



March 2014

WORKING GROUP 3
Emergency Alert System

Final Report
CSRIC WG3 State EAS Plans Subcommittee Report

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1 Results in Brief

1.1 Executive Summary

The Federal Communications Commission (Commission or FCC) established the Communications Security, Reliability and Interoperability Council (CSRIC) "...to provide recommendations...to ensure, among other things, optimal security and reliability of communications systems, including telecommunications, media, and public safety." To achieve that goal, CSRIC IV established and chartered ten "Working Groups" to examine the various issues of concern in these areas.

Working Group 3 (WG3) was formed to develop recommendations for the CSRIC's consideration regarding any actions the FCC should take to improve the Emergency Alert System (EAS). WG3 was divided into three subcommittees: one to review FCC rules and processes concerning state EAS Plans, one regarding EAS security, and one to address EAS Operational Issues and the Nationwide EAS Test. Each group worked with specific questions, including those raised by the FCC in their recent Public Notice on Nationwide EAS Test Issues.

This report is focused on the assigned task of reviewing "the FCC's rules regarding state EAS (Emergency Alert System) plans and recommending any actions, including best practices, the Commission should take to improve the process for State Emergency Communications Councils' (SECCs) development of and submission of plans as well as the FCC's process of review and approval of such plans".¹

This report from the WG3 State EAS Plans Subcommittee contains a number of responses to the FCC's questions as well as comments and recommendations for creating certain uniform EAS plan elements. These plan elements can provide the Commission, all EAS stakeholders and Federal agencies responsible for government continuity more assurance that an Emergency Action Notification (EAN) will reach as many people as possible when conventional means of communications are compromised or fail. Making key elements of EAS state plans more uniform will also require an improved description and interpretation of the membership, structure and duties for EAS State Emergency Communications Committees (SECCs).

We highlight in the report a resource for a new and valuable tool to help the SECCs and the FCC manage and assess the reliable and resilient dissemination of actual EAS EAN messages. That tool, which is more fully described in the report, will be a national, federally managed EAS monitoring assignments database. We identify core plan elements that SECCs should deliver to the Commission and recommend that the FCC stand up an online Commission database that can automatically cross-reference specific information with the FCC's Universal Licensing System (ULS).

We provide specific examples of recommended Plan sections in Appendix 1 accompanied by descriptive language on adapting these for individual states. We also provide suggestions on how SECCs can test dissemination of EAN distribution paths in meaningful ways, and we

¹ This paragraph reproduced as received from FCC. The word "Council" is not used when referring to the State-level EAS organizations. They are usually called "Committees."

present our vision for how SECCs can maintain and update EAS Plans. In Appendix 2, we outline our recommendations for changes and updates to FCC Part 11 EAS rules. A table of helpful definitions is contained in Appendix 3. A process flow chart appears in Appendix 4.

2 Introduction

CSRIC IV Working Group 3 was established to develop recommendations for the CSRIC's consideration regarding any actions the FCC should take to improve the Emergency Alert System (EAS).

In order to tackle the issues of EAS a diverse team of professionals were recruited to participate. The following areas of expertise are represented within the group.

- Message Originators: FEMA; NWS; State & Local Emergency Managers; State EAS Networks.
- EAS Participants: Radio; TV; Cable TV; Satellite TV; Satellite Radio.
- EAS Equipment Manufacturers.
- State Emergency Communications Committees
- EAS Experts and Consultants.
- Public Interest, Persons with Disabilities.

The Working Group also developed recommendations for any actions, including best practices that the Commission should take to promote the security of the EAS. The Working Group addressed such other EAS-related issues as assigned to CSRIC by the FCC. In addition, FCC staff has tasked our Working Group to explore operational issues that arose during the nationwide EAS test in November 2011.

CSRIC Working Group 3 divided into three subcommittees.

- **State EAS Plans** - Recommend steps to improve the process for developing and submitting state EAS plans to the Commission. Consider the formation and role of State Emergency Communications Committees (SECCs), and processes for optimizing the EAS while minimizing burdens on EAS stakeholders.
- **EAS Security** - Recommend actions to improve promote the security of the EAS.
- **Nationwide EAS Test/Operational Issues** - Address other EAS-related issues as assigned to CSRIC by the FCC.

2.1 The Goal of WG3: Helping EAS Committees Create Viable Plans

As noted above, Working Group 3 was divided into 3 subcommittees. This report is from the subcommittee tasked with improving the development of state and territorial EAS Plans. The group included representatives of the FCC, National Weather Service, FEMA, broadcasters and the cable TV industries, IPTV and EAS equipment manufacturers. Our focus: viable and resilient EAS dissemination.

This report to the CSRIC is the product of several months of thoughtful and detailed conference calls and subcommittee work. This report benefited from the cooperative consideration of sometimes divergent points of view on key issues. All participants share a strong motivation to improve the EAS. To create viable plans, we need to have inclusive, active and functional EAS State Emergency Communications Committees (SECCs) develop workable plans and maintain and update these plans to eliminate as many single points of failure as possible. Viable, dynamic plans will not only fulfill the requirements to disseminate EAS messages from the Federal

government to as many people as possible when normal means to do so are impaired or compromised, but also better support local and state EAS messaging.

2.2 CSRIC Structure

Communications Security, Reliability, and Interoperability Council (CSRIC) IV									
CSRIC Steering Committee									
Chair or Co-Chairs: Working Group 1	Chair or Co-Chairs: Working Group 2	Chair or Co-Chairs: Working Group 3	Chair or Co-Chairs: Working Group 4	Chair or Co-Chairs: Working Group 5	Chair or Co-Chairs: Working Group 6	Chair or Co-Chairs: Working Group 7	Chair or Co-Chairs: Working Group 8	Chair or Co-Chairs: Working Group 9	Chair or Co-Chairs: Working Group 10
Working Group 1: Next Generation 911	Working Group 2: Wireless Emergency Alerts	Working Group 3: EAS	Working Group 4: Cybersecurity Best Practices Working	Working Group 5: Server-Based DDoS Attacks	Working Group 6: Long-Term Core Internet Protocol Improvements	Working Group 7: Legacy Best Practice Updates	Working Group 8: Submarine Cable Landing Sites	Working Group 9: Infrastructure Sharing During Emergencies	Working Group 10: CPE Powering

Table 1 - Working Group Structure

2.3 Working Group 3 Team Members

Working Group 3 consists of the members listed below. The WG3 sub-group for State EAS Plans consists of four Co-Chairs; Clay Freinwald, Rich Parker, Richard Rudman and Gary Timm

Name	Affiliation(s)
Adrienne Abbott	Nevada EAS Chair
John Archer	SiriusXM
John Benedict	CenturyLink
Ron Boyer	Boyer Broadband
Ted Buehner	Warning Coordination Meteorologist National Weather Service
Lynn Claudy	National Association of Broadcasters
Roswell Clark	Cox Media Group
Kimberly Culp	Larimer Emergency Telephone Authority
Edward Czarnecki	Monroe Electronics
David Donovan	President, NY State Association of Broadcasters
Chris Fine	Goldman Sachs
Clay Freinwald (Co-chair)	Clay Freinwald Technical Services / Chair, Washington State SECC
Les Garrenton	LIN Media
Mike Gerber	NOAA
Suzanne Goucher	Maine Association of Broadcasters / Chair, Maine SECC
Neil Graves	SNR Systems (formerly FEMA IPAWS)

William Hickey	Premiere Radio Networks
Craig Hoden	NOAA
Chris Homer	Public Broadcasting Service
Steve Johnson	Johnson Telecom
Alfred Kenyon	FEMA IPAWS
Wayne Luplow	LGE/Zenith Electronics
Bruce McFarlane	Fairfax County
Dan Mettler	Clear Channel Media + Entertainment / Chair Indiana SECC
David Munson	FCC Liaison
Brian Olinger	Hubbard Radio/WTOP
Darryl Parker	TFT, Inc.
Rich Parker (EAS Plans Co-Chair)	Vermont Public Radio /Chair, Vermont SECC
Jerry Parkins	Comcast Cable
Efraim Petel	AtHoc, Inc.
Richard Perlotto	Shadowserver Foundation
Joey Peters	MyStateUSA, Inc.
Peter Poulos	Citi
Harold Price	Sage Alerting Systems
Richard Rudman (EAS Plans Co-Chair)	Broadcast Warning Working Group / Vice Chair, California SECC
Francisco Sanchez, Jr.	Harris County (TX) Office of Homeland Security
Tim Schott	NOAA
Andy Scott	V.P. Engineering, NCTA
Bill Schully	DIRECTV
Gary Smith	KTAR Phoenix, Arizona SECC
Matthew Straeb	Global Security Systems/ALERT FM
Gary Timm (EAS Plans Co-Chair)	Broadcast Chair, Wisconsin SECC
Leonardo Velazquez	AT&T U-Verse
Larry Walke (Co-Chair)	National Association of Broadcasters
Michael Watson	Gray Television Group
Kelly Williams	NAB
Reed Wilson	Belo Corp.

