

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Review of the Emergency Alert System;	)	EB Docket No. 04-296
	)	
Independent Spanish Broadcasters Association,	)	
the Office of Communication of the United Church	)	
of Christ, Inc., and the Minority Media and	)	
Telecommunications Council, Petition for	)	
Immediate Relief;	)	
	)	
Randy Gehman Petition for Rulemaking	)	

**COMMENTS OF  
THE BROADCAST WARNING WORKING GROUP**

**PREFACE**

The Broadcast Warning Working Group (BWWG) currently consists of a small group of hands-on Emergency Alert System (EAS) subject experts from the fields of broadcast association management, broadcast radio and television engineering management and support, radio and television news, industry technical publication, and state EAS Committee leadership.<sup>1</sup> The BWWG hosts a website, the EAS Forum at:

[ <http://eas.radiolists.net/> ].

On the EAS Forum's email list server, industry stakeholders share knowledge and experience that is factored in to the BWWG's EAS articles, resources and Comments addressed to the Commission such as this. Significant recent resource contributions of the BWWG to EAS development and improvement have been a comprehensive and detailed comparison of features of new EAS devices, postings to summarize and explain EAS industry news for all stakeholders, and active participation as presenters in recent DHS/FEMA IPAWS EAS Roundtables. The BWWG is also a partner with other stakeholders in EAS educational projects sponsored by the National Alliance of Broadcast Associations (NASBA) and the National Association of Broadcasters (NAB).<sup>2</sup>

**OVERALL BWWG THOUGHTS ABOUT THE FNPRM**

**Range and Structure of This Inquiry**

The BWWG applauds the Commission on this Further Notice that successfully features and documents a

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<sup>1</sup> For detailed information on the BWWG's core members, please see [<http://eas.radiolists.net/about.html> ]

<sup>2</sup> This joint stakeholder effort has a website resource for various resources to help broadcasters with the transition to a Common Alerting Protocol-enabled Emergency Alert System: <http://easalert.org/index.php>

wide range of issues largely based on comments by EAS stakeholders. That said, the BWWG would have preferred to see the Part 11 rewrite presented earlier in the process and broken up into segments. Reading, digesting and producing cogent, thoughtful Comments on this 110 page document in a compressed Comment and Reply period has been and will be challenging work for all interested parties, most of whom are uncompensated volunteers. The BWWG's concerns are threefold: 1) Stakeholders may not be able to produce as thoughtful and thorough Comments as this important work deserves due to the sheer size and range of this inquiry. 2) Some stakeholders may not choose to file comments due to the daunting size, range and complexity of this item. 3) Serious problems that need to be fixed that have been with the EAS since its start in 1997 may not get a fair hearing, much less proper resolution.

### **Do Not Filter CAP Through a SAME Strainer**

The BWWG believes that preserving legacy EAS SAME capability has to be a very short-term solution. EAS stakeholders and the general public are being told that the CAP will greatly improve public warnings. Unfortunately, the vast majority of the public and EAS stakeholders will not know that the EAS public warning process has been improved for some time as long as CAP messages are "strained" through the SAME filter.

CAP EAS messages are already being generated by warning centers in some parts of the country and transmitted to Radio, TV and Cable systems. When heard or viewed on the air, they will sound and look no different than they did before if they default to the actions burned into the PROMs in classic EAS devices or CAP converters, or "dumbed down" by legacy capabilities built in to new broadcast and cable entry point CAP decoders. While the EAS community and the public wait for what is being called "next generation" EAS, we run the risk of the effort being labeled as the warning equivalent to building a bridge to nowhere.

When a CAP message is filtered by conversion to SAME it is analogous a CAP message being run through a filter, in short, what starts out as a rich and nourishing full course dinner winds up as a strained, thin, and watery broth. The BWWG believes that every effort should be made to integrate the capabilities of CAP into all aspects of the EAS as soon as possible to eliminate the bottleneck that SAME creates.

