§ 11.21 State and Local Area plans and FCC Mapbook.

EAS plans contain guidelines which must be followed by EAS Participants' personnel, emergency officials, and National Weather Service (NWS) personnel to activate the EAS. The plans include the EAS header codes and messages that will be transmitted by key EAS sources (NP, LP, SP and SR). State and local plans contain unique methods of EAS message distribution such as the use of the Radio Broadcast Data System (RBDS). The plans must be reviewed and approved by the Chief, Public Safety and Homeland Security Bureau, prior to implementation to ensure that they are consistent with national plans, FCC regulations, and EAS operation.

(a) The State EAS Plan contains procedures for State emergency management and other State officials, the NWS, and EAS Participants' personnel to transmit emergency information to the public during a State emergency using the EAS. State EAS Plans should include a data table, in computer readable form, clearly showing monitoring assignments and the specific primary and backup path for emergency action notification (EAN) messages that are formatted in the EAS Protocol (specified in §11.31), from the PEP to each station in the plan. If a state's emergency alert system is capable of initiating EAS messages formatted in the Common Alerting Protocol (CAP), its State EAS Plan must include specific and detailed information describing how such messages will be aggregated and distributed to EAS Participants within the state, including the monitoring requirements associated with distributing such messages.

(b) The Local Area plan contains procedures for local officials or the NWS to transmit emergency information to the public during a local emergency using the EAS. Local plans may be a part of the State plan. A Local Area is a geographical area of contiguous communities or counties that may include more than one state.

(c) The FCC Mapbook is based on the above plans. It organizes all broadcast stations and cable systems according to their State, EAS Local Area, and EAS designation.

[72 FR 62134, Nov. 2, 2007, as amended at 77 FR 16700, Mar. 22, 2012]

Subpart B—Equipment Requirements

§ 11.31 EAS protocol.

(a) The EAS uses a four part message for an emergency activation of the EAS. The four parts are: Preamble and EAS Header Codes; audio Attention Signal; message; and, Preamble and EAS End Of Message (EOM) Codes.

(1) The Preamble and EAS Codes must use Audio Frequency Shift Keying at a rate of 520.83 bits per second to transmit the codes. Mark frequency is 2083.3 Hz and space frequency is 1562.5 Hz. Mark and space time must be 1.92 milliseconds. Characters are ASCII seven bit characters as defined in ANSI X3.4–1977 ending with an eighth null bit (either 0 or 1) to constitute a full eight-bit byte.

(2) The Attention Signal must be made up of the fundamental frequencies of 853 and 960 Hz. The two tones must be transmitted simultaneously. The Attention Signal must be transmitted after the EAS header codes.

(3) The message may be audio, video or text.

(b) 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.

(c) The EAS protocol, including any codes, must not be amended, extended or abridged without FCC authorization. The EAS protocol and message format are specified in the following representation.

Examples are provided in FCC Public Notices.

[PREAMBLE]ZCZC-ORG-EEE-PSSCCC+TTTT-JJJHHMM-LLLLLLLL-(one second pause)
[PREAMBLE]ZCZC-ORG-EEE-PSSCCC+TTTTpJJJHHMM-LLLLLLLL-(one second pause)
[PREAMBLE]ZCZC-ORG-EEE-PSSCCC+TTTT-JJJHHMM-