Table 2 - List of Working Group Members

3 Objective, Scope, and Methodology

3.1 Working Group Three State EAS Plans Charter

The FCC charter for CSRIC IV calls on WG3 specifically to “review the FCC's rules regarding state EAS plans and recommend any actions, including best practices, the Commission should take to improve the process for State Emergency Communications Councils’ (SECCs) development and submission of plans as well as the FCC's process of review and approval of such plans.” In this regard, the Working Group took into consideration the transition to the Common Alerting Protocol.

3.2 Scope

The subcommittee’s focus is to recommend improvements for the development and submission of State EAS plans and FCC review. The approach was designed to accomplish the following goals:

- Reduce burdens on SECCs and EAS Participants.
- Simplify description of EAS alert dissemination.
- Be verifiable by FCC.

Several issues will need to be looked at:

- Are there existing problems with Federal/State bifurcation at the EAS alert entry point?
- How to address dissemination maps?
- Should collection of information take place via template or online forms?

3.3 Methodology

Working Group 3 uses a collaborative, inclusive approach to its work. Given the array of expertise, the WG3 members brought to bear on this effort, it is critical to provide a multitude of forums and outlets through which participants could express their opinions and help shape this Final Report. The following section details the methodology through which WG3 achieved this objective.

After its initial set of meeting, the Co-Chairs of Working Group 3 decided to review the structure of the Working Group and develop a plan that would allow for WG3 to proceed with its study in an organized fashion which leveraged the diverse backgrounds of the group’s membership.

In addition to regular conference calls, an online collaboration portal was designed and implemented for use by the WG3 participants. The portal is accessible to all Working Group members throughout the duration of their work on behalf of the CSRIC.

Table 3 details some of the most prominent capabilities featured on the Portal and how they were used by the members of the Working Group 3.

Portal Capability	Description of Use
Document Repository	Collaboration space where members posted, reviewed, and edited documents
Forum	Open space where issues were discussed amongst members
Calendar	Central location where all relevant meetings and events were documented

Table 3

From its inception, the portal became a useful tool for the Working Group as they shared ideas, resources, and collaborated on common documents, including this Final Report. Given the disparate locations from which the WG3 members originated, having an online collaboration tool was instrumental to the successful completion of the Working Group's final product.

4 Findings and Recommendations

4.1 SECC Need for a Federal Government Database

The subcommittee concludes that SECCs need the resource of a federal government database to assure EAN dissemination. Secure and authorized access to a federal database by the State SECCs will contribute greatly to assurance to the Commission and other federal partners that EAS EAN messages will disseminate to the greatest extent possible. We outlined a standardized format for database submissions based on an easily understood and commonly used matrix-type format. We defined the key and continuing role of the Local Emergency Communications Committees (LECCs). We presented an EAS warning strategy that is structured to clarify for all EAS Participants exactly who they are supposed to monitor.

We recognize that the Commission has neither the staffing nor local expertise to do this and must depend on the State and territorial committees for basic monitoring structure, maintenance and updates. The subcommittee acknowledges there is currently less than 100% certainty that all 50 states and territories are capable of supporting this effort. However, we offer recommendations that may facilitate reaching closer to a 100% assurance level.

4.2 FCC Map Book Approach No Longer Needed

A simple correlation of a TV or radio EAS Participant's City of License (COL) or a cable company's service area with a monitoring database with a "County" field could replace the Part 11 "Map Book" requirement. Map Books will no longer be needed if a federal database houses EAS monitoring plan data. If a state or territorial committee wishes to produce a Map Book for their own use, we see no harm in this practice continuing on a voluntary basis.

4.3 The Two-Source EAN Dilemma

The Commission currently requires that each EAS Participant monitor two analog sources for the EAN. We note that many EAS Participants cannot meet this requirement due to Primary Entry Point (PEP) stations that are unable to cover every part of the states and territories with adequate day and night signals. The Federal Emergency Management Agency (FEMA) has authorized the Premiere Network and National Public Radio to carry analog PEP EAS EAN messages on their satellite distribution systems. Premiere and NPR can help meet this requirement once state and territorial committees incorporate them into their plans.

We further note that even if two sources are now shown in state EAS plans, they really may be duplications of the same single PEP station, rather than a separate source that can be active if a PEP station cannot relay an EAN. This will be part of an overall effort to purge all monitoring plans of single point failures.

4.4 Operational Areas vs. Other Geographical or Political Distinctions

We note that there is currently no uniformity in how each SECC's state or territory may refer to divisions or regions within it. The term "operational area" was used by the Commission going back to the Emergency Broadcast System (EBS) days. This term should, where possible, be standardized because it will work most closely in concert with overall emergency management practices and terminology.

4.5 Test Plans

State and territorial committees must devise, manage, exercise and review both closed and open circuit exercise testing. Such testing will give all EAS federal, state and local stakeholders the assurance needed that dissemination for EAS messages will be available for real emergencies.

4.6 An EAS Guiding Principle

The members of our subcommittee realize that the most important federal warning mission centers on the EAN code. The EAN Event code exists solely for Presidential declarations related to major national emergencies. Warnings of all types are at the heart of emergency management response functions and responsibility. Those in charge of managing emergencies, at all levels, should, as a core resource management responsibility, coordinate warnings with all other aspects of emergency response. This not only reinforces the EAN mission, but also reinforces the entire EAS infrastructure so the Commission can be more confident that an EAN will disseminate as widely as possible. While there is a growing number of social warning resources, the EAS and its Primary Entry Point backbone infrastructure must be ready at all times in case an EAN must be issued and other means are not available.

Warnings of all types will be more successful if the emergency management community adopts the following as a core principal: emergency public warnings are a response resource for emergency management at all levels. FEMA, from the federal level and together with local emergency management agencies, are responsible for proper warning origination. In this sense, we use the term "response" under its emergency management definition: An asset brought to bear by emergency management to manage an emergency to a faster and more successful outcome.

We must treat all emergencies, including national level events that would require use of the EAN, as local emergencies, similar to the emergency management community at large. In that sense, emergency public warnings, including EANs, are just as much a response resource as fire strike teams and emergency food and water. This single change in attitude within the emergency management community is needed to lead to greater reinforcement of the entire distribution infrastructure for that core EAN mission. It is our recommendation that the other federal partners, Congress, and the Administration work together toward this goal. This common goal emphasizes the need to bind the warning function to emergency management to make it work successfully from top to bottom and is included herein as a message to all EAS stakeholders and federal partners who will read this report, rather than as an action item for the FCC.

4.7 Bringing More Uniformity to the Federal EAS Process

Currently, each state creates its own EAS plan with as much or as little detail as the SECC sees fit to include, and that plan is subsequently submitted to the FCC for approval. As such, there is no uniform format for these plans. This lack of consistency makes it difficult for the FCC to determine if a proper distribution network exists for EAS EAN message distribution in each state.

Our subcommittee considered several options before deciding on a format to recommend. We provide elements of plans from several state plans as examples in this report. Several of those states have divided their plans into two main components, a section that defines EAS and its role in public warning, followed by a practical section on how EAS messages, including the EAN, are originated and disseminated through each state. In each case, the first section is a permanent part of the plan while the second section contains information that is subject to change, such as station call letters, frequencies or addresses as well as monitoring assignments. For example, California calls the unfixed sections of its plan "Communications Operations Orders" or COOs. Nevada refers to the changeable sections of its plan as "Appendices". Washington State has followed a procedure for plan writing similar to that used in California and some other states. The Washington State SECC constructed its plan in tabular form so that only each element which requires periodic review and updating needs to be changed instead of rewriting an entire plan to accommodate needed changes or updates.

