

 b. The FCC, DPS and Local Public Safety entity's.

 c. Any participating private organization that contributes to the dissemination of EAS messages.

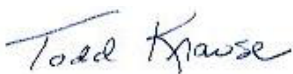 d. Posted to the internet on the ECN IPAWS and FCC web Pages.

Signatures

_____
Chair IPAWS Committee SECB

_____
MPR 5/3/21

_____
NWS

_____
FCC

Emergency Alert System (EAS) Checklist for EAS Participants

Our EAS Operational Area is: _____
                                    (Page 10)

CAP Monitoring Point: www.fema.gov/apps

EAS Monitoring Assignment # 1_____

EAS Monitoring Assignment # 2_____

EAS Monitoring Assignment # 3 (Optional) _____

_____ 1. FCC EAS Operating Handbook is immediately available.
            (https://www.fcc.gov/general/eas-test-reporting-system)

_____ 2. All personnel receive appropriate training in EAS procedures and in the use of EAS equipment.

_____ 3. EAS encoder-decoder is installed and operating.

_____ 4. Correct assignments monitored, according to State EAS plan.

_____ 5. Weekly and monthly EAS tests (RWT, RMT) received and logged.

_____ 6. Weekly EAS test transmissions (RWT) made and logged.

_____ 7. Copy of State EAS plan is immediately available.

_____ 8. A member of the station on the EAS List-serv. eas@eas.talklist.com

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SECC Governance Structure (State Emergency Communication Committee)

The SECC is the IPAWS subcommittee of the Minnesota Statewide Emergency Communications Board (SECB).

The Minnesota Statewide Emergency Communications Board (SECB), now named the IPAWS subcommittee (IPAWS), was created to replace the FCC mandated SECC. This committee works together with the following organizations to maintain this plan: The Minnesota Broadcasters Association, National Weather Service, Public Safety, Minnesota Emergency Management, Twin Cities Public Television, Minnesota Public Radio and other interested parties.

Plan updates address radio, television, internet, social media, email, and text messaging.

The MN-IPAWS committee is the statewide coordinating group for the EAS and IPAWS. A list of current key members of the MN-IPAWS is located in Annex E.

Alert Origination

Alerting Responsibilities:

Handbook

Part 11 of the FCC Rules and Regulations require that a copy of the EAS Handbook and State EAS Plan is be maintained "at normal duty positions or EAS equipment locations "for all EAS Participants". The current FCC EAS Handbook is available at https://www.fcc.gov/general/eas-test-reporting-system under the heading: HANDBOOK.

National Level Activation EAN Alert

National (EAN/NPT)

In the event of a national emergency, the President may decide to address the nation. The White House Communication Agency will transmit an Emergency Alert Notification (EAN) directly from the White House via FEMA, to the Minnesota Primary Entry Point (WCCO Radio) and the NPR satellite system to the Minnesota State Relay, (MPR).

Periodically, FEMA will schedule a National Periodic Test (NPT) to test this part of the system.

For Statewide emergencies, the authorized alert is sent to the Primary Entry Point (PEP) WCCO AM and the State Relay (MPR).

All participating nationals (PN) are mandated to install and operate a CAP certified EAS encoder/ decoder. PNs must configure the decoder to receive two sources (see Monitoring Assignment: Presidential), decode and monitor for the emergency activation notification (EAN) alert code and the national periodic test (NPT) alert code. If an EAN is properly received/decoded, PN's must pre-empt

programming and immediately broadcast the live incoming audio continuously until the end-of-message (EOM) code is received/ decoded.

Severe Weather Activation

Broadcasting severe weather alerts over the EAS is voluntary. The NWS local forecast office is responsible for originating severe weather alerts.

The NWS local forecast office may distribute non-weather emergency messages, (NWEM) via local NOAA radio transmitters (legacy EAS) and/or the FEMA IPAWS program (CAP). Any NWEM alerts are originated via NOAA weather radio in cooperation and agreement with the local public safety/emergency management office and the NWS local forecast office.

Statewide and Regional Activation

Statewide (BLU, CAE, RMT, RWT and NUW)

During a statewide emergency or test, authorized agencies may originate an EAS/IPAWS alert via the EAS or using the IPAWS-OPEN server. Incoming EAS/IPAWS alerts will be relayed on WCCO AM and the Minnesota Public Radio state relay network.

Local Activation

Local Alert (CDW, CEM, EVI, RWT, and SPW)

During a local emergency, authorized agencies may originate an EAS Alert using IPAWS.

As an alternative, a NWEM alert can be sent to the local NWS office via telephone, fax, email, 800 MHz radio. The NWS local forecast office may distribute non-weather emergency messages, (NWEM) via local NOAA radio transmitters (legacy EAS) and/or the FEMA IPAWS program (CAP). Any NWEM alerts are originated via NOAA weather radio in cooperation with the local public safety/emergency management office and the NWS local forecast office.

See annex D for NWS contact information for your local NWS office. The NWS will forward the alert using the NOAA Weather Radio network.

EAS/IPAWS Operations Policies

EAS and IPAWS are intended to alert the public with a message that informs them where to turn for further information. After the alert has been issued, participating news organizations should preempt programming and provide emergency information. The EAS is not intended to be a broadcast service providing continuous programming and supporting information.

EAS and IPAWS alerts should be clear, concise, and used only when necessary to protect lives or property. To ensure accountability and responsible use of the EAS/IPAWS, the MN-IPAWS has determined that all EAS alerts may only be originated by those agencies with authority assigned by FEMA and the MN-IPAWS. Federal and state laws prohibit anyone without cause or authority from originating an EAS notification.

Emergency Alert System (EAS) Checklist for Emergency Response Personnel

In general, the following conditions should be considered in determining whether the issuance of an EAS alert is warranted:

EAS Activation Checklist

Yes   No

___   ___   Is this a sudden, unforeseen, or unpredictable situation?

___   ___   Does the situation pose an imminent threat to life or property?

___   ___   Does the situation have the potential to adversely impact a significant population
                          or geographic area?

___   ___   Does the situation require that the public be warned immediately to seek shelter or
                          take other protective action?

___   ___   Are other means of disseminating information inadequate to ensure rapid delivery
                          of the information?

Important: Do not activate EAS or WEA if the answer to any of these questions is "No."

False Alerts

As stated in part 11.45 Prohibition of false or deceptive EAS transmissions.

No person may transmit or cause to transmit the EAS codes or Attention Signal, or a recording or simulation thereof, in any circumstance other than in an actual National, State or Local Area emergency or authorized test of the EAS; or as specified in;

11.46 EAS public service announcements.

EAS Participants may use the EAS Attention Signal and a simulation of the EAS codes as provided by FEMA in EAS Public Service Announcements (PSAs) (including commercially-sponsored announcements, infomercials, or programs) provided by federal, state, and local government entities, or non-governmental organizations, to raise public awareness about emergency alerting. This usage is only permitted if the PSA is presented in a non-misleading and technically harmless manner, including with the explicit statement that the Attention Signal and EAS code simulation are being used in the context of a PSA for the purpose of educating the viewing or listening public about emergency alerting.

11.61 Tests of EAS procedures.

Reporting Period

No later than twenty-four (24) hours of an EAS Participant's discovery (i.e., actual knowledge) that it has transmitted or otherwise sent a false alert to the public, the EAS Participant send an email to the Commission at the FCC Ops Center at FCCOPS@fcc.gov, informing the Commission of the event and of any details that the EAS Participant may have concerning the event.

Header Codes

Note: The EAS protocol, including any alert codes, must not be amended, extended, or abridged without FCC authorization.

EAS Header Code Analysis

The FCC has mandated that an EAS Header Code contain the following elements sent in the following sequence:

[Preamble] ZCZC-ORG-EEE-PSSCCC+TTTT-JJJHHMM-LLLLLLLL – repeated 3 times, Attention Signal (8 seconds), Audio, Video, or Text Message, [Preamble] NNNN – repeated 3 times

Note: The ASCII dash (-) and plus (+) symbols are required and may not be used for any other purpose. Unused characters must be ASCII space characters. FM or TV call signs must use a slash, ASCII character number 47 (/), in lieu of a dash.

