

# **EAS CAP Roadmap Coordinating Committee**

## **The EAS CAP ROADMAP**

### **A Strategy for Implementing the Common Alerting Protocol for a Next Generation Emergency Alert System**

#### **Mission Statement**

The EAS CAP Roadmap Coordinating Committee was formed to help ensure the successful implementation of Common Alerting Protocol (CAP) technology for a revised Next Generation Emergency Alert System (EAS) for the United States and its territories. The Committee seeks to identify the challenges and recommend possible solutions for an EAS CAP deployment. The results of this Committee's research will be made available as a resource for U.S. government agencies, for the constituencies of our member organizations, and for the EAS and CAP communities at large.

#### **Call to Action**

The work product of this Committee's Working Groups is in most cases a set of recommendations for particular responsible parties to act upon, including Federal and State agencies, State Emergency Communications Committees, and both CAP message originators and recipients. It is the assertion of this Committee that the bulk of the recommendations identified by each Working Group should be completed by the responsible parties before the start of the 180-day clock referred to in the FCC Report & Order on EAS CAP, or at the very least should be completed concurrent with the 180-day time period. The Committee further contends that most entities will need funding to act on our recommendations, and thus identifying funding is on the task list of every Working Group.

#### **Terminology**

A glossary of terms used in this document appears in Appendix A.

#### **Milestones**

1. Identify the key industry stakeholders in the Next Generation EAS. (completed, see App. B.)
2. Form an Advisory Council with membership from each stakeholder. (completed, see App. B.)
3. Form Working Groups to address individual tasks. (see next page, and Appendices C and D.)

#### **Timeline for Working Groups**

- > First week of January 2009: Preliminary Report due.
- > Last week of March 2009 (NASBA EAS Summit): Interim Report due, to include preliminary conclusions, funding needs and sources, and any outstanding issues and problems.
- > Within 60 days of FEMA issuing a statement on the CAP standard: Final Report due, addressing any issues or questions raised by the FEMA statement.

## **Working Groups and assigned tasks**

For a list of Working Group Chairperson, Committee Liaison, and Members, see Appendix C.

For initial guidance on Working Group start-up, see Appendix D.

For Working Group Operational Policies, see Appendix E.

Group 1. EAS CAP Profile WG

Group 2. EAS CAP Distribution Network WG

Group 3. EAS CAP Alert Presentation WG

Group 4. EAS CAP Training WG

Group 5. EAS CAP Equipment WG

Group 6. EAS CAP FCC Rules/FEMA Directives Study WG

Group 7. EAS CAP Alert Origination WG

### 1. EAS CAP Profile WG

Develops the EAS CAP Profile to be mandated by FEMA for use in every state, regardless of distribution means, to ensure interoperability among states and devices.

[The work of this WG has already been addressed by another group, the EAS-CAP Industry Group, so our Committee will not deal with this topic. Their work is at: [www.eas-cap.org](http://www.eas-cap.org)]

### 2. EAS CAP Distribution Network WG

Work with FEMA and states on developing Next Generation EAS distribution networks.

Initial Task List:

- Make recommendations to FEMA and FCC on possible solutions, such as using vacated 700 MHz TV bandwidth for local last-mile distribution of EAS CAP alerts.
- Establish best practices for SECC's to follow in building CAP distribution networks, including examples of state CAP networks currently deployed, and lessons learned by those early adopters.
- Offer recommendation on handling network security, including responsible parties for maintaining and distributing the "keys", for instance.
- Identify funding needs for the responsible entities to carry out the recommendations of your Working Group, as well as any funding sources identified.
- If invited, work with FCC in evaluating distribution networks submitted in revised State EAS Plans.

### 3. EAS CAP Alert Presentation WG

Develops recommendations for standardized presentation of the public message across all media.

Initial Task List:

- Ensure that emergency alerts have a degree of consistency across all media by developing some common elements, such as consistent visual, aural, even tactile (e.g., portable device vibrator cadences) cues that one might almost call "branding elements".
- Investigate the possibility of employing a standard "sounder" that can be used across broadcast, wireless, wireline and even acoustical delivery systems, along the lines of Australia's Standard Emergency Warning Signal (SEWS).
- Work with representatives from programming, production, news, weather and graphics departments to develop best practices for uniform on-air presentation.

- Work with emergency management representatives to develop the most effective on-air information/warning presentation.
- Work toward standardized presentation on computers, PDAs, digital signage, etc. with representatives from those industries.
- Factor in CMSAAC recommendations on devising a consistent user experience on text messaging devices.
- Work with NRSC, which is trying to develop a common user experience between FM RBDS and HD Radio text displays.
- Work with equipment manufacturers to ensure they incorporate the capabilities in their devices to carry out the above objectives.
- Identify funding needs for the responsible entities to carry out the recommendations of your Working Group, as well as any funding sources identified.