No matter what an SECC calls the various sections of its EAS Plan, the underlying principle should be to create an overall plan that allows SECCs to more easily manage inevitable changes and efficiently communicate them to the FCC as well as the EAS Participants. The EAS Plans subcommittee takes the position that all states should write their plans in this way as a top-level goal.

Simplifying Designations for EAS Stations, Sources and Participants
The Plans Committee views the broad topology of EAS as follows:

- EAN Sources designated by FEMA
- EAS EAN Activation Points that are EAN relay sources for other EAS participants
- EAS Participants who are not designated as LPs

4.8 The Matrix Approach

Our subcommittee recommends that EAS stakeholders should endeavor to build a core standard for their state's distribution of federally originated EANs around a model using tabularized sections. Appendix 1 to this report contains notes on how an SECC can customize the sample matrix and flow chart tabs.

We must emphasize that with committees in fifty continental United States and the Territories and Possessions, it is not expected that all EAS plans will adhere our "matrix" suggestions

exactly as presented. Our subcommittee emphasizes that if a standardized submission format is followed as closely as possible, all committees will be able to report their distribution infrastructures for a federally-originated EAN in a manner the Commission can more easily evaluate. This will provide the FCC with an accurate EAN dissemination model to assess the overall national distribution of federally originated EAN messages. This will also help ensure that future national “live” code EAN tests will reach to as many EAS Participants as possible, and a real EAN, should it ever be needed, will do its part to preserve government continuity objectives.

4.9 Importance of Partnering with FCC

Partnering with the Commission on EAN dissemination using an online entry system is recommended. The key elements of all properly written state, territorial, possessions and local plans should contain enough information so that the Commission can cross reference County information with its current Universal Licensing System (ULS)² database to help provide the long sought analysis of EAN dissemination.

We recommend that the FCC create an online entry system so each SECC can securely update their federal EAN dissemination network that will also automatically update the Commission’s cross reference to the ULS. While we leave it to the Commission to develop the procedures and security for this process, the common goal we share is to assure effective and resilient EAN dissemination in the interests of supporting government continuity, and that goal should provide the necessary impetus to overcome any obstacles, including funding for this project.

In order to reduce the need for frequent changes and updates to the database, and state plans due only to changes in call letters, we recommend that the FCC Facility ID, in addition to station call letters, be used as the unique identifier for each participating broadcast station. Local plans which reference monitoring assignments by call letters may wish to continue to do so as a convenience, but the Facility ID should be included as part of the plan in order to allow the assignment designation to ‘survive’ short term changes in call letters. This will allow the Plans to maintain consistency with the Online Entry System without requiring frequent updates to that online system simply for changes in call letters. Ultimately, any change in call letters will eventually propagate through the ULS database, but using the unique Facility ID would vastly simplify the process of database maintenance. Facility IDs reference call letters for broadcasters, and Physical System ID or Community Unit ID references non-broadcast entities such as cable systems.

4.10 Border and Regional Plan Coordination

Because broadcast signals do not stop at geographic or geopolitical state borders, a key part in the success of EAS EAN dissemination is regional cooperation to determine primary responsibility for adjacent and shared state EAS Operational Areas. Some states like

² The Federal Communications Commission online Universal Licensing System (ULS)
<http://wireless.fcc.gov/uls/index.htm?job=home>

Washington, California and Nevada already have SECC liaison with neighboring states. All SECCs must inform the Commission in their plans that adjacent state border responsibilities have been clearly defined. Liaisons from adjacent state SECCs should become part of each other's SECC to enhance planning and operation coordination.

Basic data entry to accomplish what we envision should only require entering a minimum of three basic database elements:

- State (or states, territories or protectorates)
- Operational Area Name
- Counties within those Operational Areas, including, if possible, a map or graphic showing the Operational Area borders

4.11 Further Considerations and Realities

Should the Commission decide to stand up an online system for plan information entry, the following are recommendations as to how this process should be secured and managed:

- **Database Access**
The FCC operated database should not be open to everyone for changes and updates. Monitoring assignments must be coordinated, approved and entered by the SECCs who are charged with this responsibility.
- **Only SECC chairs or designated SECC members or SECC staff should be permitted to enter monitoring assignment information.**
Due to the lack of uniform SECC structures, it is not appropriate for the Rules to specify who within the organization of an SECC should be able to enter monitoring assignment information, or language that limits how an SECC wants this duty to be managed. For example, some SECCs have people who deal with monitor assignments, who may be someone other than the SECC Chair. The SECC should be given this responsibility and the ability to discharge this duty in a way that works best for that particular SECC. Further, each SECC should have the flexibility to designate one or more alternates for data entry who would be authorized for monitoring assignment data entry. One model for such authorization already exists in the FCC's Disaster Information Reporting System (DIRS) website.³
- **As an internal SECC policy, entries to the national monitoring database should be reviewed by each SECC.**
Entries should be reviewed and confirmed before actually updating the master database via a method at the discretion of each SECC. Each SECC should be able to make this decision, and appoint a Monitoring Database Administrator (MDA). That said, there must be some means in place to insure that the information transmitted to the FCC from the SECC is valid. Existing mechanisms for this important step that exist within the Federal Government could be used.

³ <http://transition.fcc.gov/pshs/services/cip/dirs/dirs.html>

- **The security model for access to this database should be determined by the FCC.**
As the custodian of a central EAS monitoring database, the FCC will have to determine proper security and authentication measures.

4.12 Ensuring Continued Local EAS Support

All federal emergency alert systems, of which EAS is an essential component, depend on local distribution. Policies should be developed to provide incentives that will encourage local communications distribution systems to participate in the emergency warning process. In the context of EAS, the distribution of federally originated EAN messages depends on the participation of local LP stations.

Local Primary stations spend significant resources in time and money to ensure that EAN messages are distributed to every local market throughout the country. The FCC should consider adopting incentives to encourage continued participation. For example, participation could be considered as a positive element during the license renewal process. All possible incentives that encourage better EAS participation should also be examined.⁴ Such incentive programs will help ensure that EAS remains strong and vital in local markets and make significant differences in state EAS infrastructures.

Similarly, we respectfully encourage the FCC to reduce unnecessary disincentives to participation and candid reporting of any deficiencies discovered during testing. While recognizing the important role of the FCC Enforcement Bureau for ensuring compliance with the rules of Part 11, we also recognize that no system of testing can be fully effective without a sufficient measure of understanding (and public awareness) that tests are intended as diagnostic events that will necessarily reflect certain imperfections in the system. By instituting a more measured system of reporting and ‘forgiveness’ for unintended errors, we believe that overall compliance and participation will be increased. It must be clearly understood that success of a test should be characterized by the identification of imperfections, rather than 100% performance. We certainly understand that ‘repeated and willful’ violation or errors must be dealt with effectively, but it serves no useful purpose to punish participants who are making honest efforts to implement the system, and in our view it discourages active participation and frank reporting and assessments of deficiencies so that they may be corrected by participants.

4.13 Incorporating FEMA in New and Potential Future EAN Reinforcement

The PEP network provides the means for EAN message dissemination to all EAS Participants, as well as direct “last ditch” communications to the public in a major catastrophe. FEMA has recently taken a great step forward to reinforce and harden the PEP network, by adding new PEP stations, reinforcing existing PEP stations and by adding new participants such as the Premiere Networks satellite network, along with NPR which that FEMA added to the PEP network in

⁴ While such incentives to encourage better participation in the EAS are clearly outside of the scope of our charge, we feel it is worth noting that there is a need to explore all possible options to encourage better EAS participation.

2002. Premiere brings expanded capabilities to the EAN dissemination process because the Clear Channel (Parent of Premiere) owned and operated stations and Premiere syndication network affiliates are available to a substantial portion of US radio broadcasting licensees.

Our subcommittee favors the Commission's working with FEMA to encourage EAN participation by all viable national network distribution systems, including those in the video realm, to help state SECCs reinforce their EAN distribution to all EAS Participants as widely as possible. We recommend a new version of the discontinued EBS network distribution model that would maximize dissemination resilience of the EAN message.⁵ We additionally recommend that there be a renewed effort on the part of the federal public warning partners to work toward the same goal.