Explanation:

[Preamble]= (Clears the system): Sent automatically by your Encoder.

ZCZC= (Start of ASCII Code): Sent automatically by your Encoder.

ORG= (Originator Code): Preset once by the message originator, then sent automatically by your Encoder. See section (a) below for codes.

EEE= (Event Code): Determined by the message originator, each time an alert is sent. See section (b) below for codes.

PSSCCC= (Location Code): Determined by the message originator, each time an alert is sent. See section (c) below for codes.

TTTT= (Duration of Alert): Determined by the message originator, each time an alert is sent. This indicates the valid time period of a message in 15 minute segments up to one hour and then in 30 minute segments beyond one hour; i.e. , +0015, +0030, +0045, +0100, +0430 and +0600.

JJJHHMM= (Date/Time-of-Day): Sent automatically by your Encoder.

LLLLLLLL= (8-Character ID, identifying the EAS Participants, Weather Service Office, or Civil Authority operating that Encoder): Preset once by message originator, then sent automatically by your Encoder. See section (d) below for the format to be used in constructing L-codes.

Attention Signal: Must be sent if an audio, video or text message is sent, duration 8 seconds.

[Preamble]= (Re-clears the system): sent automatically by your Encoder when you receive the

End-of-Message sequence. Followed by: NNNN= (End-of-Message Code): End of Message (EOM) code sent as a string of four ASCII N characters. Usually initiated automatically at the end of every EAS Alert originated by all sources. If an EAS message fails to carry the EOM code, or an EAS encoder-decoder does not automatically release back to air at the end of the message, EAS Participants may clear their system by manually issuing an RWT (Required Weekly Test).

(a) Originator Codes (ORG) the following are the only Originator Codes to be used by sources in the state of Minnesota:

WXR – To be used by National Weather Services Offices

CIV – To be used by Minnesota Emergency Management Agency, Minnesota Dept. of Public Safety, and all other Civil Authorities

EAS – To be used by all EAS Participants. EAS Participants will almost always be relaying EAS messages originated by WXR or CIV. However, on rare occasion there may be an emergency condition that requires an EAS Participant, in coordination with emergency response authorities, to use their EAS equipment to originate an EAS message.

PEP – Primary Entry Point. Only used by federal authorities.

(b) Event Codes authorized in Minnesota (EEE) The only required EAS event codes are EAN, NIC, NPT, RMT and RWT (see chart page 7). The following codes are approved by the IPAWS committee.

The following Event (EEE) codes are presently authorized for the State of Minnesota:

BLU - Blue Alert - An emergency message that rapidly disseminates information to law enforcement agencies throughout the United States to the media and the public about violent offenders who have killed, seriously injured or pose an imminent threat to law enforcement, or when an officer is missing in connection with official duties. BLU Alerts provide details about the possible assailant(s), including physical descriptions, vehicle information and other identifying characteristics.

CAE - Child Abduction Emergency (AMBER Alert) – An emergency message, based on established criteria, about a missing child believed to be abducted. A local or state law enforcement agency investigating the abduction will describe the missing child, provide a description of the suspect or vehicle, and ask the public to notify the requesting agency if they have any information on the whereabouts of the child or suspect.

CDW - Civil Danger Warning – A warning of an event that presents a danger to a significant civilian population. The CDW, which usually warns of a specific hazard and gives specific protective action.

CEM - Civil Emergency Message – An emergency message regarding an in-progress or imminent significant threat(s) to public safety and/or property. The CEM is hazard is less specific than the Civil Danger Warning (CDW).

EVI - Immediate Evacuation – A warning where immediate evacuation is recommended or ordered according to state law or local ordinance.

NUW - Nuclear Power Plant Warning - A warning of an event at a nuclear power plant, classified as a Site Area Emergency or General Emergency as classified by the Nuclear Regulatory Commission (NRC).

RMT - Required Monthly Test - A test message that is generally originated by the state primary entry point (PEP) station, a state emergency management agency, or by the National Weather Service and are then relayed by broadcast stations and cable channels.

RWT – Required Weekly Test – A test message that consists at a minimum of the header and end-of-message tones. RWTs are also authorized to test the WEA system in the background by having your phone handset enabled to receive a test alert.

SPW – Shelter in Place Warning – A warning of an event where the public is recommended to shelter in place (go inside, close doors and windows, turn off air conditioning or heating systems, and turn on the radio or TV for more information).

FFW – Flash Flood Warning – A flood which occurs due to heavy or excessive rainfall, a dam or levee failure, sudden release of water impounded by an ice jam, or a debris slide or flow. A flash flood warning will also be issued if a previously issued flash flood warning needs to be extended in time.

SMW – Special Marine Warning – issued for near-shore areas for short-duration (2 hours or less) sustained marine thunderstorm winds or associated frequent gusts of 34 knots (39 mph) or greater; and/or hail 3/4 inch or more in diameter; and/or waterspouts. They are also issued for near shore areas with sustained non-thunderstorm short duration winds or associated frequent gusts of 34 knots or greater (gale force or stronger).

SVR – Severe Weather – Radar indication and/or reliable reports of wind gusts equal to or in excess of 58 mph and/or hail size of one inch diameter or larger.

TOR – Tornado Warning – radar indication and/or reliable reports of a tornado or developing tornado.

SQW – Snow Squall Warning - radar or satellite indication and/or reliable reports of snow squalls with visibility 1/4 mile or less in snow with sub-freezing ambient road temperatures, and/or plunging temperatures behind an arctic front sufficient to produce flash freezes, along with a significant reduction in visibility from falling and/or blowing snow. Forecaster judgment regarding impacts including time of day, day of week, and other societal factors should be considered. If a blizzard or winter storm warning is already in effect, the SQW is not issued.

EAS Event Code programming recommendations

Event Code	Event Name	WEA Permitted	Recommended Priority	Originators	Relay Required	Address
	National Codes (Required):					
EAN [1]	Emergency Action Notification	Yes	High	PEP	Yes	000000 [2]
NPT	National Periodic Test	Yes	High	PEP	Yes	000000
NIC [3]	National Information Center		Low	PEP	No	000000
RMT	Required Monthly Test	Yes	Low	CIV	Yes	All counties in local area
RWT	Required Weekly Test	Yes	Log Only	PEP, CIV, WXR	No	County in the city of license
	State and Local Codes (Recommended):					
BLU [4]	Blue Alert	Yes	High	CIV	Voluntary	Statewide
CAE	Child Abduction Emergency	Yes	High	CIV	Voluntary	Statewide
CDW	Civil Danger Warning	Yes	High	CIV	Voluntary	Local Area
CEM	Civil Emergency Message	Yes	Medium	CIV	Voluntary	Local Area
EVI	Immediate Evacuation Notice	Yes	Medium	CIV	Voluntary	Local Area
NUW	Nuclear Power Plant Warning	Yes	High	CIV	Voluntary	[5]
SPW	Shelter in Place Warning	Yes	Medium	CIV	Voluntary	Local Area
	National Weather Service (Recommended):					
FFW	Flash Flood Warning	Yes	High	WXR	Voluntary	Local Area
SVR	Severe Thunderstorm Warning		High	WXR	Voluntary	Local Area
SMW [6]	Special Marine Warning		High	WXR	Voluntary	091000
SQW	Snow Squall Warning	Yes	High	WXR	Voluntary	Local Area
TOR	Tornado Warning	Yes	High	WXR	Voluntary	Local Area

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[1] Needs to be programmed in, per requirements of; CFR 47, §11.54 EAS operation during a National Level Emergency.

[2] See Part 11.51(m)

[3] Needs to be programmed in, per requirements of; CFR 47, §11.16 National Control Point Procedures.

[4] Child Abduction Emergency (CAE) and Blue Alert (BLU) is initiated in the State of Minnesota specifically by the Department of Public Safety, Bureau of Criminal Apprehension.