For example – TV Stations should be encouraged to, as early as possible, derive their 'EAS Crawl' from the textual information contained in the CAP message. Radio EAS should use text-to-speech converters that can automatically convey vital CAP details aurally<sup>3</sup> that will better assist people at risk take proper protective actions.<sup>4</sup>

Taking these steps as soon as possible must be done to avoid prolonging the present confusion caused by the legacy 'Header Codes' in the SAME message that often conflict with the voice message thereby creating misleading and erroneous messages being transmitted to the public as pointed out in Society of Broadcast Engineers Comments filed in the past on Docket 04-296.

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<sup>3</sup> The BWWG thinks this is especially important in view of the growing number of broadcast entities that operate EAS in the automatic mode.

<sup>4</sup> Some states have already begun to deploy their own CAP based systems that already provide Voice/Textual compatibility for TV and Cable Systems (Washington State is an example) In these cases. Emergency management entities, at the State and Local level, are already generating public warning messages in CAP format and transmitting this information, via a CAP Server, to multiple radio and TV stations and cable systems. All this is being done without the use of SAME thereby providing the public in these areas with a significant enhancement of the EAS. The source of TV crawls must transition from SAME to CAP as soon as CAP is available in an area.

Let us also remember that the CAP has been heavily promoted to stakeholders as a way to address long-standing concerns of the hearing and sight-impaired communities that have been (rightly so) highly critical of legacy public warning efforts.

There are, perhaps, some parallels to be drawn for the conversion from SAME to the CAP with another 'conversion' we have experienced, the recent transition from analog to digital TV. This process has a number of parallels. For a period of time, stations generated program content in digital that was down-converted to SDTV for analog.

So it is with EAS where the CAP can be thought of as Digital and SAME as analog. Everyone knew that digital offered much greater capability than did analog, and, the only reason we made the transition can be traced directly to the Commission committing to a "date-certain". The lesson learned: Recognize the need to transition and provide the leadership to make sure that it takes place.

The BWWG therefore believes that when local and/or state EAS messages are available to broadcast and cable systems in CAP as well as SAME, the new rules should clearly state the unfiltered CAP message must be conveyed to the public. Setting a "date-certain" for this will not be easy, and should be assigned as a top priority for the public/private EAS stakeholder effort that the BWWG recommends be formed. The question was how best to make the transition.

'CAP Converters' can be thought of in much the same way we view those devices that people purchased so they could view their local TV stations on their existing TV receivers. Just like those converters – much is lost in the process. A public at risk will not receive the whole warning picture.

Many of the originators of public warning messages, emergency management entities etc, at the State and Local levels, have long not participated in the EAS due to its lack of specificity. It is hard for emergency managers to buy into a warning system that cannot always spell out clearly what the risks are, and what actions to take. CAP significantly enhances this capability, and is being "Sold" to the emergency management community as a solid investment to improve origination of all types of warnings. Many of these new warning tools are or will be features that users will have to pay for.

So, non-broadcast technologies that the public will have to pay for may well see more and faster direct benefits from CAP than warnings over "free" radio and television. The BWWG strongly recommends that every day that legacy EAS is still in use is another day when audiences of "free" radio and television" will be at this disadvantage.

The FCC must recognize that many states and areas are not waiting for the Commission to act. They have already recognized the value of CAP and are moving forward with their own CAP systems – now! This is a process that has significant momentum that the FCC must consider as they attempt to craft rules that will apply to those portions of the country where there have been no movement beyond legacy SAME based EAS.

This issue directly involves the present originator of most EAS warnings. The National Weather Service has, for some time, been the principal source of EAS warnings for broadcasters via their NOAA Weather Radio (NWR). NWR has well-documented issues with their legacy narrow band VHF radio system. Regrettably, for the foreseeable future, NWS will be using SAME for warnings on that system. However, this should not, in any way, slow down the transition to CAP for everyone else. Current NWR analog broadcasts are now monitored by radio, TV and cable systems as part of their basic Part 11 compliance. In the future, the NWS will be transmitting their information, in CAP to CAP servers that will join emergency management warning center CAP servers already in operation to realize the benefits of a 100% CAP EAS. When NWS begins

supplying product to the CAP Servers, broadcasters and cable systems will then be able to disconnect their NWR SAME connections. When this happens, NWS CAP messages must not be “dumbed down” by the legacy SAME filter.