Presently, FEMA has not yet announced a timeline to upgrade FEMA IPAWS OPEN for EAN alerts because IPAWS-OPEN cannot presently support live streaming audio. Live streaming audio is an implied requirement for the eventual capability needed in IPAWS OPEN for EAN alerts. If this capability can be implemented we foresee an overall reinforcement to existing state and local networks that have already established facilities to support CAP messages as presently provided for in 47 CFR 11. FEMA should be encouraged to resolve the live audio streaming issue or identify other ways in which currently deployed CAP equipment can be best utilized during a national alert.

4.14 Recommended SECC Participants

As part of our work, we have compiled a list of present and potential stakeholders in the overall EAS picture who ideally should be represented on each state's SECC.

Again, we look to one of our subcommittee member who is the Minnesota SECC Chair and presented this example of an SECC roster:

- Minnesota Broadcasters Association
- Minnesota Cable Companies
- National Weather Service
- Minnesota Homeland Security and Emergency Management
- Minnesota State Patrol
- Minnesota Department of Health
- Minnesota Fire Chiefs Association
- County Emergency Managers
- Individual broadcasters including public broadcasters
- Utility company representatives
- Special needs community representatives
- Multilingual community representatives

⁵ Resilience in this case means providing as many different paths to EAS Participants as possible for reception of the EAS EAN code. The fewer instances of potential single point failure that exist, the better. Resilience was an integral part of the old EBS when the three radio networks as well as the two news wire services had direct connections to FEMA in case of national emergencies.

4.15 Other EAN/EAS Participants

While the above list is only one example of state SECC, SECCs could further include:

- Direct EAS Participants (broadcast licensees, cable, wireless)
- Liaison to Wireless warning providers
- Liaison to IPTV and Satellite providers and others
- Liaison to State EM, NWS, DOJ, FEMA Regions and tribal entities where appropriate
- Liaison to their LECCs
- Liaison to Cable and Broadcaster Associations
- Liaison for each SECC for participating FEMA authorized PEP reinforcement affiliates⁶

4.16 Other Potential Stakeholders

- Amateur Radio
- AMBER Alert, Silver Alert and/or Blue Alert programs consistent with state practices
- WEA/CMAS
- Other operating public warning systems in the respective states
- Public Broadcasting Network Emergency Messaging Resources

4.17 Our suggestions for Identifying SECC Leadership

Once an SECC identifies as many stakeholders as possible, that group should decide on its leadership.

When an SECC decides on a leadership structure, we suggest they then notify the Commission whom they chose and provide the following information:

- Full Name of Chairperson or point of contact for the SECC (or other names if a Co-Chair is also appointed).
- Affiliation as an EAS Stakeholder
- 24/7 Phone Number(s) or other contact information
- Valid Email Address(es)
- Physical address (es)

Titles can be attached at the discretion of the committee to the various EAS constituencies represented in each SECC, *e.g.*, Cable Vice Chair, Radio Vice Chair, Television Vice Chair, State Association Vice Chair, State Emergency Management Vice Chair, etc.

⁶ Premiere and NPR affiliates listed as participating in PEP Reinforcement

4.18 One Size Does Not Fit All

If there was an oft-repeated phrase during our discussions, it was the concern about developing a “one size” concept. There are a number of reasons that we recommend that the Commission leave room within any Part 11 SECC matters for variations due to the following reasons:

- State SECCs that have already re-written their plans
- State SECCs that have limited resources to re-write their plans
- State SECCs that have to attract one or more key stakeholders for Plan writing and maintenance
- Inadequate or non-existent Local Emergency Communications Committees
- Large states where the SECC may not have information on one or more areas
- Inability to recruit LECC members
- Some SECCs may wish to formalize their structure

4.19 The Importance of State and Local Test Plans

Each SECC should design an EAS test plan that will both stress and verify the integrity of EAS distribution of federally initiated EAN messages. We believe if this is done, effective distribution for state, local and weather-event EAS messages will follow. With the Commission’s emphasis on the role of the SECC, a detailed, periodic test plan will not only insure dissemination of an EAN Event but also of other Events originated by State and Local entities.

We suggest that SECC test plans ideally should provide for periodic "closed circuit" relay network segment tests where such relay networks exist.⁷ These tests, which are not part of the broadcast program stream, are designed to ensure the integrity of message EAN dissemination without, in most cases, interrupting program streams. We recognize that various states will have different operational and logistical requirements, so the specifics of testing is better left to the individual SECC and described in detail in the state and/or local plan.

SECCs should devise test schedules to have as little impact as possible on the interruption of program streams and annoyance to the public. Because these are closed circuit tests that are merely logged, we see no reason for them not to occur between 0000 and 0300 local time. Where feasible, SECCs should also consider the origination of Common Alerting Protocol (CAP) test messages to perform closed circuit segments tests that will verify the integrity of digital state relay network segments and will also not disturb program streams. While FEMA IPAWS OPEN messages cannot at this time contain streaming live audio, they can still be an effective test of the integrity of EAN relay segments. Where available, the email capability of many CAP EAS boxes could help provide relay network segment reports (analog and digital)⁸

⁷ We are using the term “relay network” to mean all links from warning origination points to EAS Participants, including LP stations, state and local relay networks, and any other means that state and local committees devise to more effectively disseminate EAS messages, especially EAN messages originated through FEMA’s resources.

⁸ We envision enlisting volunteer EAS Participants who can add an SECC email address to their EAS devices with email capability. While we do not have a suggestion at this time for automating collection of such dissemination reports, we believe that finding a way to accomplish their collection in some automated manner should be a high priority.

back to the SECCs.

We realize that not all SECCs are able to implement this type of testing; however, such testing would provide the SECCs with more valuable confirmation about the viability of EAN relay networks giving reassurance that EANs can reach the public. The Plans subcommittee also noted that Part 11 should more clearly provide for additional EAS tests for training purposes and for educating the public about emergency messaging. Further, the emergency management community should be encouraged to incorporate EAS tests in their emergency management exercises.

4.20 National Test Plans

There should of course also be a plan to provide for periodic national end-to-end program stream tests using the National Periodic Test code (NPT). Reliability of any system can only be assured when the entire system is periodically tested. This is especially important for EAN Event code EAS messages. The present method of origination of RMT and RWT Events does not test national distribution of an EAN Event. RMT and RWT represent only a partial test of EAS message dissemination.

Periodic testing must be done at the national level using all approved EAS EAN distribution systems. We suggest that a schedule for any national tests (some closed circuit that can occur overnight) be made available well ahead of the test event. The Operational Issues and Nationwide Testing Sub-Committee recommended substituting NPTs for two of the RMTs each year in order to test the national distribution system. We agree with this recommendation.

4.21 Overall EAS Infrastructure Improvement

The FCC's Rules, especially Part 11, must be built around the needs of the emergency management community at all levels and what their duty is to the public to provide emergency public warnings⁹. Warnings are supposed to present a public at risk with timely notification and protective actions that can help save more lives and property. Currently the warning process is not bound to state and local emergency management as a core response resource responsibility.

We believe that binding warnings more closely to the overall management process in the National Incident Management System (NIMS) will not only solve this problem, but give badly needed state and local support to the EAN dissemination infrastructure that still has significant gaps or omissions.¹⁰

- Core partners at the federal level include FEMA, NOAA NWS, and the Department of Justice (AMBER), as well as the White House Communications Agency (WHCA)

⁹ Other sections of 47 CFR have emergency public warning implications for the EAS EAN and all other EAS codes. For instance, 47 CFR Part 79.2 (Accessibility of programming providing emergency information)

¹⁰ Reports archived at the National Hazards Center at the Colorado State University [<http://www.colorado.edu/hazards/>] document that many failures to warn can be traced to emergency managers never issuing warnings

operating on behalf of the systems' primary national user. At the state level, corresponding state agencies should be involved as partners. More must be done to build and reinforce public/private partnerships at all levels.¹¹

- Each EAS Plan monitoring assignment matrix must be outlined and managed through cooperative efforts of each state and territorial EAS committee with full input and cooperation from their EAS local committees. These matrices can be used to instruct EAS Participants who they should monitor to get EAS messages within their operational Area.
- The FCC has to seek permissions and voluntary cooperation when it comes to EAS distribution and maintenance issues that are rooted in state and local government entities. Ways have to be found through partnerships outlined in memoranda of understanding (MOU's) and other means to provide support at local and state levels for the warning process that the Commission cannot provide.
- EAS participants should have the confidence that they will not be cited for honest attempts at "good deeds" with the intent of overall EAS improvement. Reporting of issues affecting reliable dissemination of all EAS messages, including the EAN, should be treated as constructive attempts for repairs and improvements. A Commission policy that information submitted with repair and improvement as goals should be encouraged at all costs.