[5] Nuclear Power Plant Warning (NUW) Limited to EAS Participants with coverage in the Counties of Dakota, Goodhue, Sherburne, Wright, Pierce County, Wisconsin.

[6] Special Marine Warning (SMW) limited to EAS Participants with coverage in the Counties along the Lake Superior shoreline.

(c) Location Codes (PSSCCC) ANSI codes: 027000 Minnesota (entire state) and 091000 for Lake Superior.

County	Code	County	Code	County	Code
Aitkin	027001	Isanti	027059	Pipestone	027117
Anoka	027003	Itasca	027061	Polk	027119
Becker	027005	Jackson	027063	Pope	027121
Beltrami	027007	Kanabec	027065	Ramsey	027123
Benton	027009	Kandiyohi	027067	Red Lake	027125
Big Stone	027011	Kittson	027069	Redwood	027127
Blue Earth	027013	Koochiching	027071	Renville	027129
Brown	027015	Lac qui Parle	027073	Rice	027131
Carlton	027017	Lake of the Woods	027077	Rock	027133
Carver	027019	Lake	027075	Roseau	027135
Cass	027021	Le Sueur	027079	Scott	027139
Chippewa	027023	Lincoln	027081	Sherburne	027141
Chisago	027025	Lyon	027083	Sibley	027143
Clay	027027	Mahnomen	027087	St. Louis	027137
Clearwater	027029	Marshall	027089	Stearns	027145
Cook	027031	Martin	027091	Steele	027147
Cottonwood	027033	McLeod	027085	Stevens	027149
Crow Wing	027035	Meeker	027093	Swift	027151
Dakota	027037	Mille Lacs	027095	Todd	027153
Dodge	027039	Morrison	027097	Traverse	027155
Douglas	027041	Mower	027099	Wabasha	027157
Faribault	027043	Murray	027101	Wadena	027159
Fillmore	027045	Nicollet	027103	Waseca	027161
Freeborn	027047	Nobles	027105	Washington	027163
Goodhue	027049	Norman	027107	Watonwan	027165
Grant	027051	Olmsted	027109	Wilkin	027167
Hennepin	027053	Otter Tail	027111	Winona	027169
Houston	027055	Pennington	027113	Wright	027171
Hubbard	027057	Pine	027115	Yellow Medicine	027173

FCC rules specify the EAS/SAME Locations codes in the PSSCCC format. The first digit ("P") is used to indicate one-ninth of a local jurisdiction such as a county, etc. as located in the CCC element.

P Digit Location		
0 = Entire Area		
1 = Northwest	2 = North	3 = Northeast
4 = West	5 = Central	6 = East
7 = Southwest	8 = South	9 = Southeast

The second set of two digits ("SS") indicates the state. Therefore, a message targeted to the entire state of Minnesota would have the SS code of 27, and the EAS/SAME message PSSCCC code would be 027000.

The SS code is also used to designate offshore areas (marine areas). The offshore area code for Minnesota is SS code 91. The NWS description for code 91 is as follows: Lake Superior

The third set of three digits ("CCC") indicate the county or local jurisdiction. The list of ANSI codes for the entire United States is provided at the following web site:

(d) EAS Participant Identification Codes (LLLLLLLL): This 8-character (LLLLLLLL) code is affixed to every EAS message originated or re-transmitted by every EAS Encoder. The code identifies the particular EAS message originator, including EAS Participants, NWS Offices, or civil authorities operating that encoder. "L-code" IDs must adhere to the following formats. No deviation from these formats is allowed, since using certain other characters would cause an error in the system.

EAS Participants: Single Station: WXXX followed by four "space" characters. Two Stations using a common EAS Encoder-Decoder: "WXXXWYYY". Three or more Stations using a common EAS Encoder-Decoder: The call letters of one of the stations is sufficient. All other stations sending the alert should keep a log of alerts sent, as should the station whose call letters are used in the L-Code.

National Weather Service Offices: Use the Letters "NWS" followed by the call sign of the NOAA Weather Radio (NWR) station sending the alert.

Civil Authorities: Use the letters "MN-HSEM" and "MN-BCA" for identification when using EAS hardware solutions, all others will identify using a CAP assigned solution.

Operational Areas

Monitoring Assignments: Presidential

**Overview**

The national activation of the Emergency Alert System (EAS) for an Emergency Action Notification (EAN) must take priority over any other EAS message and preempt any broadcast in progress. During a national emergency radio and television broadcast network program distribution facilities must be reserved exclusively for the dissemination of Presidential messages per 47 C.F.R. 11.2(a).
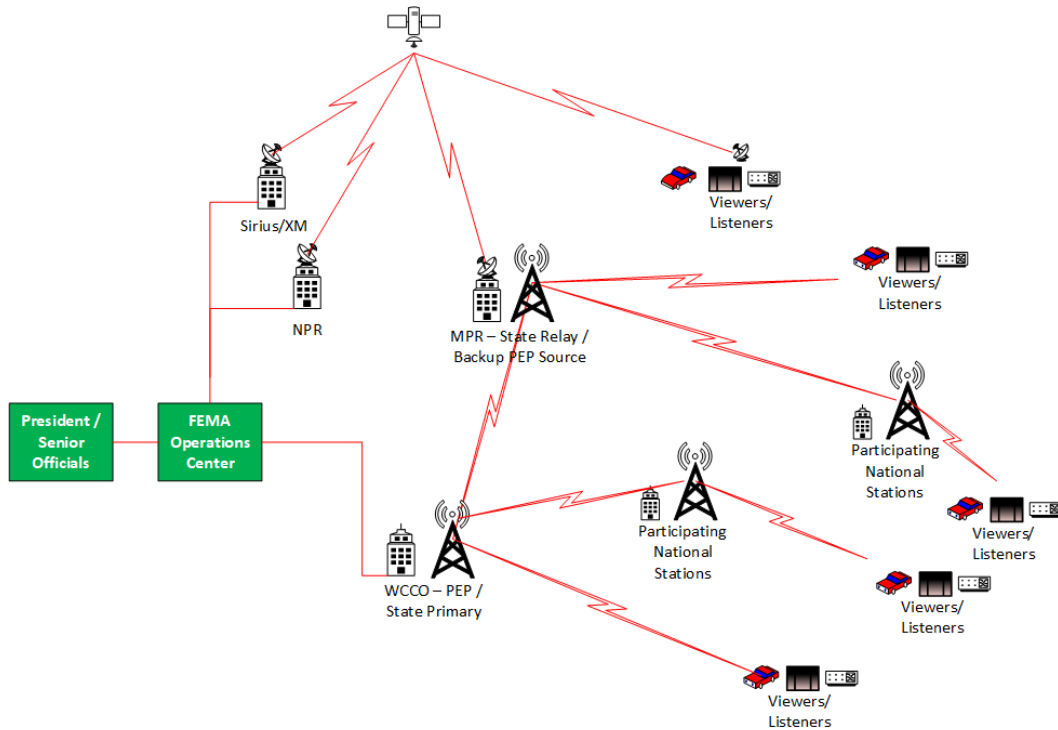
All EAS participants are required to monitor the assigned channels for inputs one (1) and two (2) on their EAS decoder. This action will enable relay of the national level emergency action notification (EAN) alert. The table that follows shows these recommended inputs. In addition, your local NWS station is also listed; it is recommended that it be tuned to input 3.

Note: If your station or headend facility is unable to receive any one of their monitoring assignments they should sent an email to eas@eas.talklist.com.

EAS Decoder Input 1 - This input is required by FCC rules.

EAS Decoder Input 2 - This input is required by FCC rules.

EAS Decoder Input 3 - local NWS, recommended by MN-IPAWS

CAP (Common Alert Protocol) Connectivity EAS receiver boxes must (by FCC ruling) be connected to the CAP server maintained by FEMA. The URL for the FEMA server is: https://apps.fema.gov/IPAWSOPEN_EAS_SERVICE/rest/update

All broadcast Stations and cable systems must be able to receive a Common Alerting Protocol (CAP) source as required by the FCC Rules and Regulations 47 C.F.R Part 11.56.