### **Governor Mandatory: A Bad Idea**

As any professional emergency manager will tell you, all emergencies are local. It makes little sense for a governor in a state capital to issue a statewide warning about an emergency in front of their state capitol building, much less at the other end of his or her state. The proper people to carry out the warning function using the EAS have already been duly designated under law and in the state EAS Plans. They are professional emergency managers.

The BWWG subscribes to the premise that emergencies are “event driven” and that imposing a mandatory requirement that broadcasters carry a governor’s message makes no sense. The proper role for governors during emergencies in our view is assuring that state resources are available to state and local emergency managers, and to go on the air using non-emergency broadcast resources to give support and reassurance to victims, residents, first responders and even emergency managers. Strictly speaking, governor mandatory CAP is NOT a warning in the strict definition of what warnings really are and should not be made a part of Part 11 by the Commission.

What is needed? The Commission should provide better assurance through Part 11 that broadcasters and cable systems will carry event-driven warnings in a timely, effective and consistent manner. The BWWG believes that Part 11 can start to do this in a better way by clearly stating that EAS equipment must always be operated in the automatic mode. The BWWG also offers later in this section what will certainly be a controversial compromise to governor mandatory that we think has merit.

However, the reality is that mandating carriage of EAS emergency messages in Part 11 by itself will not address the underlying issues – lack of faith in and support of the EAS by many licensees, lack of commitment to the EAS by many in the emergency management community, and the variety of circumstances and resources in different areas. One size solutions do not fit all events and/or responses. The issues of lack of faith in and support of the EAS by licensees and emergency managers should be addressed by state broadcaster associations, recognizing local needs and what works best, working with their members to re-invigorate a better sense of public service through the carriage of emergency warning messages. The Commission could assist this effort (but not in Part 11) by itself recommitting to the value of warnings as part of what both commercial and non-commercial licensees must do in return for being granted licenses.

In the original 04-296 Report and Order, the Commission suggested that the Governor (or a designee) should have the ability to issue a public warning, via EAS, that would be carried by radio, TV and Cable systems as a mandatory compliance duty. The BWWG understands the basis of this proposed change was a well-intentioned but misguided idea that making Governor’s messages mandatory would bring otherwise reluctant state officials to the table and encourage them to engage in EAS.

The challenge we all face is to enhance acceptance, utility and viability of the EAS. We need to accomplish this so we can assure state officials that an EAS message of significant merit and warning value will indeed be carried to help a public at risk take proper protective actions when natural and other disasters occur.

To expand on the BWWG concerns about governor mandatory, we feel the Commission’s goals, while noble, will lead to messages that have more to do with politics than warning people about what actions they must take to preserve life and property. Unfortunately, the BWWG has learned that some states are making

plans so their governor will have a microphone in their office where they could voice an EAS emergency message. The BWWG feels strongly that placing a live EAS mike in a governor's office is not what the Commission had in mind, nor would allowing states to exercise a governor mandatory provision really serves the core missions of emergency response and management.<sup>5</sup>

What is really important here is the nature of an emergency event, and the timeliness and accuracy of the protective actions called for; certainly not who is issuing the warning. Public emergency warnings using the EAS can best (and should) be handled by the emergency management offices and warning centers in each state, not elected officials, or to elected officials who may select non-professionals as designees<sup>6</sup>. What is not needed here is the voice of the highest elected politician in a state, or the voice of designee a politician may choose to speak for him or her. What is needed are decisions based on the severity of the event leading to desired actions to be taken by people at risk. In short, the issuing of emergency warnings for EAS and other warning systems must be event driven by qualified professionals, not politicians<sup>7</sup>. Stated another way, governors should be listening, not talking, during the early hours of a major emergency.