¹¹ California enacted Assembly Bill 2231 in 2008 requiring that the Office of Emergency Services (OES) take steps to form a state level emergency warning public/private partnership to advise OES on developing policies that "will lay the framework for an improved warning system for the public." If each state did this, we would have a key element in place that could assure not only the successful dissemination of EAN messages throughout each state, but greatly improve the changes that all public warnings (EAS and others) will have their intended effect. That effect: Helping to save more lives and property by getting timely and accurate protective action information from emergency managers to a public at risk from a multitude of dangers.

5 Overall Recommendations

Appendix 2 of this report details specific FCC Part 11 rule changes recommended by this working group. In addition to those specific rule changes, the EAS Plans subcommittee recommends the following goals for Part 11 Revisions to Support SECCs:

- The role of the SECC must be strengthened, and SECCs must be free to design and maintain their respective state's own robust and redundant EAS relay networks in the best and most practical ways possible.
- That the FCC re-establish a mechanism for SECCs to coordinate with the Commission and other SECCs. In our opinion, the best way to accomplish this goal is to re-charter the FCC EAS National Advisory Committee (NAC).
- That the FCC develop technology for SECCs to report changes to state plans and EAS EAN Event Code distribution in the least demanding and most efficient manner possible that still provides the Commission with current and accurate information. To accomplish this goal, we recommend that the FCC adopt our proposal for an on-line database.
- That the FCC update the EAS Handbook as soon as possible. The rewritten EAS Handbook needs to be applicable as an operator aid. We recommend that the FCC form an advisory committee to address updating the EAS Handbook, or assign the work to the next CSRIC group.
- That all references to an FCC Mapbook in Part 11 be eliminated. The Map Book is no longer necessary as a mandated element of plan submission if the Commission follows the recommendations of our report and a federal EAS monitoring assignment database is established.
- We recommend that the FCC adopt incentive approaches to the EAS in the Part 11 rewrite to encourage the role of EAS Participants as partners.
- We encourage the FCC to make it clear in Part 11 that State EAS Plans should be written and maintained by the SECCs.

6 APPENDIX

6.1 Appendix 1-Creating A Matrix for EAN Message Distribution and Monitoring Assignments

While EAN messages are designed as a function of the Federal Government, State Emergency Communications Committees (SECCs) have several obligations to consider in planning how EAN messages are distributed to the public via broadcast and cable television systems within a state from their federal originating sources. The products the SECCs produce need to both instruct the various EAS Participants how this goal is accomplished in the state and also clearly demonstrate to the FCC how their requirements are met.

There are several ways to explain this process:

- The bottom-up method whereby each broadcast station and Cable system is identified along with their individual monitoring requirements.
- The top-down method that provides instructions for each level of the process, a more preferable approach.
- States should be allowed, however, to take the approach that works better for them. Some states may wish to approach this in both directions:

There are two major tools to accomplish this goal. The first is a graphic in the form of a flow chart that identifies the major elements of the process. An example of this is shown in Figure 1 from the Washington State SECC EAS Plan, Tab 14, titled National Message Analog Distribution.

This flow-chart identifies the sources of EANs:

- The President (or Designee),
- The National PEP System
- The FEMA authorized national EAN distribution systems,
 - The legacy Primary Entry Point (PEP) radio station serving the state
 - Associated primary systems used to distribute the ‘output’ of currently authorized FEMA PEP sources.

The flow chart shows simply and graphically how a given state’s message sources are connected to the Radio, TV and Cable Systems whose primary responsibility is reaching the public with the President’s EAN message. Different states may well employ variations that are unique to their situations; however, the goal of this graphic remains the same.

The second tool is a matrix for SECCs to explain the specific requirements and/or options for each EAS Participant in the state to determine their designated monitoring assignments. The example in Figure 2 is again from the Washington State EAS Plan in which a matrix for various regions of their state has been created. Note that this matrix has no relationship to the on-line database that this CSRIC working group is proposing that the FCC establish. Rather, this matrix

is strictly for use by EAS Participants in a state to choose their best monitoring assignments from the options offered by that State EAS Plan.

The following is an explanation of each field, or column, in the Washington State example Matrix in Figure 2.

Area Name

SECCs will typically divide a state into Local EAS Areas, often called Operational Areas. These areas are usually determined by the signal coverage of principal Radio and TV stations, NOAA Weather Radio coverage and similar supporting information. Operational Areas sometimes cross state lines. The name for these ‘areas’ will appear in Column 1. Using the top row in our example, Central Puget Sound is the Area Name. The Matrix will contain ‘Rows’ corresponding to each Local EAS/Operational Area.

Counties

Each Local EAS/Operational area will contain one or more counties depending on the geopolitical boundaries within each ‘Area’. It is vital that the participants clearly know where they fit into the larger picture.

In some cases, a portion of a county may be shown. For example, the provided Matrix lists East Jefferson in Central Puget Sound while West Jefferson is in Coastal. The reason for this is that the county is divided by a National Park with no road access between the segments. In the opinion of our subcommittee, decisions such as these are most appropriately left to the SECCs.

EAN Primary Sources

These include FEMA-designated facilities or systems which receive an EAN message directly from a FEMA Operation Center for delivery to EAS Participants within the State or Local Area.¹²

EAN Secondary Sources

These are facilities or systems that receive EAN Messages from primary PEP sources and further distribute them to EAS participants. Secondary Sources monitor Primary Sources. In the example these systems described in the sample matrix include:

- State Relay Networks or (SRN), where available. In the case of Washington State, the SRN automatically relays EAS/EAN messages from the PEP, Statewide on a common VHF Radio Frequency. In the case of the example, the location of the SRN transmitter is shown.¹³

¹² See Figure 1 for details.

¹³ Local Relay Networks (LRN) may also be employed, Like SRN’s, they are direct distribution links, hopefully wireless, from local emergency management and/or law enforcement that make possible direct delivery of local emergency messaging. The goal to keep in mind for the LRN distribution model is to encourage and foster less reliance on the LP distribution model that is a remnant of “daisy-chain” distribution. The LP model dates back to the Emergency Broadcast System (EBS) days and is much less reliable and relevant when we take into account major changes in the way that EAS Participants staff their facilities.

- NOAA Weather Radio (NWR) In the Seattle area, the Seattle Weather Forecast Office (WFO) is equipped with broadcast-type EAS equipment in addition to the standard-issue NOAA EAS equipment so the WFO can automatically relay EAS/EAN messages from the PEP through their various radio transmitters served by that WFO.

EAN Tertiary Sources

These are facilities that receive EAN Messages from either Primary or Secondary Sources. Examples of these systems include Local Primary Stations.

NOAA Site and Frequency

This column lists the National Weather Radio (NWR) facilities providing service to the various Local Areas.

Other Issues to Note

- The bottom 'Row' in the example Matrix shows an adjacent Operation Area. In this case, Clark County Washington is part of the Portland, Oregon metropolitan area and is, therefore, considered to be a part of the Oregon EAS System
- There are other 'Fields' not shown in this example from the Washington State plan that provide addition details of facets of the EAS in that state. SECCs should be aware that they can customize this matrix as needed to illustrate EAN distribution in their state
- We note that Washington State, like many others, has a more complete breakdown of monitoring assignments within their plan. However, without this level of detail, this matrix will provide the necessary information for all parties to receive EANs from multiple points to better assure the FCC that EAS dissemination will occur properly.