COUNTY	ASSIGNMENT 1	FREQ	BAND	ASSIGNMENT 2	FREQ	BAND	NWS	FREQ	BAND
AITKIN (NORTH)	KGRP	89.7	FM	KBPR	90.7	FM	KZZ84	162.45	FM
AITKIN (SOUTH EAST)	WINH	91.9	FM	WGRH	88.5	FM	KZZ84	162.45	FM
AITKIN (EAST)	WSCN	100.5	FM	WSCD	92.9	FM	KZZ84	162.45	FM
AITKIN (WEST)	KBPN	88.3	FM	KBPR	90.7	FM	KZZ84	162.45	FM
ANOKA	KNOW	91.1	FM	WCCO	830	AM	KEC65	162.55	FM
BECKER	KCCD	90.3	FM	KCCM	91.1	FM	WNG610	162.45	FM
BELTRAMI (NORTH)	KRXW	103.5	FM	KCRB	88.5	FM	WXM99	162.425	FM

BELTRAMI (SOUTH)	KNBJ	91.3	FM	KCRB	88.5	FM	WXM99	162.425	FM
BENTON	KNSR	88.9	FM	KSJR	90.1	FM	WXL65	162.4	FM
BIG STONE	KNCM	91.3	FM	KRSU	88.5	FM	KXI32	162.55	FM
BLUE EARTH	KNGA	90.5	FM	KGAC	91.5	FM	WXK40	162.4	FM
BROWN (EAST)	KGNA	90.5	FM	KGAC	91.5	FM	KXI39	162.525	FM
BROWN (WEST)	KGNA	90.5	FM	KRSW	89.3	FM	KXI39	162.525	FM
CARLTON	WSCN	100.5	FM	WSCD	92.9	FM	KIG64	162.55	FM
CARVER	KNOW	91.1	FM	KSJN	99.5	FM	WNG685	162.425	FM
CASS (NORTH)	KNBJ	91.3	FM	KCRB	88.5	FM	WXM99	162.425	FM
CASS (SOUTH)	KBPN	88.3	FM	KBPR	90.7	FM	WXJ64	162.55	FM
CHIPPEWA	KNCM	91.3	FM	KRSU	88.5	FM	KXI32	162.55	FM
CHISAGO	KNOW	91.1	FM	WCCO	830	AM	WNG	162.425	FM
CLAY	KCCD	90.3	FM	KCCM	91.1	FM	WXK42	162.475	FM
CLEARWATER	KNBJ	91.3	FM	KCRB	88.5	FM	WXM99	162.425	FM
COOK	WLSN	89.7	FM	WMLS	88.7	FM	KXI43	162.45	FM
COTTONWOOD	KNSW	91.7	FM	KRSW	89.3	FM	KXI31	162.45	FM
CROW WING	KBPN	88.3	FM	KBPR	90.7	FM	WXJ64	162.55	FM
DAKOTA	KNOW	91.1	FM	WCCO	830	AM	KEC65	162.55	FM
DODGE	KZSE	91.7	FM	KLSE	90.7	FM	WXK41	162.475	FM
DOUGLAS	KNSR	88.9	FM	KSJR	90.1	FM	WNG707	162.4	FM
FARIBAULT	KNGA	90.5	FM	KGAC	91.5	FM	WXK40	162.4	FM
FILLMORE	KZSE	91.7	FM	KLSE	90.7	FM	WXK41	162.475	FM
FREEBORN	KNSE	90.1	FM	KGAC	91.5	FM	WXK40	162.4	FM
GOODHUE	KZSE	91.7	FM	KLSE	90.7	FM	KJY80	162.45	FM
GRANT	KNCM	91.3	FM	KRSU	88.5	FM	WNG707	162.4	FM
HENNEPIN	KNOW	91.1	FM	WCCO	830	AM	KEC65	162.55	FM
HOUSTON	KXLC	91.1	FM	KZSE	91.7	FM	WXJ86	162.55	FM
HUBBARD	KNBJ	91.3	FM	KCRB	88.5	FM	WWG98	162.475	FM
ISANTI	KNOW	91.1	FM	WCCO	830	AM	WNG678	162.425	FM
ITASCA (WEST)	KNBJ	91.3	FM	KCRB	88.5	FM	WXM99	162.425	FM
ITASCA (EAST)	WIRN	92.5	FM	WIRR	90.9	FM	KZZ29	162.4	FM
ITASCA (SOUTH)	KGRP	89.7	FM	WIRR	90.9	FM	KZZ29	162.4	FM
JACKSON	KNSW	91.7	FM	KRSW	89.3	FM	KXI31	162.45	FM
KANABEC	WINH	91.9	FM	WGRH	88.5	FM	WNG678	162.425	FM
KANDIYOHI	KNSR	88.9	FM	KSJR	90.1	FM	WXK44	162.475	FM
KITTSON	KNTN	102.7	FM	KQMN	91.5	FM	WNG683	162.525	FM
KOOCHICHING (NORTH EAST)	KITF	88.3	FM	KCRB	88.5	FM	WXK45	162.55	FM
KOOCHICHING (SOUTH WEST)	KNBJ	91.3	FM	KCRB	88.5	FM	WXK45	162.55	FM
LAC QUI PARLE	KNCM	91.3	FM	KRSU	88.5	FM	KXI32	162.55	FM
LAKE (NORTH)	WIRC	89.3	FM	WSCD	92.9	FM	KXI44	162.5	FM
LAKE (SOUTH)	WSCN	1005	FM	WSCD	92.9	FM	WNG630	162.425	FM
LAKE OF THE WOOD	KRXW	103.5	FM	KCRB	88.5	FM	WWF45	162.45	FM
LE SUEUR	KNGA	90.5	FM	KGAC	91.5	FM	WXK40	162.4	FM
LINCOLN (NORTH)	KNCM	91.3	FM	KRSW	91.5	FM	KXI50	162.5	FM
LINCOLN (SOUTH)	KNSW	91.7	FM	KRSW	89.3	FM	KXI50	162.5	FM
LYON	KNSW	91.7	FM	KRSW	89.3	FM	KXI50	162.5	FM
MAHNOMEN (NORTH)	KNTN	102.7	FM	KQMN	91.5	FM	WNG610	162.45	FM
MAHNOMEN (SOUTH)	KCCD	90.3	FM	KCCM	91.1	FM	WNG610	162.45	FM
MARSHALL	KNTN	102.7	FM	KQMN	91.5	FM	WXK43	162.55	FM