#### 4. EAS CAP Training WG

Work with FCC and FEMA on partnership-building, training, and best practices for all stakeholders. Assist FCC and FEMA in implementing the training mandated in the R&O.

Initial Task List:

- EMA training and best practices.
- State Governor's Office training and best practices. (Work with Alert Origination WG on this)
- Work with FEMA on possibly including EAS as a NIMS training module. (Work with Alert Origination WG on this)
- EAS Participant training.
- SECC training. (Regional planning sessions needed for CAP network interoperability?)
- Survey and recommend best practices for SECC's.
- Identify funding needs for the responsible entities to carry out the recommendations of your Working Group, as well as any funding sources identified.

#### 5. EAS CAP Equipment WG

Develops recommendations for the interoperability of EAS CAP Encoders and Decoders.

[The work of this WG has already been addressed by another group, the EAS-CAP Industry Group, so our Committee will not deal with this topic. Their work is at: [www.eas-cap.org](http://www.eas-cap.org)]

#### 6. EAS CAP FCC Rules/FEMA Directives Study WG

Offer guidance to FCC and FEMA on rule changes needed to implement CAP.

Provide guidance to SECC's on what the FCC expects to see in the revised EAS State Plans.

Initial Task List:

- What Directives are needed from FEMA to ensure proper and uniform implementation of EAS CAP?
- What new FCC Rules are needed to ensure proper and uniform implementation of EAS CAP?
- Modify FCC Rules to eliminate the LP/daisy chain model?
- Modify FCC Rules monitoring requirements to move from stations to facilities/sources?
- Review 47 CFR Part 11 to suggest necessary changes in the current rules and regulations.
- Should mandatory EAS RWT and RMT test origination requirements be changed in light of EAS enhancements?
- Should FCC create a GOV or other must-carry EAS Originator Code to better enable CAP Decoders to pass this must-carry message status on to the current legacy EAS Decoders?

- FCC says a Governor's CAP message is must-carry, but which Governor(s)? Only from the state of the City of License? From any state in the station coverage area?
- FCC says a Governor's geo-targeted local CAP alert is must-carry, but what constitutes a station's local must-carry area? The county of the City of License? Any county in the station coverage area? Areas smaller than a county jurisdiction?
- Work with Alert Origination WG on advisability of mandatory county, municipal and tribal emergency messaging.
- Should FCC drop the ZCZC-based presentation sentence in EAS alert rendering?
- Should FCC mandate text-to-speech technology in EAS CAP decoders? If so, suggest which technology, licensed/unlicensed, methodology.
- If EAS Participant holds an NN Authorization, are they also exempted from carrying the Governor's mandatory CAP alert? If so, what procedure must they follow when a Governor's message is received? Would this policy extend to future mandatory Mayor CAP alerts?
- Address some apparent oversights on items mentioned in the R&O which are not reflected in the revised FCC rules, such as, R&O Paragraph 68: "In order to ensure that the Commission has sufficient notice of revised EAS plans, we will require state and local entities to file modified plans with the Commission at least 90 days before the effective date of any revisions to their EAS plans or EAS designations.", and R&O Paragraph 68: "We will require state and local entities to annually confirm their plans and designations." And what do these paragraphs mean?
- Is a FCC Rules "Type Acceptance" requirement for EAS CAP Decoders needed?
- Identify funding needs for the responsible entities to carry out the recommendations of your Working Group, as well as any funding sources identified.

## 7. EAS CAP Alert Origination WG

Examine capabilities and recommend options and best practices for the origination of CAP-based public alert and warnings intended for Advanced EAS activation, as well as potentially other interoperable communications systems (such as mobile, wireless, computers, etc.).

Initial Task List:

- Assess current and future capabilities available for origination of emergency messages, whether civil, weather, administrative or other.
- Work with representatives from emergency management, weather service, manufacturer, special needs, and other communities of interest to develop best practices for message content and format, using the new EAS-CAP Profile ([www.eas-cap.org](http://www.eas-cap.org)) as one of several guidelines.
- Develop guidelines on consistent, effective warning messages, given the diverse needs of various population groups, technology platforms and mission areas.
- Examine and develop best practices and potential new concepts of operations for Advanced CAP-based EAS origination, including mandatory gubernatorial messaging (Relay findings to Training WG), and the advisability of mandatory county, municipal and tribal emergency messaging. (Relay findings to FCC Rules WG)
- Examine and develop recommendations on the role of advanced EAS origination as NIMS-compliant public information systems. (Relay findings to Training WG)
- Factor in CMSAAC recommendations, wherever relevant, for CAP messaging limits for mobile vs. broadcast EAS and other.
- Identify funding needs for the responsible entities to carry out the recommendations of your Working Group, as well as any funding sources identified.