SAMPLE WASHINGTON STATE TAB EXAMPLE
National Message Analog Distribution
11.30.13

AREA NAME	COUNTIES	EAN PRIMARY SOURCES	EAN SECONDARY SOURCES	EAN TERTIARY SOURCES	NOAA WEATHER RADIO (NWR) SITE & FREQ
CENTRAL PUGET SOUND	ISLAND SNOHOMISH KITSAP KING PIERCE E.JEFFERSON	>PEP-710 AM >Premiere >88.5 FM >94.9 FM	> SRN West of Bremerton > NWR	> KIRO-710- > KPLU 88.5	>Puget Sound 162.425 >Seattle 162.550
CLALLAM	EAST PORTION CLALLAM	>Premiere >SRN > 89.3 FM	>SRN GALBRAITH South of Bellingham > NWR	> KONP - 1450 > K269FX - 101.7	>Puget Sound 162.425
CLALLAM (WEST)	WEST PORTION CLALLAM	>Premiere	>SRN ELLIS W. Clallam County > NWR	> KBIS-1490 > KBDB - 96.7	>Forks 162.425 >Neah Bay 162.550
COASTAL	W. JEFF G. HARBOR PACIFIC	>Premiere >SRN > 102.1-FM	>SRN BAW FAW SW of Chehalis > SRN NASELLE @Naselle > NWR	> KXRO-1320 > KDUX-104.7	>Olympia 162.475 >Astoria 162.400 Forks 162.425
COWLITZ WAHKIAKUM	COWLITZ WAHKIAKUM	>Premiere >SRN	> SRN BAW FAW SW of Chehalis	> KUKN-105.5 > KBAM - 1270	> Davis Pk 162.525
LEWIS	LEWIS	>Premiere >SRN >NWS >710 AM	>SRN BAW FAW SW of Chehalis > NWR > 100.9 FM	> KELA - 1470 > KITI 1420 > KITI-FM 95.1	>Olympia 162.475
MASON-THURSTON	MASON THURSTON	>710AM >97.3 FM >SRN >88.5 FM >1340 AM	>SRN GOLD West of Bremerton > NWR > KPLI 90.1	> KGY-1240 > KGY-96.9	> Olympia 162.475
NORTHERN PUGET SOUND	WHATCOM S. JUAN SKAGIT	>Premiere >SRN	>SRN GALBRAITH South of Bellingham > NWR	> KGMI-790 > KISM-92.9	>Puget Sound 162.425 >Blaine 162.525
PORTLAND/VANCOUVER	CLARK		>Clark Co Comm. Center 155.475	> KXL-750 > KGON-92.3	Portland 162.550

Figure 2: State EAS Plan Monitoring Assignment Matrix

6.2 Appendix 2-CSRIC WG3 FCC EAS Rule Change Recommendations

CSRIC WG3 recommends that the Commission issue the following recommended rule changes in a Notice of Proposed Rulemaking (NPRM) for consideration by the greater EAS community.

Key to recommended text changes:

Highlighted text is a recommended change or indicates new proposed text.

Strike-through (~~text~~) text indicates recommended deletion of this text.

Rule	Current Language	Suggested Revised Language	Notes
Definitions 11.2		<p>Recommend dropping paragraphs: 11.2 (c) LP-1 definition 11.2 (f) PN definition 11.2 (g) NP definition 11.2 (h) SP definition</p> <p>All four are also defined in 11.18 EAS Designations, which seems the more appropriate section to define them. They should not be defined twice, with different definitions in each section.</p>	<p>Note that NP, LP, SP, and PN appear first in <i>11.2 Definitions</i>, and again in <i>11.18 EAS Designations</i> – with arguably better definitions in the 11.18 section, which uses the term “sources” rather than “stations” as is used in the 11.2 section.</p> <p>We recommend eliminating the 11.2 Definitions for NP, LP, SP, and PN (SR does not appear in 11.2).</p>

Rule	Current Language	Suggested Revised Language	Notes
Definitions 11.2 (b)	(b) <i>Primary Entry Point (PEP) System</i> . The PEP system is a nationwide network of broadcast stations and other entities connected with government activation points. It is used to distribute EAS messages that are formatted in the EAS Protocol (specified in §11.31), including the EAN and EAS national test messages. FEMA has designated some of the nation's largest radio broadcast stations as PEPs. The PEPs are designated to receive the Presidential alert from FEMA and distribute it to local stations.	Recommend following insertion: (b) <i>Primary Entry Point (PEP) System</i> . The PEP system is a nationwide network of broadcast stations and other entities designated by FEMA and the FCC connected with government activation points. It is used to distribute EAS messages that are formatted in the EAS Protocol (specified in §11.31), including the EAN and EAS national test messages. FEMA has designated some of the nation's largest radio broadcast stations as PEPs. The PEPs are designated to receive the Presidential alert from FEMA and distribute it to local stations.	
Definitions 11.2 (c)	(c) <i>Local Primary One (LP-1)</i> . The LP-1 is a radio or TV station that acts as a key EAS monitoring source. Each LP-1 station must monitor its regional PEP station and a back-up source for Presidential messages.	Recommend dropping this paragraph. (e) <i>Local Primary One (LP-1)</i>. The LP-1 is a radio or TV station that acts as a key EAS monitoring source. Each LP-1 station must monitor its regional PEP station and a back-up source for Presidential messages.	Uses the term “station”, and is duplicative but less descriptive than 11.18 (b).
Definitions 11.2 (f)	(f) <i>Participating National (PN)</i> . PN stations are broadcast stations that transmit EAS National, state, or local EAS messages to the public.	Recommend dropping this paragraph. (f) <i>Participating National (PN)</i>. PN stations are broadcast stations that transmit EAS National, state, or local EAS messages to the public.	Uses the term “stations”, and is duplicative but less descriptive than 11.18 (e).

Rule	Current Language	Suggested Revised Language	Notes
Definitions 11.2 (g)	(g) <i>National Primary (NP)</i> . Stations that are the primary entry point for Presidential messages delivered by FEMA. These stations are responsible for broadcasting a Presidential alert to the public and to State Primary stations within their broadcast range.	Recommend moving this 11.2 (g) language for NP to the 11.18 (a) EAS Designation description for NP.	This 11.2 (g) language is more descriptive than that found in 11.18 (a), so this language should be moved to 11.18 (a), but with “stations” changed to “entities” and other minor changes indicated in 11.18 (a).
Definitions 11.2 (h)	(h) <i>State Primary (SP)</i> . Stations that are the entry point for State messages, which can originate from the Governor or a designated representative.	Recommend dropping this paragraph. (h) <i>State Primary (SP)</i>. Stations that are the entry point for State messages, which can originate from the Governor or a designated representative.	Uses the term “stations”, and is duplicative but less descriptive than 11.18 (c).

Rule	Current Language	Suggested Revised Language	Notes
Definitions 11.2 (i)	(No existing language defining “SECC”.)	<p>Recommend following language:</p> <p>A State Emergency Communications Committee (SECC) is a body recognized by the Federal Communications Commission that includes but is not necessarily limited to EAS stakeholders such as EAS Participants, emergency management officials, public safety agencies that issue EAS messages, and National Weather Service entities.</p> <p>Responsibilities of an SECC include but also may not be limited to planning EAS dissemination within their respective jurisdictions, developing and maintaining State EAS plans and monitoring assignments, informing the Chief, Public Safety and Homeland Security Bureau, of the FCC of State Plan and monitoring assignment changes, and liaison to other SECCs in other geographical areas.</p>	

Rule	Current Language	Suggested Revised Language	Notes
<p>EAS Operating Handbook 11.15</p>	<p>The EAS Operating Handbook states in summary form the actions to be taken by personnel at EAS Participant facilities upon receipt of an EAN, an EAT, tests, or State and Local Area alerts. It is issued by the FCC and contains instructions for the above situations. A copy of the Handbook must be located at normal duty positions or EAS equipment locations when an operator is required to be on duty and be immediately available to staff responsible for authenticating messages and initiating actions.</p>	<p>Recommend following wording changes: The EAS Operating Handbook states in summary form the actions to be taken by personnel at EAS Participant facilities upon receipt of an EAN, an EAT, tests, or State and Local Area alerts. It is issued by the FCC and contains instructions for the above situations. A copy of the Handbook must be located at normal duty positions or EAS equipment locations when an operator is required to be on duty and be immediately available to staff responsible to the EAS Participant for maintaining compliance of EAS equipment, authenticating messages and initiating actions related to all EAS activities, and for any authentication procedures specified by the EAS Participant's State EAS Plan.</p>	<p>Reference to “authenticating” messages may be misleading and meaningless here in the context of current day EAS. Proposed language makes authentication specific to provisions in state plans.</p>

Rule	Current Language	Suggested Revised Language	Notes
EAS Designations 11.18 (a)	(a) National Primary (NP) is a source of EAS Presidential messages.	Recommend substituting the current 11.18 (a) language with the current 11.2 (g) Definition for NP, with the indicated changes. (a) National Primary (NP) is a component of the Stations that are the Primary Entry Point System (PEP) for Presidential messages delivered by FEMA. These stations entry points are responsible for broadcasting relaying a Presidential alert to the public and to State Primary stations EAS Participants within their broadcast range or connected to a designated PEP network.	