What is the proper message from elected officials including governors during the early stages of an emergency? They should be issuing messages of support and reassurance for first responders, those who are at risk, and other interested and concerned parties. These are not warning messages, and they should be disseminated using non-EAS modes after legitimate EAS warnings are issued.

We again must remind the Commission that the underlying mission for the EAS is the saving of lives, with a secondary mission to preserve property. For the purposes of opening a discussion within the framework of the FNPRM, the BWWG believes that the following potentially life saving, messages, initiated by a state, should be carried by all means possible. We further believe that such carriage should be made mandatory. If this is done, the issue of governor mandatory should be consigned to a minor footnote in the history of EAS.

So the BWWG proposes that a limited number of EAS event codes be made mandatory:

*CAE - Child Abduction Emergency*

*EVI - Evacuation Immediate*

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<sup>5</sup> The BWWG realizes that the while Commission would intend to review all state plans if governor mandatory is allowed, there would neither be the specificity in a given state's plan or assurance that the plan will be followed for the Commission to determine if abuse of the warning function. The BWWG also believes that the governor mandatory function cedes far more control into the hands of elected officials than the Commission's rules lay out regarding licensee control of what goes on the air.

<sup>6</sup> While we in the BWWG do not claim to be legally qualified to make absolute statements on this issue, a strong case can be made that there is a duty, in the legal sense, for duly elected governments acting through duly authorized emergency management entities, to issue public warnings when they know an emergency event can cause loss of life and property. The BWWG believes that sooner or later lawyers who are legally qualified will be asked will be asked that question, and will ultimately render a legal opinion. We believe that this legal duty, if proven valid, will rest on governments carrying out a warning function based on guidelines and by qualified emergency managers and sources like the reports written by the Partnership for Public Warning (PPW).

<sup>7</sup> The BWWG has nothing against politician per se, but few if any have the necessary background and credentials to make decisions regarding warnings, let alone emergency management. We again suggest to the Commission and other parties reading the BWWG's Comments that the proper role for elected officials in the response phase of an emergency is to do more listening than talking.

*CEM - Civil Emergency Warning*

*TOR - Tornado Warning*

*TSW - Tsunami Warning*

There may be other views on additional EAS event codes that should be mandatory – one size may not fit all states. Our suggestion is to limit mandatory carriage to only those alerts that have implicit value to save lives in a given state or region. The criteria used to determine whether or not carriage of these public warnings should simply be mandatory should be – could a life be lost should a radio/TV/Cable system not carry the warning? Broadcast of EAS warnings and messages that do not rise to the level would remain optional. The CAP can introduce sufficient specificity to any of the above messages so they can properly crafted to reach the public as effective warnings.

The BWWG proposes that the limited number of EAS event codes stay within the 2 minute time limit that exists for all local, state and weather event codes, and do not trigger the “capture and hold” function in EAS devices that the EAN event code is capable of.

We feel, strongly that this change will significantly enhance the underlying goal of the EAS by making clear the life safety mission is in the public interest. We recommend the Commission grant this authority on a state-by-state basis upon the receipt of and approval of revised a State Plan, drafted by the SECC and approved by the states emergency management entity.

### **The Required Weekly Test Should Go**

While not mentioned in the FNPRM, the BWWG would like to bring to the attention of the FCC how the changes in the way stations operate have made the Required Weekly Test (RWT) specified in 11.61(a)(2) much less effective than the Commission would desire and, in our opinion, superfluous.

We start by noting that under the LP system, other stations monitor very few non-LP stations. Hence, the alert tones do not trigger anything “down the line.” The only benefit that the RWT would have is to ensure the station’s ENDEC actually works once a week. But is this of any real value?