| MARTIN	KGNA	90.5	FM	KGAC	91.5	FM	WNG688	162.475	FM
MCLEOD (NORTH)	KNSR	88.9	FM	KSJR	90.1	FM	WNG685	162.425	FM
MCLEOD (SOUTH)	KGNA	90.5	FM	KGAC	91.5	FM	WNG685	162.425	FM
MEEKER	KNSR	88.9	FM	KSJR	90.1	FM	WXK44	162.475	FM
MILLE LACS (NORTH)	WINH	91.9	FM	KBPR	90.7	FM	KZZ84	162.45	FM
MILLE LACS (SOUTH)	KNSR	88.9	FM	KSJR	90.1	FM	WNG678	162.425	FM
MORRISON	KNSR	88.9	FM	KSJR	90.1	FM	WNG673	162.525	FM
MOWER	KZSE	91.7	FM	KLSE	90.7	FM	KXI68	162.45	FM
MURRAY	KNSW	91.7	FM	KRSW	89.3	FM	WNG702	162.425	FM
NICOLLET	KGNA	90.5	FM	KGAC	91.5	FM	KXI39	162.525	FM
NOBLES	KNSW	91.7	FM	KRSW	89.3	FM	WNG702	162.425	FM
NORMAN (NORTH)	KNTN	102.7	FM	KQMN	91.5	FM	WXK42	162.475	FM
NORMAN (SOUTH)	KCCD	90.3	FM	KCCM	91.1	FM	WXK42	162.475	FM
OLMSTED	KZSE	91.7	FM	KLSE	90.7	FM	WXK41	162.475	FM
OTTER TAIL (SOUTH WEST)	KNWF	91.5	FM	KCMF	89.7	FM	WNG680	162.5	FM
OTTER TAIL (NORTH WEST)	KCCD	90.3	FM	KCCM	91.1	FM	WNG680	162.5	FM
OTTER TAIL (WEST)	KBPN	88.3	FM	KBPR	90.7	FM	WNG680	162.5	FM
PENNINGTON	KNTN	102.7	FM	KQMN	91.5	FM	WXK43	162.55	FM
PINE	WINH	91.9	FM	WGRH	88.5	FM	WNG678	162.425	FM
PIPESTONE	KNSW	91.7	FM	KRSW	89.3	FM	KXI50	162.5	FM
POLK	KNTN	102.7	FM	KQMN	91.5	FM	WXK43	162.55	FM
POPE (EAST)	KNSR	88.9	FM	KSJR	90.1	FM	WXK44	162.475	FM
POPE (WEST)	KNCM	91.3	FM	KRSU	88.5	FM	WNG707	162.4	FM
RAMSEY	KNOW	91.1	FM	WCCO	830	AM	KEC65	162.55	FM
RED LAKE	KNTN	102.7	FM	KQMN	91.5	FM	WXK43	162.55	FM
REDWOOD (SOUTH WEST)	KNSW	91.7	FM	KRSW	89.3	FM	KXI50	162.5	FM
REDWOOD (NORTH WEST)	KNCM	91.3	FM	KGAC	91.5	FM	WGN711	162.4	FM
RENVILLE (NORTH WEST)	KNCM	91.3	FM	KRSU	88.5	FM	WGN711	162.4	FM
RENVILLE (SOUTH EAST)	KGNA	90.5	FM	KGAC	91.5	FM	WGN711	162.4	FM
RENVILLE (NORTH EAST)	KNSR	88.9	FM	KSJR	90.1	FM	WGN711	162.4	FM
RICE	KNOW	91.1	FM	KSJN	99.5	FM	WXK40	162.4	FM
ROCK	KNSW	91.7	FM	KRSW	89.3	FM	WXM28	162.4	FM
ROSEAU (EAST)	KRXW	103.5	FM	KQMN	91.5	FM	WNG583	162.525	FM
ROSEAU (WEST)	KRXW	103.5	FM	KQMN	91.5	FM	WWF45	162.45	FM
ST. LOUIS (NORTH WEST)	KTIF	88.3	FM	WIRR	90.9	FM	WXK45	162.55	FM
ST. LOUIS (NORTH EAST)	WIRC	89.3	FM	WIRR	90.9	FM	KZZ44	162.45	FM
ST. LOUIS (CENTRAL)	WIRN	92.5	FM	WIRR	90.9	FM	KZZ45	162.475	FM
ST. LOUIS (SOUTH)	WSCN	100.5	FM	WSCD	92.9	FM	KZZ45	162.475	FM
SCOTT	KNOW	91.1	FM	WCCO	830	AM	WNG685	162.425	FM
SHERBURNE	KNOW	91.1	FM	KSJN	99.5	FM	WNG676	162.5	FM
SIBLEY	KGNA	90.5	FM	KGAC	91.5	FM	WNG685	162.425	FM
STEARNS (EAST)	KNSR	88.9	FM	KSJR	90.1	FM	WXL65	162.4	FM
STEARNS (WEST)	KNSR	88.9	FM	KSJR	90.1	FM	WXK44	162.475	FM
STEELE	KZSE	91.7	FM	KGAC	91.5	FM	WXK40	162.4	FM
STEVENS	KNCM	91.3	FM	KRSU	88.5	FM	WNG707	162.4	FM
SWIFT	KNCM	91.3	FM	KRSU	88.5	FM	KXI32	162.55	FM
TODD (NORTH)	KBPN	88.3	FM	KBPR	90.7	FM	WNG673	162.525	FM
TODD (SOUTH)	KNSR	88.9	FM	KSJR	90.1	FM	WNG673	162.525	FM
TRAVERSE	KNCM	91.3	FM	KRSU	88.5	FM	WNG707	162.4	FM
WABASHA	KZSE	91.7	FM	KLSE	90.7	FM	WXK41	162.475	FM

WADENA	KBPN	88.3	FM	KBPR	90.7	FM	WXJ64	162.55	FM
WASECA (EAST)	KZSE	91.7	FM	KGAC	91.5	FM	WXK40	162.4	FM
WASECA (WEST)	KNGA	90.5	FM	KGAC	91.5	FM	WXK40	162.4	FM
WASHINGTON	KNOW	91.1	FM	WCCO	830	AM	KEC65	162.55	FM
WATONWAN	KNGA	90.5	FM	KGAC	91.5	FM	KXI31	162.45	FM
WILKIN	KCCD	90.3	FM	KCCM	91.1	FM	WNG680	162.5	FM
WINONA	KZSE	91.7	FM	KLSE	90.7	FM	WXJ86	162.55	FM
WRIGHT	KNOW	91.1	FM	WCCO	830	AM	WNG676	162.5	FM
YELLOW MEDICINE	KNCM	91.3	FM	KRSU	88.5	FM	KXI32	162.55	FM

Monitoring Assignments: State and Local Alerts

Statewide

State alerts will come from either the Bureau of Criminal Apprehension (BCA) or the State Emergency Operations Center (SEOC) operated by Homeland Security and Emergency (HSEM). These agencies have equipment capable of producing an EAS message in CAP or legacy formats. The primary way to distribute a message is through IPAWS using CAP, as shown is the figure below. WCCO-AM and MPR both function as a back up to stations that may not receive the message through IPAWS.
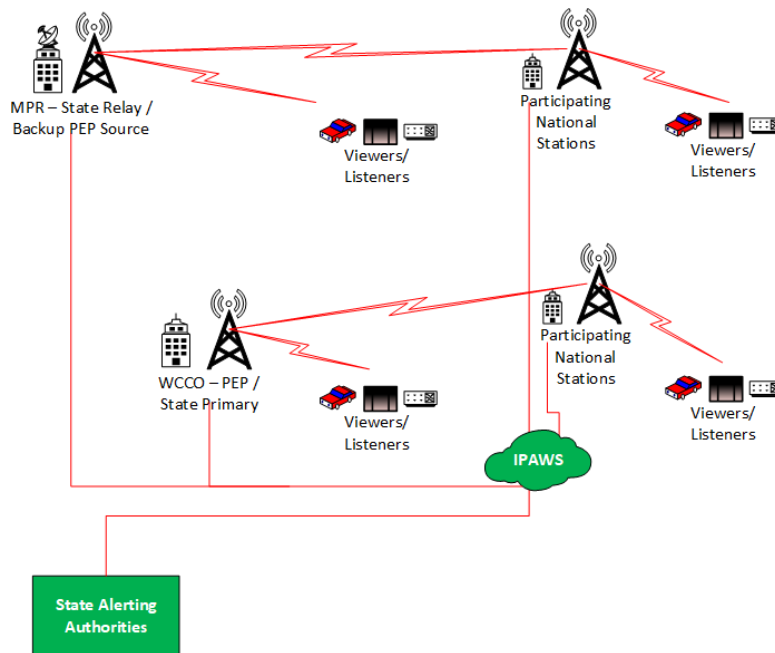
The secondary "legacy" method uses leased lines to send an audio message to the State Primary (SP) WCCO-AM and State Relay (SR) Minnesota Public Radio (MPR) as shown in the diagram below.
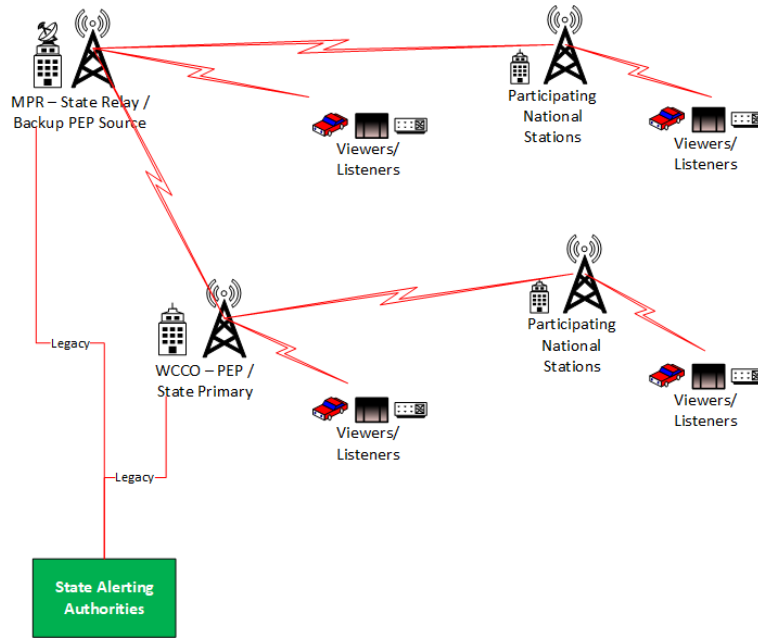
Local