Rule	Current Language	Suggested Revised Language	Notes
EAS Designations 11.18 (b)	(b) Local Primary (LP) is a source of EAS Local Area messages. An LP source is responsible for coordinating the carriage of common emergency messages from sources such as the National Weather Service or local emergency management offices as specified in its EAS Local Area Plan. If it is unable to carry out this function, other LP sources in the Local Area may be assigned the responsibility as indicated in State and Local Area Plans. LP sources are assigned numbers (LP-1, 2, 3, etc.) in the sequence they are to be monitored by other broadcast stations in the Local Area.	<p>Recommend following wording changes:</p> <p>(b) Local Primary (LP) is a source of EAS Local Area messages. An LP source is responsible for coordinating relaying the carriage content of common authorized emergency tests and messages from sources such as the National Weather Service or local emergency management offices as specified in its EAS Local Area Plan. If it is unable to carry out this function, other LP sources in the Local Area may be assigned the responsibility as indicated in State and Local Area Plans. LP sources are assigned numbers (LP-1, 2, 3, etc.) in the sequence they are to be monitored by other broadcast stations EAS Participants in the Local Area.</p>	
EAS Designations 11.18 (c)	(c) State Primary (SP) is a source of EAS State messages. These messages can originate from the Governor or a designated representative in the State Emergency Operating Center (EOC) or State Capital. Messages are sent via the State Relay Network.	<p>Recommend adding the word "A".</p> <p>(c) A State Primary (SP) is a source of EAS State messages. These messages can originate from the Governor or a designated representative in the State Emergency Operating Center (EOC) or State Capital. Messages are sent via the State Relay Network.</p>	

Rule	Current Language	Suggested Revised Language	Notes
EAS Designations 11.18 (d)	(d) State Relay (SR) is a source of EAS State messages. It is part of the State Relay Network and relays National and State common emergency messages into Local Areas.	<p>Recommend adding the word "A".</p> <p>(d) A State Relay (SR) is a source of EAS State messages. It is part of the State Relay Network and relays National and State common emergency messages into Local Areas.</p>	
EAS Designations 11.18 (e)	(e) Participating National (PN) sources transmit EAS National, State or Local Area messages. The EAS transmissions of PN sources are intended for direct public reception.	<p>Recommend moving the one-sentence section <i>11.41 Participation in EAS</i> into this definition. That is the green highlighted text.</p> <p>(e) All EAS Participants specified in §11.11 are categorized as Participating National (PN) sources, and must have immediate access to an EAS Operating Handbook. Participating National PN sources transmit EAS National, State or Local Area messages. The EAS transmissions of PN sources are intended for direct public reception.</p>	

Rule	Current Language	Suggested Revised Language	Notes
<p>State and Local Area plans and FCC Mapbook 11.21</p>	<p>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.</p>	<p>Recommend wording change: 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 relayed 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.</p>	

Rule	Current Language	Suggested Revised Language	Notes
<p>State and Local Area plans and FCC Mapbook 11.21 (a)</p>	<p>(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.</p>	<p>Recommend following wording changes:</p> <p>(a) States that want to use the EAS shall submit a State EAS Plan. The State EAS Plan should be developed and maintained by the State Emergency Communications Committee (SECC). The State EAS Plan contains procedures for State emergency management and other State officials, the NWS, and EAS Participants' personnel to transmit relay 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 EAS Participant 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.</p>	

Rule	Current Language	Suggested Revised Language	Notes
State and Local Area plans and FCC Mapbook 11.21 (c)	(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.	Recommend dropping this paragraph: (e) 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.	We recommend in this report that all references to an FCC Mapbook in Part 11 be eliminated. The Mapbook is no longer necessary as a mandated element of plan submission if the Commission follows the recommendations of our report and a federal EAS monitoring assignment database is established.
Participation in EAS 11.41	All EAS Participants specified in §11.11 are categorized as Participating National (PN) sources, and must have immediate access to an EAS Operating Handbook.	Recommend moving this 11.41 language on PN to the 11.18 (e) EAS Designation description for PN, thus eliminating section 11.41.	11.41 formerly detailed both PN and NN. With NN now dropped, 11.41 is one sentence, which would be more useful as the intro to 11.18 (e).
EAS code and Attention Signal Monitoring requirements 11.52 (d) (1)	(d) EAS Participants must comply with the following monitoring requirements: (1) With respect to monitoring for EAS messages that are formatted in accordance with the EAS Protocol, EAS Participants must monitor two EAS sources. The monitoring assignments of each broadcast station and cable system and wireless cable system are specified in the State EAS Plan and FCC Mapbook. They are developed in accordance with FCC monitoring priorities.	Recommend following wording changes: (d) EAS Participants must comply with the following monitoring requirements: (1) With respect to monitoring for EAS messages that are formatted in accordance with the EAS Protocol, EAS Participants must monitor two EAS sources. The monitoring assignments of each EAS Participant broadcast station and cable system and wireless cable system are specified in the State EAS Plan and FCC Mapbook . They are developed in accordance with FCC monitoring priorities .	Do to the elimination of EAS rule 11.44 EAS Message Priorities and the abandoning of manual monitoring, the last sentence in this section is no longer germane.

Rule	Current Language	Suggested Revised Language	Notes
EAS code and Attention Signal Monitoring requirements 11.52 (d) (4)	(4) If the required EAS message sources cannot be received, alternate arrangements or a waiver may be obtained by written request to the Chief, Public Safety and Homeland Security Bureau. In an emergency, a waiver may be issued over the telephone with a follow up letter to confirm temporary or permanent reassignment.	<p>Recommend following wording changes:</p> (4) If the required EAS message sources cannot be received, alternate arrangements changes or a waiver may be requested, in writing, and submitted to obtained by written request to the State Emergency Communications Committee (SECC), which shall inform the Chief, Public Safety and Homeland Security Bureau. In an emergency, a waiver may be issued over the telephone with a follow up letter or email to confirm temporary or permanent reassignment.	We feel that the SECC is on the ground locally and in a better position to determine the need and consequence of EAS Participants deviating from the EAS Monitoring Assignments in the State EAS Plan.

Rule	Current Language	Suggested Revised Language	Notes
EAS operation during a State or Local Area emergency 11.55 (a)	(a) The EAS may be activated at the State and Local Area levels by EAS Participants at their discretion for day-to-day emergency situations posing a threat to life and property. Examples of natural emergencies which may warrant state EAS activation are: Tornadoes, floods, hurricanes, earthquakes, heavy snows, icing conditions, widespread fires, etc. Man-made emergencies warranting state EAS activation may include: Toxic gas leaks or liquid spills, widespread power failures, industrial explosions, and civil disorders.	Recommend the following insertion: (a) The EAS may be activated at the State and Local Area levels by EAS Participants at their discretion in accordance with any existing State and Local EAS Plans for day-to-day emergency situations posing a threat to life and property. Examples of natural emergencies which may warrant state EAS activation are: Tornadoes, floods, hurricanes, earthquakes, heavy snows, icing conditions, widespread fires, etc. Man-made emergencies warranting state EAS activation may include: Toxic gas leaks or liquid spills, widespread power failures, industrial explosions, and civil disorders.	
EAS operation during a State or Local Area emergency 11.55 (b)	(b) EAS operations must be conducted as specified in State and Local Area EAS Plans. The plans must list all authorized entities participating in the State or Local Area EAS.	Recommend the following deletion: (b) EAS operations must be conducted as specified in State and Local Area EAS Plans. The plans must list all authorized entities participating in the State or Local Area EAS.	SECCs should be free to develop their State EAS Plans as best suits their situation.