During the past 15 years many radio stations have installed automation systems either for live assist or total automation of the station's operation. With the reduced the number of live individuals working at stations this, in turn, has led to most stations operating EAS in the “automatic” mode, with the automation system set to “trigger” the RWT. In fact, this has evolved to the point where the RWT is merely a part of another program element for which many stations simply fire the EAS tones for a RWT and move on without any text or explanation. At those stations that may not be automated, the technical department, not operations or air staff, often is tasked with sending the RWT, regardless of who is on duty. A number of television entities likewise run partially or entirely using automation systems with no direct operator or technical department actions required.

While the Rules currently allow an Enforcement Bureau Inspector to enter a station and ask that the operator on duty send an EAS test, due to the way tests are now sent, training has all but disappeared. Furthermore, while there may be someone on duty capable of sending a test, doing so has no relation or bearing on real world EAS operations that normally just relay automatically what their local plan monitoring assignments require. Further, (1) RWT’s do not contain any audio message as would a real EAS message

and (2) broadcast, television and cable entities with very few exceptions never issue real EAS warnings.<sup>8</sup>

Furthermore, the current LP distribution model is set up so only a very few stations need to be monitored by others. So, an RWT merely indicates an automation system can trigger an event.<sup>9</sup> It cannot even verify that the tones went on the air. Therefore RWT's are of questionable value. The RWT may have become little more than an opportunity for the Commission's Enforcement Bureau to levy fines based on a test of questionable value.

We further note that few stations operating their EAS equipment in the "automatic" mode take advantage of the provision in 11.61 (2) (iii) to drop the RWT in weeks there is an RMT. It is even less likely stations will go to the trouble of dropping the RWT when National EAS tests are done as further allowed for in 11.61. The irony is that entities subject to Part 11 compliance have conceivably been fined for failing to properly log an unnecessary (and in our opinion, useless) test.

Therefore the BWWG respectfully suggests the RWT be deleted from the Rules.

As a replacement, we suggest a full regional test, based on the current Required Monthly Test (RMT) on an area-wide or statewide basis. Such a Required System Test (RST) could be done on a different schedule than RMT's, perhaps every three weeks, perhaps twice a month, with the SECC collecting information as to the performance of the system. Where stations appear to have difficulty in maintaining confident reception of the LPs, the SECC and LECC can take rapid action to solve the problems. We obviously believe that as CAP-based EAS takes hold, both testing and monitoring test results will become easier.

### **The Commission in Part 11 Should Not Mandate a Specific Feed Technology**

The BWWG has major concerns about the FEMA decision to use RSS feeds for Federal aggregator CAP message distribution. These concerns will be outlined in detail in our Comments, but chief among them is that EAS polling clients might have to download RSS EAS feeds in bulk form rather than just specific feeds that apply to people in their area of coverage. The reasons for this are highly technical, but the BWWG thinks that the Commission simply needs to know that selection of RSS feeds by FEMA, if approved and codified without proper safeguards, could have the effect of forcing radio, TV and broadcast EAS entry points polling the yet-to-be-announced FEMA aggregator IP address; the equivalent of having to download the entire Sunday New York Times® when all that is needed is a few articles.

While the BWWG has received reassurance from the FEMA IPAWS office that our concerns will be addressed in the final product, we feel it is important to get these concerns about the downside of using RSS feeds on the record. For this reason, and others, the BWWG feels that the FCC must not lock CAP-EAS into any one type of feed, especially RSS, in Part 11. We will go into our concerns this issue in more depth later in these Comments.<sup>10</sup>

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<sup>8</sup> The BWWG is aware of some LECC plans in force that currently call for originations of tests and real alerts by broadcast licensees outside of duly authorized emergency warning centers. The BWWG does not believe that any entity outside of duly authorized emergency management has a right to originate warnings unless there is no other alternative.

<sup>9</sup> The BWWG in separate remarks in these Comments suggests that the current LP distribution model be supplemented as much as possible by public safety licensed wireless Local Relay Networks so many more licensees can monitor warning centers directly.