All local alerts will come from Counties or Cities of the First Class in CAP. Those entity's purchase third party software that integrates with their current warning application. This "add-on" feature is activated after proper IPAWS COG authorization. It offers the ability to originate a CAP alert directly to FEMA IPAWS OPEN system. EAS Participants must program their equipment accordingly.
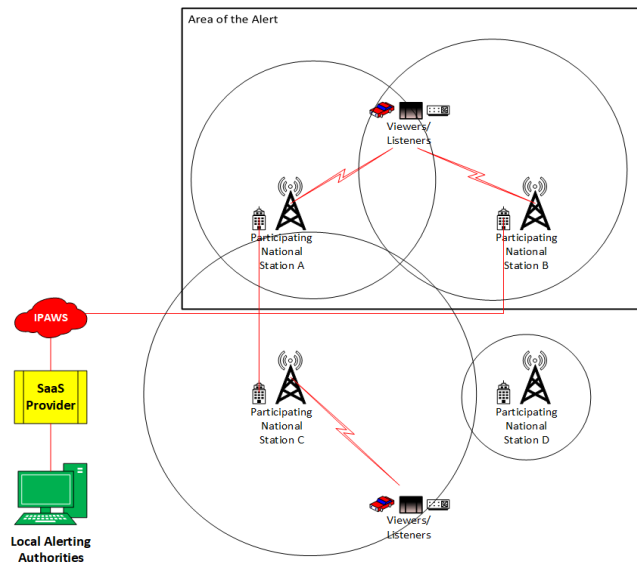
Stations A, B and C receive the alert because they broadcast into the affected county, station D does not.

Alerting Procedures

Overview

For the EAS to function properly, standard operating procedures (SOPs) must be outlined for all operators of EAS equipment. These SOPs must be adhered to consistently for the EAS to work. This section will provide the information necessary for all EAS participants to perform their assigned tasks.

Assumptions

FCC Regulations require the use of the Emergency Alert System (EAS). This Plan shall be utilized for all hazards regardless of emergency, disaster and/or event type. This Plan assumes all participants have received training in the utilization of the Emergency Alert System and are familiar with FCC Rules and Regulations. The following individuals or their representative are authorized to initiate national and state level activation of the Minnesota EAS.

- The President of the United States,
- Governor of Minnesota,
- Minnesota Homeland Security and Emergency Management Director or designee,
- Meteorologist-In-Charge, National Weather Service, Chanhassen or designee,
- Superintendent of the Bureau of Criminal Apprehension or designee,
- Local activation may also be initiated by the chief law enforcement official or designee.

Elected Officials

The Governor's office may initiate EAS alerts, the office will coordinate with HSEM for distribution.

National Weather Service

The NWS issues EAS weather alerts. Minnesota NWS forecast offices originate all weather emergency alerting via NOAA weather radio. In addition, the Tornado (TOR) and Flash Flood Warnings (FFW) are issued via IPAWS OPEN.

Transmission of warnings over NWR will include the 1050 Hz alert tone followed by the SAME/EAS preamble header code, the reading of the weather emergency message, and finally the end-of-message (EOM) code.

NOAA weather radio can also transmit non-weather messages (NWEM). Under local agreement, if the local PSAPs/Public Safety or Emergency Management is unable, they can provide emergency messages to their local NWS office for broadcast on the NOAA Weather Radio. See annex D for NWS local office contact information.

Statewide Distribution

AMBER (CAE)

AMBER alerts are issued by the Minnesota Bureau of Apprehension. Criteria for issuing an alert can be viewed on the BCA website. AMBER alerts are issued once, cancellation of the alert is communicated by the BCA and news organizations but not as an EAS message. The state BCA will transmit the following message to all Minnesota EAS Participants via WCCO and the State Relay network during an AMBER activation:

 BLUE (BLU)

Blue alerts are issued by the Minnesota Bureau of Apprehension. Criteria for issuing an alert can be viewed on the BCA website. Blue alerts are issued once, cancellation of the alert is communicated by the BCA and news organizations but not as an EAS message. The state BCA will transmit the following message to all Minnesota EAS Participants via WCCO and the State Relay network during a Blu Alert activation:

Nuclear Power Plant Warning (NUW)

The NUW code is issued by Minnesota HSEM in coordination with the power plant operators. This is a warning of an event at a nuclear power plant, classified as a Site Area Emergency or General Emergency as classified by the Nuclear Regulatory Commission (NRC).

Local

PSAPs & EOCs may distribute EAS alerts the following ways.

Purchase of third party software that integrates with their current warning application. This "add-on" feature is activated after proper IPAWS COG authorization. It offers the ability to originate a CAP alert directly to FEMA IPAWS OPEN system.

Partner with other local PSAP to centralize the alert origination process.

Alerting authorities may also request that the servicing NWS send out non weather emergency alerts to their local NWS radio system. See annex D for the NWS office in your local area and contact information.

Multilingual Alerting

It is recommended that stations be aware of non-English speakers in their audience. For stations that have more than 5% non-English speakers viewing or listening, the exploration of non-English language emergency alerts is encouraged.

Our recommendation is that each jurisdiction follow the Department of Justice (DOJ) "5% rule".

https://www.justice.gov/crt/file/885391/download

This rule suggests an annual review of demographics noting that for every 5% or more of non-English speaking audience members, accommodations should be made to issue messages in their language.- Our recommendations are the following:

- A Social media provided link to public officials responsible for warning and alerting.
- Community outreach with key leaders willing to be part of a list-serve that in turn, can help disseminate public health and safety information.
- Partnerships with broadcast entities willing to support ELL public information services.

Social Media

Our recommendation is that social media NOT be used to alert or post alerts for the following reasons:
- Posts quickly go out of date yet can live a long time, any post should consist only of links to authorized public information.
- Because content is never ending on social media, sites posting alerts are often not able to remove alerts once they've expired, creating a risk of misinformation.
- Warning and alerting is the job of public officials, the best intentions from those responsible for issuing alerts may cause undo alarm.

Local Area Plans

The state of Minnesota only has a statewide plan and does not have any local plans.

Annex A: Testing and Training

Testing

The following requirements regarding both RWTs (required weekly test) and RMTs (required monthly test) apply to all cable operators and broadcasters, "PN". Even stations that have elected not to participate in local EAS alerts must still rebroadcast their local RMT. There are two exceptions to these rules.

1. Class "D" FM and LPTV stations need not have an EAS Encoder. They must have an EAS Decoder. Thus, these stations are exempt from running the weekly digital code RWT test. However, they must retransmit monthly RMT tests as outlined below, minus the EAS Header Codes and Attention Signal. In addition, LPTV stations must present all EAS information visually, just as all other TV stations must do.

2. FM Translator and TV Translator stations, which are not required to have any EAS equipment.

Wired and Wireless Cable systems participants should reference FCC rules and regulations part 11 for testing responsibilities.

County-Location Codes:

All Minnesota EAS Participants must program their EAS equipment to designate, at a minimum, the county of their city of license as their local EAS area.