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### **Appendix A: Glossary of terms used in this document**

CAP Common Alerting Protocol  
CMSAAC Commercial Mobile Service Alerting Advisory Committee  
DEAS Digital Emergency Alert System  
EAS Emergency Alert System  
EMA Emergency Management Agency  
FCC Federal Communications Commission  
FEMA Federal Emergency Management Agency  
HD Radio© US Digital Radio  
IAEM International Association of Emergency Managers  
LP Local Primary (Station)  
NAB National Association of Broadcasters  
NASBA National Alliance of State Broadcasters Associations  
NCTA National Cable and Telecommunications Association  
NEMA National Emergency Management Association  
NIMS National Incident Management System  
NN Non-participating National  
NOAA National Oceanic and Atmospheric Administration  
NRSC National Radio Systems Committee  
NWR NOAA Weather Radio  
NWS National Weather Service  
PDA Personal Digital Assistant  
R&O Report and Order (*Federal Communications Commission, In the Matter of Review of the Emergency Alert System, Second Report & Order and Further Notice of Proposed Rulemaking, EB Docket No. 04-296, Adopted May 31, 2007; available at [http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/FCC-07-109A1.pdf](http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-07-109A1.pdf)*)  
RBDS Radio Broadcast Data System  
RMT EAS Required Monthly Test  
RWT EAS Required Weekly Test  
SAME Specific Area Message Encoding  
SBE Society of Broadcast Engineers  
SCTE Society of Cable Telecommunications Engineers  
SECC State Emergency Communications Committee  
SEWS Australia's Standard Emergency Warning Signal  
WG Working Group

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### Appendix B: Coordinating Committee Membership List

Organization	Representative	Ex officio/alternate
SBE-Society of Broadcast Engineers	Clay Freinwald	Barry Thomas
NAB-National Association of Broadcasters	Ann Bobeck	John Marino
NASBA-National Alliance of State Broadcasters Associations	Suzanne Goucher, <b>Committee Chairperson</b>	Ann Arnold, Texas
NEMA-National Emergency Management Association	Tom Simon	
IAEM-International Association of Emergency Managers	Larry Gispert	
SCTE-Society of Cable Telecommunications Engineers	Arthur Leisey	Allen Studer
NCTA-National Cable and Telecommunications Association	Steve Johnson	Andy Scott
SECCs-State Emergency Communications Committees	Gary Timm, <b>Committee Vice-Chair</b>	
Manufacturers	Jerry LeBow Ed Czarnecki	

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### **Appendix C: Working Group Operational Policies**

Formation of Working Groups: The Coordinating Committee may form one or more Working Groups. The formation and later dissolution of such Working Groups shall require approval by the affirmative vote of a majority of the members of the Coordinating Committee. The scope and duties of a technology group and any subsequent changes in such scope or duties shall be approved by the Coordinating Committee members in the same manner.

WG Chairperson: The Coordinating Committee may appoint a Working Group chairperson, charged with the responsibility to serve as liaison to the Coordinating Committee and conduct WG activities to achieve the deliverables and milestones as specified by the Coordinating Committee. The Coordinating Committee may elect to appoint separate Chairperson and Liaison functions in a given Working Group, in which event the Liaison will serve as WG representative to the Coordinating Committee.

WG Vice Chair: A chairperson of a Working Group may appoint a Vice Chair, or may take nominations from the general membership of the Working Group for a Vice Chair. In the case of the chairperson's absence, the Vice Chair will temporarily assume the responsibilities of the chair. The Vice Chair may fulfill the separate function of WG Liaison, in the event the Chairperson and Liaison functions are separated in a given Working Group.

Membership: Any individual with a material interest in the work of a particular Working Group shall be entitled to membership thereon and shall be accorded such status. Members will be entitled to participate in any conference calls or meetings of a Working Group, and shall be eligible to participate in any subcommittee or task group activity, with the approval of the Working Group Chairperson.

A Working Group chairperson may create additional subcommittees to address specific issue areas. A Working Group chairperson has the authority to limit membership in those subcommittees.

Removal of a Member: Upon recommendation of the Chairperson of the Coordinating Committee, and majority vote of the Coordinating Committee, a member of a Working Group may be removed should it be determined that the work of the Working Group would be adversely affected by the continuing membership.