<sup>10</sup> The BWWG contacted Antwane V. Johnson Division Director & Program Manager, Integrated Public Alert & Warning System (IPAWS) Federal Emergency Management Agency on this issue. In an email dated June 20, 2011 Mr.

### **Deadlines, EAS Committees and External Emergency Management Warning Stakeholders**

The BWWG is aware that there has been significant pressure to implement on September 30, 2011 the centerpiece of the 04-296 Report and Order, namely that those subject to 47 CFR Part 11 must be able to accept Common Alerting Protocol (CAP) messages from the Federal CAP aggregator by that already postponed deadline of September 30, 2011. As the BWWG will explain in more detail, there are numerous unsettled local and state operational issues that go to improving the EAS through lessons learned over its now almost 15-year history.

Foremost of these in the opinion of the BWWG are the challenges to solidify structure and operations of the local and state EAS Committees (LECC's and SECC's) needed to bind emergency management warning stakeholders to broadcasters despite the fact that the very Rules under which licensees must operate have no binding effect on that external community.

It seems very important to the BWWG that the Commission, by granting a further postponement of 180 days, could give volunteer and external emergency management warning stakeholders very much needed time to, as the saying goes, get our respective public/private local and state acts together. Some have argued and will argue that this can be done after the CAP deadline passes, but few if any of the advocates for this position appear to have any primary stake or responsibility (let alone appreciation) for the staggering amount of volunteer stakeholder time and effort to bring about the major improvements to the cause of public broadcast warnings that this effort really deserves.

Although the BWWG realizes that EAS will continue to be an unfunded federal mandate as it pertains to its local management by broadcast, cable and satellite entry points, we hope that our Federal EAS partners, especially the FCC, will do their level best to help.

### **Audio Inputs to New CAP EAS Devices**

The BWWG notes that at least one manufacturer of new CAP EAS devices has joined an existing manufacturer of legacy devices in only providing equipment with only two (2) analog audio inputs for legacy SAME EAS messages, in accord with current Part 11 Rules. Although in some locations, and under some SECC plans, two inputs are all that are required - and indeed for some stations all that are available - this may prove to cause some difficulties in other Operational Areas.

As long as legacy SAME EAS is being used, having EAS equipment with only two such audio inputs on an EAS box might undermine efforts of state and local committees that are trying to rebuild and maintain a robust EAS system based on lessons learned. Why does limiting SAME analog audio inputs to only two become a very serious issue? Until such time as all inputs to mandated EAS devices are via a cap server, it creates potential conflict between some LECC's and SECC's desiring to reinforce EAS messaging by using local relay networks and/or alternate LP's and stations that may want to do only the legal minimum - at present, stations can state their equipment is compliant and the SECC/LECCs have no right to ask them to comply.

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Johnson replied as follows: "Thanks for the comment/question. In developing an EAS CAP message dissemination, the IPAWS office has used the term "RSS feed" out of convenience due to its widespread familiarity. We understand that using this term has led to some confusion among the community as being the preferred solution. RSS, Atom, and other syndication methods were considered, and we would like to put this matter to rest and assure the public that an Atom feed is being developed for CAP message dissemination to EAS devices. In addition, I would like to see your ATOM vs. traditional "RSS" analysis, if you are in a position to share it. Thanks again and hopefully this addresses your question/concern." The BWWG sent a copy of our statements included in these Comments on this matter to Mr. Johnson on June 20, 2011.

If stations in a given LECC have a device that can only monitor two analog inputs, that means that state and local committees either create an exemption for such stations, or be forced to build their state and local plans around the lowest common denominator. This frustrates emergency managers and leaves them with a basis for complaining that broadcasters do not care about Public Warnings.