Required Weekly Test

All EAS Participants, with exception of those noted earlier, must transmit an RWT every week, on random days and times, except for the week of the Required Monthly Test. There are no time-of-day restrictions for transmitting the RWT. Reception of an RWT must be logged, but no further action is required.

Required Monthly Test

All Minnesota Statewide EAS RMT's will happen on the first Wednesday of the month.

Daytime	Nighttime
Jan, Mar, May, Sept, Sept, Nov	Feb, Apr, Jun, Aug, Oct, Dec
13:44	22:44

Testing Schedule for RMT: HSEM, and the BCA Duty Officer need to follow this plan for timely distribution of the test HSEM issues the daytime RMT's, the BCA issues the night time RMTs and daytime tests when they fall on a holiday.

During the designated week for this test, all other EAS Participants are to standby for this test and then retransmit it within 60 minutes of reception. Re-transmission of the RMT within 60 minutes is an FCC requirement. Transmission of the RMT takes the place of the RWT for that week. Times should be logged for both the receipt and retransmission of an RMT. All incoming information, including audio, must be retransmitted exactly as received except for the location code portion of the digital preamble. Retransmission of a RMT is not required by a station that is off the air.

National Periodic Tests (NPT)

FEMA will schedule and originate the National Periodic Test (NPT) semiannually. This test must be auto-forwarded immediately after reception. The results of this test must be filed with the FCC using EAS Test Reporting System (ETRS):

- Part 1 On or before 11:59 p.m. EDT the day of the test,
- Part 2 With-in 24 hours of the test,
- Part 3 With-in 45 days after the test.

Missed Tests

If you miss a RWT or RMT, follow these steps:

- Check operational status of the EAS encoder decoder unit.
    - Check system logs,
    - Confirm receivers are working OK for good signal,
    - Good audio level, and
    - No audio distortion of the incoming broadcast.
- Also check for IPAWS OPEN connectivity.

Post an inquiry to the Minnesota EAS list server. (eas@eas.talkgroups.com)

- See if other PN have experienced similar issue(s).
- Try to determine if the source of the test did in fact broadcast it.
- Log any information gleaned from the above steps into the EAS log.

Log keeping

A log must be kept of all EAS messages received and sent. The log must be checked for the required tests received from your assigned monitoring sources, as well as your originated tests, and signed weekly by the participants Chief Operator, or their designee. This log may be requested for inspection by agents of the Federal Communications Commission or Alternative Broadcast Inspection Program personnel in the normal course of their duties. Logs must be kept for two (2) years.

Failure to receive or send any of the above test alerts requires that your Chief Operator, or their designee, investigate the cause then remediate and take measures to make sure it does not repeat (assuming remediation of the problem was on the end of the receiving station). This series of events must be documented and included with the stations EAS log for that month including explanations from your assigned monitoring sources. A discussion of missed or impaired alerts can be view on the eas@eas.talklist.com list service.

Training

Proper training must be maintained for the EAS to succeed. Alert Originators are required to complete at a minimum the FEMA IS-247 course. It is recommended for all other EAS Participants to take it for an overview of the IPAWS program. See FEMA training website for details on courses 247b.

http://training.fema.gov/EMIWeb/IS/courseOverview.aspx?code=is-247.b

Annex B: Security Recommendations

Overview of EAS Equipment Installation and Configuration EAS Device General Best Practices

Alert Authentication

- Ensure CAP 1.2 is enforced and signature is enforced.

Account Management

- Change your EAS equipment's password from the factory default password.

- If your facility receives alerts from other EAS participant relays, as described in your State EAS Plan, ensure that you are receiving their RWT and RMTs (check the device's logs or print outs).

- If you are not receiving these test messages, alert your EAS source stations and check your receiver/tuner and other source devices.

- If your receiver/tuner is working properly, contact your relay or activation source and let them know you are not receiving their RWT/RMTs.

- Ensure your patch management is up to the equipment manufactures recommendations.

- Ensure that the appropriate Originator and Event Codes are programmed for forwarding/relay

- Check the EAS device for Automatic/Manual message relay setting. Set to your facility's desired action.

- Check auxiliary or other necessary external equipment, such as distribution amplifiers, audio switching equipment, text crawl generators for proper connections and operation

- Check and adjust all audio levels to and from the device to minimize distortion and noise.

- Alert audio input circuitry could have been compromised unknowingly.

- This is important if you do not receive regular alerts or tests (especially for other states primaries).

- Ensure that your monitoring source (tuner/receiver, etc.) is feeding clear audio to the EAS device.

Annex C: Memorandum of Understanding (MOU)

MEMORANDUM OF UNDERSTANDING BETWEEN MINNESOTA PUBLIC RADIO (MPR) AND THE MINNESOTA INTEGRATED PUBLIC ALERT WARNING SYSTEM TEAM (MN-IPAWS)

Memorandum of Understanding

Introduction

The Emergency Alert System (EAS) was designed to provide citizens with timely emergency information for major emergencies and disasters, both natural and technological, which pose significant threat to health and safety of the public. The Federal Communications Commission (FCC) developed the EAS to facilitate the communications infrastructure, set up standard rules, and mandate EAS Participants to acquire and install the necessary EAS hardware and to "voluntarily" participate in EAS.

Purpose

This Memorandum of Understanding between Minnesota Public Radio (MPR) and the Minnesota Emergency Alert System Team (MN-IPAWS) establishes a broad framework of cooperation with the Emergency Alert System under Part 11 of the FCC rules and regulations.

Recognition

MN-IPAWS recognizes that MPR is a tax-exempt non-profit organization whose mission is to produce and to acquire radio programming of community value; to combine these programs into a nonprofit radio service of the highest quality for broadcast through a network of radio stations to the people of Minnesota and its border communities; and to reflect the culture, events, issues and ideas of Minnesota and its people in radio broadcasts designed for national and international audiences.

MPR recognizes that MN-IPAWS is made up of representatives of committed EAS Participants, State and Local Emergency Management agencies, the National Weather Service, and other public and private organizations that have a role with the EAS/MN-IPAWS. MN-IPAWS is responsible for coordination of the Emergency Alert System for the citizens of Minnesota.

Principles of Cooperation

So that communications facilities of the Minnesota Public Radio network may be utilized to the extent required by the Minnesota Statewide EAS Plan, and to the extent permitted or required by law and regulation, Minnesota Public Radio and the Minnesota Emergency Alert System Team have agreed with the following:

> 1. MPR will provide their radio network for immediate transmission of the National Level Emergency Action Notification (EAN) and Emergency Action Termination (EAT) which originate from the office of the President of the United States.

2. MPR will provide their radio network for transmission of the scheduled Required Monthly Test (RMT) which originates from sources authorized by the Minnesota EAS Statewide Plan.

3. MPR will provide their radio network for transmission of all Statewide EAS alerts originating from the Governor or his or her authorized representative, the Minnesota Bureau of Criminal Apprehension and Minnesota Homeland Security and Emergency Management.

4. MPR will continue to maintain audio paths from the Primary Entry Point (PEP) station (WCCO) and the State Emergency Operations Center to MPR HQ.

5. One representative of MPR will become a member of the MN-IPAWS. He/she will sit on the main team and the Technical Sub-committee.

6. MN-IPAWS will distribute copies of this agreement through channels to its own organization, and other organizations, both public and private, which may have an active interest in distribution of National and State level EAS alerts and tests. In addition, this agreement will be included in the official EAS state plan.

7. MN-IPAWS will hold MPR harmless from any liability MPR may incur due to MPR's activities hereunder.

Implementation

This memorandum shall take effect upon its signing by authorized representatives of the MPR and the MN-IPAWS. This memorandum may be amended by mutual agreement of both parties and will remain in effect until terminated. MPR and MN-IPAWS will review this agreement and coordinate such revisions as may be necessary on an annual basis or as needed. Upon 90 days written notice, this memorandum may be terminated by either party.

