E.A.R. Participant Guidelines

Version V1.2

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1 Introduction

1.1 Purpose

The purpose of this document is to define the terms and operating procedures of participants in EAR. These operating procedures are crucial for ensuring that all participants in the network understand their roles and responsibilities, particularly in handling EAS messages. These procedures reflect the requirements found in the part 11 rules of the FCC.

1.2 Terminology

EAR – **E**mergency Alert System and **A**lert Ready **R**elay Network

EAS – Emergency Alert System

CAP – Common Alerting Protocol

IPAWS – Integrated Public Alert and Warning System

WEA – Wireless Emergency Alerts

NWS – National Weather Service

NWR – NOAA Weather Radio

CRTC – Canadian Radio-television and Telecommunications Commission

1.3 Network Structure

EAR operates in a "star-mesh" configuration where Participants monitor an assigned central station and those central stations monitor any other central stations within EAR. The current configuration of the EAR network can be viewed at: https://easrelay.net/Network-Layout/

1.4 Joining EAR

In order to be eligible for participation in EAR, one must satisfy several conditions. These are as follows:

a) Be verified in EAR discord server

b) Have EAS equipment (hardware/software) capable of following FCC Part 11 Regulations or CRTC Guidelines.

c) Have a setup capable to monitor at least one icecast stream and an internet connection fast enough to stream your station.

d) Be respectful to other members in EAR and follow the EAR Discord Rules/TOS. (See https://easrelay.net/Discord-Rules/)

2 Participants

2.1 Monitors

As stated above, EAR participants are required to monitor at least one station. However, EAR participants must follow a few guidelines when choosing a monitor.

a) The following are the required CAP sources for participants with a Digital Endec:

    A) **IPAWS** (This can be filtered for a stations local area only and should be screened where development and "Synthetic alerts" are not relayed)

    B) **EAR Centralized CAP Server**

b) Participants have the option to monitor the listed CAP sources below, but it's not mandatory.

    A) **IPAWS WEA** (TTS is **REQUIRED** to be enabled for all alerts and is recommended to filter WEA)

    B) **NWS CAP** (Must be filtered to local area only, participants are not allowed country-wide NWS CAP monitors)

    C) **COMCAST/COX CAP/xcal.tv** (Not recommended for all digital Endecs but can be monitored with a software solution. All "xcal.tv" sources are **REQUIRED** to have filtering configured to ignore all RWTs and "Synthetic Tests".)

    D) **Canadian CAP** (Proper filtering and alert screening should be applied, so that alerts are relayed properly. Non-experienced participants should avoid directly monitoring this source.)

c) Participants, whether they have analog or digital Endecs, are given the option to monitor the following "analog" EAS sources, but it's not a requirement.

    A) Other participants within EAR.

    B) Licensed broadcasters via FM/AM reception or streams.

    C) SecludedFox Systems' COX/COMCAST/IPAWS streams (for those with non-CAP compliant Endecs, this is recommended)

    D) NWR stations via either over-the-air reception or trusted community provided streams. (Be careful when using community streams since some can compromise alert integrity)

d) Monitoring the following EAS sources is strictly prohibited.

   A) Participants within other relay programs, unless specifically authorized by EAR staff.

   B) Unlicensed stations or pirates, unless specifically authorized by EAR staff.

   C) CAP Sources not located in the North American or Caribbean areas.

2.2 Alert Origination

Participants have the option to originate a Required Weekly Test (RWT) or Practice/Demo Warning (DMO). However, it's important to note that RWTs can be sent a maximum of three times in a week and DMOs must not be sent excessively. Additionally, EAR participants are not permitted to "Push" to the EAR Centralized CAP Server.

2.3 Station Callsigns

EAR Stations must follow the EAR Discord Rules Content Policy. This prohibits the use of profanity, slurs, and text deemed inappropriate.

2.4 Alert Filtering

Participants are given the option and are encouraged to establish alert filtering on compatible Endecs. However, it's crucial that filter names clearly indicate their function and that these filters permit the necessary alerts as stated in §3.1.

2.5 Local Area

During the enrollment process, participants are required to submit FIPs codes corresponding to their local area. These codes are utilized to generate a centralized map that represents all participants' local areas. It's mandatory for participants to adhere to this map and avoid infringing on the local areas of other stations. The station local area map can be found at: https://easrelay.net/Local-Areas/

2.6 Local Breaching

Participants are permitted to "local breach" under the following circumstances:

   A) The participant's stream is offline.

   B) The participant's stream cannot be decoded.

C) The quality of the participant's alert audio is poor. This includes, but not limited to, poor quality alerts, such as overprocessing, extreme loudness, or extreme compression.

D) The participant's stream is unstable.

E) The participant incorporates any form of "sound effect" into the audio that could be deemed annoying or unusual. This includes, but is not limited to, Midland or any weather radio alarm sounds and other elements that could be added to alert audio.

It is mandatory for participants to inform both the local station and the EAR staff when a local breach is being implemented. This is subject to the discretion of EAR management.

2.7 Station Inactivity

Participant stations undergo regular monitoring and auditing to guarantee the highest quality of alerts are forwarded, which includes assessing station activity. Participants are to maintain at least 120 hours of stream uptime per week, unless approved in advance via "Modmail" or during scheduled/unscheduled outages. Participants streams are to be a minimum of 96kbps for MP3, 64kbps for AAC+, and 128kbps for OGG. Utilizing a lower codec bitrate may be subjected to a detailed review by EAR staff. Individuals utilizing ADSL, dial-up, or satellite internet connections are eligible to exceptions. This can be done by providing evidence via an approved speedtest tool to "Modmail". In cases where a station is deemed inactive by EAR staff, the associated participant will be dismissed from the EAR program.

2.8 Participant Discord Channels

Channels that fall under the "PARTICIPANTS" category are considered private and confidential. The dissemination of any media, messages, links, etc., outside of this specific Discord category is strictly forbidden.

3 Appendix

3.1 Required Alerts to Forward

Event Description	Event Code
Required Monthly Test	RMT
Tornado Warning	TOR
Severe Thunderstorm Warning	SVR
Earthquake Warning	EQW
Hurricane Warning	HUW
Radiological Hazard Warning	RHW
Child Abduction Emergency	CAE
Administrative Message	ADR
National Emergency Message	EAN
Nationwide Test of the Emergency Alert System	NPT