Rule	Current Language	Suggested Revised Language	Notes
<p>EAS operation during a State or Local Area emergency 11.55 (c) (1), (2), and (3)</p>	<p>(c) Immediately upon receipt of a State or Local Area EAS message that has been formatted in the EAS Protocol, EAS Participants participating in the State or Local Area EAS must do the following:</p> <p>(1) State Relay (SR) sources monitor the State Relay Network or follow the State EAS plan for instructions from the State Primary (SP) source.</p> <p>(2) Local Primary (LP) sources monitor the Local Area SR sources or follow the State EAS plan for instructions.</p> <p>(3) Participating National (PN) sources monitor the Local Area LP sources for instructions.</p>	<p>Recommend dropping paragraphs (c) (1), (c) (2), and (c) (3).</p> <p>(1) State Relay (SR) sources monitor the State Relay Network or follow the State EAS plan for instructions from the State Primary (SP) source.</p> <p>(2) Local Primary (LP) sources monitor the Local Area SR sources or follow the State EAS plan for instructions.</p> <p>(3) Participating National (PN) sources monitor the Local Area LP sources for instructions.</p>	<p>These are holdovers from EBS. All EAS Participants already have their Monitoring Assignments in the State EAS Plan, so these statements are no longer applicable and may not apply in every situation.</p>

Rule	Current Language	Suggested Revised Language	Notes
<p>EAS operation during a State or Local Area emergency 11.55 (c) (4)</p>	<p>(4) EAS Participants participating in the State or Local Area EAS must discontinue normal programming and follow the procedures in the State and Local Area Plans. Analog and digital television broadcast stations must transmit all EAS announcements visually and aurally as specified in §11.51(a) through (e) and 73.1250(h) of this chapter, as applicable; analog cable systems, digital cable systems, and wireless cable systems must transmit all EAS announcements visually and aurally as specified in §11.51(g) and (h); and DBS providers must transmit all EAS announcements visually and aurally as specified in §11.51(j). EAS Participants providing foreign language programming should transmit all EAS announcements in the same language as the primary language of the EAS Participant.</p>	<p>Recommend the following deletion: (4) EAS Participants participating in the State or Local Area EAS must discontinue normal programming and follow the procedures in the State and Local Area Plans. Analog and digital television broadcast stations must transmit all EAS announcements visually and aurally as specified in §11.51(a) through (e) and 73.1250(h) of this chapter, as applicable; analog cable systems, digital cable systems, and wireless cable systems must transmit all EAS announcements visually and aurally as specified in §11.51(g) and (h); and DBS providers must transmit all EAS announcements visually and aurally as specified in §11.51(j). EAS Participants providing foreign language programming should transmit all EAS announcements in the same language as the primary language of the EAS Participant.</p>	<p>“discontinue normal programming” is a holdover from EBS.</p> <p>This paragraph becomes the new (c) (1) as the first paragraph under “...EAS Participants participating in the State or Local Area EAS must do the following:”</p> <p>It starts off with the appropriate statement: “EAS Participants participating in the State or Local Area EAS must follow the procedures in the State and Local Area Plans.”</p>

Rule	Current Language	Suggested Revised Language	Notes
EAS operation during a State or Local Area emergency 11.55 (c) (5)	(5) Upon completion of the State or Local Area EAS transmission procedures, resume normal programming until receipt of the cue from the SR or LP sources in your Local Area. At that time begin transmitting the common emergency message received from the above sources.	Recommend dropping this paragraph (c) (5). (5) Upon completion of the State or Local Area EAS transmission procedures, resume normal programming until receipt of the cue from the SR or LP sources in your Local Area. At that time begin transmitting the common emergency message received from the above sources.	This is a holdover from EBS and should be dropped.
Tests of EAS procedures 11.61 (a) (3)	(3) <i>National tests.</i> (i) All EAS Participants shall participate in national tests as scheduled by the Commission in consultation with the Federal Emergency Management Agency (FEMA). Such tests will consist of the delivery by FEMA to PEP/NP stations of a coded EAS message, including EAS header codes, Attention Signal, Test Script, and EOM code. All other EAS Participants will then be required to relay that EAS message. The coded message shall utilize EAS test codes as designated by the Commission's rules.	Recommend following wording changes: (3) <i>National tests.</i> (i) All EAS Participants shall participate in national tests as scheduled by the Commission in consultation with the Federal Emergency Management Agency (FEMA). Such tests will consist of the delivery by FEMA to PEP/NP stations the PEP system of a coded EAS message, including EAS header codes, Attention Signal, Test Script, and EOM code. All other EAS Participants will then be required to relay that the entire EAS message. The coded message shall utilize EAS test codes as designated by the Commission's rules.	“PEP/NP stations” should be replaced by “the PEP system”, which is defined in section 11.2 as “a nationwide network of broadcast stations and other entities connected with government activation points.”

Rule	Current Language	Suggested Revised Language	Notes
<p>Tests of EAS procedures 11.61 (a) (4)</p>	<p>(4) <i>EAS activations and special tests.</i> The EAS may be activated for emergencies or special tests at the State or Local Area level by an EAS Participant instead of the monthly or weekly tests required by this section. To substitute for a monthly test, activation must include transmission of the EAS header codes, Attention Signal, emergency message and EOM code and comply with the visual message requirements in §11.51. To substitute for the weekly test of the EAS header codes and EOM codes in paragraph (a)(2)(i) of this section, activation must include transmission of the EAS header and EOM codes. Analog and digital television broadcast stations, analog cable systems, digital cable systems, wireless cable systems, and DBS providers shall comply with the aural and visual message requirements in §11.51. Special EAS tests at the State and Local Area levels may be conducted on daily basis following procedures in State and Local Area EAS plans.</p>	<p>Recommend following wording changes: (4) <i>EAS activations and special tests.</i> The EAS may be If the EAS is activated for emergencies or special tests at the State or Local Area level by an EAS Participant, that activation may substitute for instead of the monthly or weekly tests required by this section. To substitute for a monthly test, activation must include transmission of the EAS header codes, Attention Signal, emergency message and EOM code and comply with the visual message requirements in §11.51. To substitute for the weekly test of the EAS header codes and EOM codes in paragraph (a)(2)(i) of this section, activation must include transmission of the EAS header and EOM codes. Analog and digital television broadcast stations, analog cable systems, digital cable systems, wireless cable systems, and DBS providers shall comply with the aural and visual message requirements in §11.51. Special EAS tests at the State and Local Area levels may be conducted on daily basis following procedures in State and Local Area EAS plans.</p>	

6.3 Appendix 3-Definitions of Terms Recommended for Use in State EAS Plans

Definitions of the following terms are meant as guidance for SECCs in applying the use of these terms in the drafting of State EAS Plans, in order to gain uniformity in the understanding and application of such terms across all State EAS Plans. The inclusion of definitions of these terms in this report should not be construed as a recommendation for their inclusion in the FCC EAS Part 11 rules. These definitions are presented here solely as a guideline for SECC use.

Activate	<i>(verb)</i> Describes the process of originating the transmission of the EAS header codes, attention signal, emergency message and EOM code that also complies with the visual message requirements of 47 C.F.R. § 79.2(a)(2).
Authority	<i>(noun)</i> Describes the source of responsibility and the right to activate or request activation of an emergency alert on the relay network, utilizing the traditional or legacy EAS dissemination or the Common Alerting Protocol. The source of authority for EAS resides with federal, state, county and local emergency management and public safety officials as outlined in EAS plans.
Capability	<i>(noun)</i> An attribute describing the technical ability of an entity, possessing the equipment to activate code and voice a legacy EAS or CAP message, upon the request of an authorized entity, on the relay network. This ability may reside with a government agency, a CAP vendor who provides this service or a broadcast entity. This relationship structure is outlined in the EAS plan.
Closed Circuit Test	<i>(noun)</i> Tests that do not reach the public, but do allow for reception by EAS participants for logging and evaluation.
Gatekeeper	<i>(noun)</i> The entity, as identified in the EAS plan, having ultimate authority to request activation (e.g. state/local emergency management, state police and local public safety) and the responsibility to insure that the requested activations meet the standards of acceptability as to not saturate the system with unwarranted activations.
Initiate	<i>(verb)</i> To begin an action that results in activation for legacy EAS or CAP messages, by or at the request of federal, state, county and local emergency management and public safety officials as outlined in EAS plans.
Originator	<i>(noun)</i> Refers to the authorized party who requests the activation of the legacy EAS or CAP message. It specifically refers to the ORG code outlined in 47 C.F.R. § 11.31.
Relay Network	<i>(noun)</i> Describes the links and paths from warning origination points to EAS Participants for legacy EAS and CAP messages.
Response	<i>(verb)</i> A descriptive for the actions an emergency management asset brings to bear to manage an emergency to a quick and successful outcome.
Resource	<i>(noun)</i> A descriptive for a supply that is drawn upon of materials, personnel or information that are managed during an emergency to help bring the event to a fast and successful outcome.

6.4 Appendix 4-Process Flowchart for State and Local Emergency Messages for Use in State EAS Plans