Annex D: Minnesota National Weather Service Contact Information

Grand Forks, ND: Telephone: (701) 795-5119 (answered 24/7) (701) 772-0720 (General)
Fax: (701) 772-0751
Email: cr.fgf@noaa.gov
ARMER: SEMTAC and Grand Forks Weather Talk Groups.

Duluth, MN: Telephone: (218) 729-0653 (answered 24/7) (218) 729-0651 (General)
Fax: (218) 729-0690
Email: cr.dlh@noaa.gov
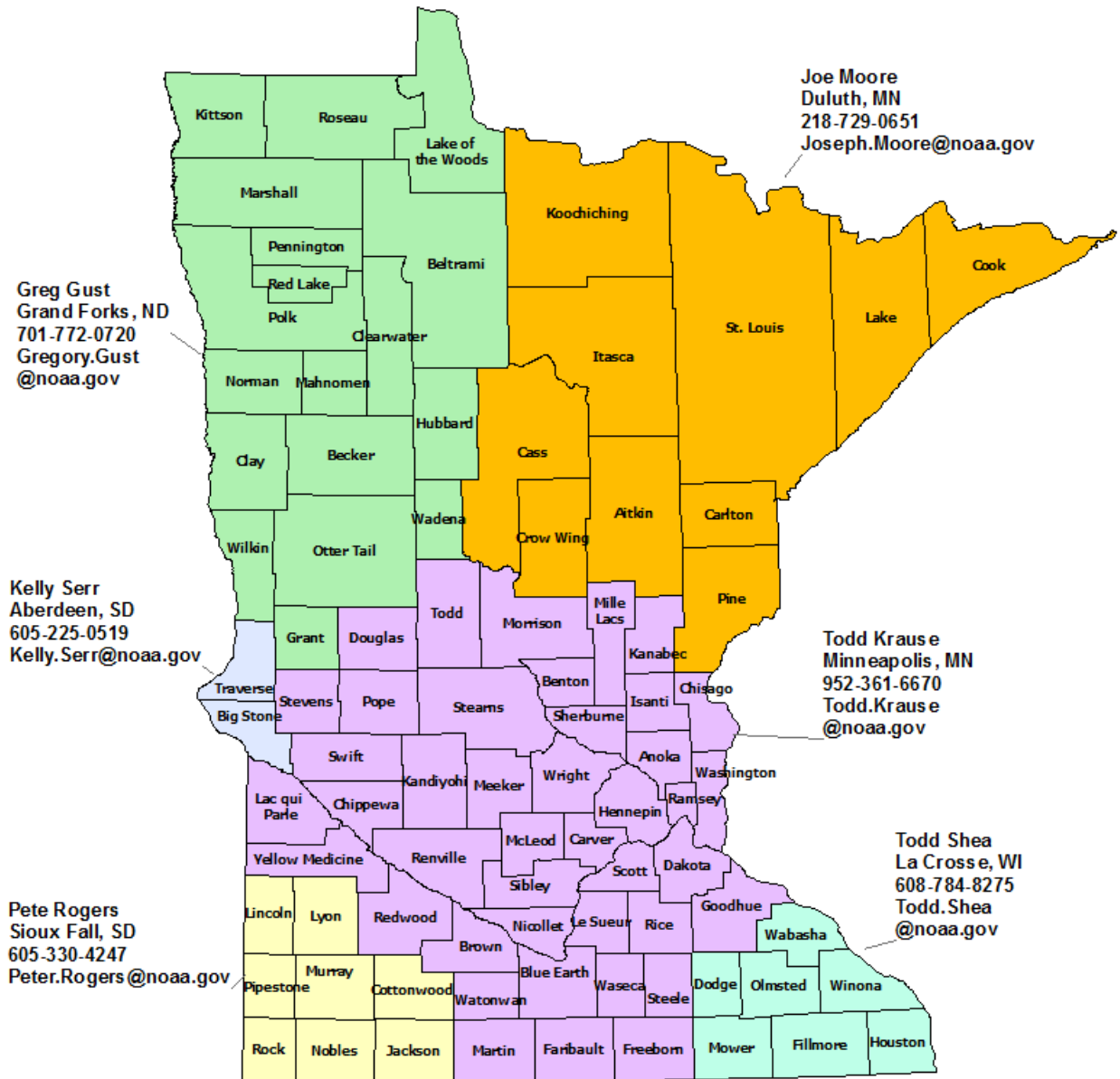ARMER: SEMTAC and Duluth Weather Talk Groups.

Aberdeen, SD: Telephone: (605) 225-5547 (answered 24/7) (605) 225-0519 (General)
Fax: (605) 225-7417
Email: cr.abr@noaa.gov.
SD Radio Patch to Aberdeen

Minneapolis, MN: Telephone: (952) 361-6671 (answered 24/7) (952) 361-6670 (General)
Fax: (952) 361-6668
Email: cr.mpx@noaa.gov
ARMER: SEMTAC, METEM, and Chanhassen Weather Talk Groups.

Sioux Falls, SD: Telephone: (605) 330-4250 (answered 24/7) (605) 330-4247 (General)
Fax: (605) 330-4248
Email: cr.fsd@noaa.gov
ARMER: SEMTAC and Sioux Falls Weather Talk Groups.

La Crosse, WI: Telephone: (608) 784-8292 (answered 24/7) (608) 784-8275 (General)
Fax: (608) 784-8238
Email: cr.arx@noaa.gov
ARMER: SEMTAC and La Crosse Weather Talk Groups.

Pending FCC Aproval

Pending FCC Aproval

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Annex F: Glossary of Terms

CAP - Common Alerting Protocol

COG - Collaborative Operating Group

EAS - Emergency Alert System

EAS Participants - Entities required under the Commission's rules to comply with EAS rules, e.g., analog radio and television stations, and wired and wireless cable television systems, DBS, DTV, SDARS, digital cable and DAB, and wireline video systems.

EAN - Emergency Action Notification alert

EAT- Emergency Action Termination

EM - Emergency Manager

EOC - Emergency Operations Center

ESL – English as a Second Language

FCC - Federal Communications Commission (http://www.fcc.gov)

FEMA - Federal Emergency Management Agency (http://www.fema.gov)

IP – Internet Protocol

IPAWS – Integrated Public Alert Warning System (https://www.fema.gov/emergency-managers/practitioners/integrated-public-alert-warning-system)

IPAWS-OPEN - Integrated Public Alert Warning System – Open Platform for Emergency Networks

LP - Local Primary (Station)

NAB - National Association of Broadcasters www.nab.org

NASBA - National Alliance of State Broadcaster Associations www.nasbaonline.net

NCMEC - National Center for Missing & Exploited Children www.ncmec.org

NCTA - National Cable and Telecommunications Association www.ncta.com

NEMA - National Emergency Management Association www.nemaweb.org

NIMS - National Incident Management System www.fema.gov/emergency/nims

NOAA - National Oceanic and Atmospheric Administration www.noaa.gov

NPR – National Public Radio

NPR Cue Channel - A non-program channel to Public Radio stations which carries National EAS messages and tests as a PEP station. Also known as the "Squawk" channel.

NPR Squawk - also known as NPR Cue Channel

NPT – National Periodic Test

NWEM - Non-weather emergency message

NWR - NOAA Weather Radio

NWS - National Weather Service (http://www.nws.noaa.gov)

NWPS - National Public Warning System aka PEP

PEP – Primary Entry Point, a special station used for POTUS EAN alert code

PN – Participating Nationals, all media organizations operating under FCC part 11 rules.

R&O - Report and Order

RBDS - Radio Broadcast Data System

RMT - EAS Required Monthly Test

RWT - EAS Required Weekly Test

SaaS – Software as a Service

SAME - Specific Area Message Encoding

SBE - Society of Broadcast Engineers www.sbe.org

SCTE - Society of Cable Telecommunications Engineers www.scte.org

SECB - State Emergency Communications Board

SECC - State Emergency Communications Committee (now the IPAWS Committee of the SECB)

SP - State Primary. Stations that are the entry point for State messages.

SR – Statewide relay for EAS distribution

WFO – Weather forecast office

Wireline Video Systems - The system of a wireline common carrier used to provide video programming service.