In the carefully considered opinion of the BWWG, the EAS has suffered from its inception in 1997 from a number of built-in single point failure issues based on remnants of a daisy chain distribution mode left over from the old Emergency Broadcast System (EBS). The CAP-EAS migration strategy, as outlined in the proposed re-written Part 11, mandates continued use of legacy SAME EAS messaging for some time. We must finally purge EAS of as many single point failure issues as possible, even during this transition period. Since most legacy EAS SAME devices have at least four audio inputs, we would hope that the Commission would specify the new CAP EAS devices for those subject to Part 11 and using SAME EAS have at least four audio inputs and that those currently using such devices work with their LECC to ensure some alternate path for alert reception.

### **EAS is Event Driven**

While not in the Further Notice, the BWWG believes it is essential that the revised Part 11 carries language that emphasizes what should be the common goal for EAS, namely an emergency management “event driven” user experience that supplies timely warnings that inform people at risk about immediate protective actions they should take to better protect life and property. For EAS, the ultimate user of EAS messages is the individual radio listener or TV/Cable viewer. Hence it is important that the messages delivered to users during emergency situations be clear, informative and unambiguous, and geared to the specific emergency event placing lives and property at risk. What EAS should not be about is the title or political position of the message giver. This flows directly from the description of what a proper emergency warning should be based on according to the Partnership for Public Warning.<sup>11</sup>

The existing system is currently held captive by limitations including, but not limited to SAME, a lack of proper message formation training for originators, no clear direction for the formation and duties of state and local EAS committees, and a general lack of stakeholder review for all real EAS events.

As stated, the ultimate user who is supposed to benefit from EAS messages is the individual radio listener or TV/Cable viewer. Hence it is vital that the messages delivered to users during emergency situations be clear and unambiguous, and free of any hint of intentional or unintentional political spin. In many parts of the country, EAS currently falls short in taking into account the real needs of the users of public emergency alerts. Policies outlining what EAS should really be doing should be written into Part 11 to help guide local and state EAS committee stakeholders on how to best fulfill the needs of an audience at risk. They should incorporate the following elements:

1. **The location of the event:** The current system of identification of “operational areas” does not help anyone except those familiar with local governmental unit names, usually a county name. Travelers on highways, for example, may have no idea what county they are in. Furthermore, this means they may be driving directly into an event, which is dangerous, or directly away from an event, which would unnecessarily panic a listener. The BWWG believes it is important to inform the user of the specific location of an event in

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<sup>11</sup> Partnership for Public Warning, Protecting America’s Communities, Page 8: “Disasters are local and local government has the primary responsibility to look after the welfare of its citizens. Thus local government has the primary responsibility to warn its citizens and to assist them in preparing, responding and recovering from disasters. Even though some warnings may originate outside the local community (e.g. hurricane warnings from the National Weather Service or terrorist alerts from the federal government), it is primarily the responsibility of the local authorities to ensure that citizens are provided with the information they need to protect themselves and their families.”

terms they can understand.

2. **The source of the alert:** Currently, most stations, especially those on automation systems, usually terminate a test, and many events, with “serving the xxxx operational area” and no further information as to the location of the message sender. Combined with the tendency of many stations to “hide” their City of License designation per Section 73.1201 in the midst of a series of commercial messages that may be as isolated as 15 minutes from the top of the hour, casual listeners and travelers alike may never learn what station issued an alert nor even where it is located. Some stations are licensed to communities that simply do not truly exist. Indeed, some stations cover multiple states, and an alert in the middle of a national satellite talk show could well leave a listener more confused than if no message were transmitted.

The BWWG suggests that stations should be directed to make clear their location both as to City of License and its relation to the event. (Additionally, as a separate matter, the need for compliance with Section 73.1201 should be an initiative of the Media Bureau.)

3. **What the listener should do:** It seems to go without saying that simply saying “there is a tornado in Miller County” is insufficient. Those 100 miles away and away from the path of the tornado do not need to head for shelter immediately. However, those closer, in the path of the tornado, do. The BWWG believes that if a listener is anywhere close to an event, they should be told what they should do - at the very least in terms of whether the event is moving toward them or away.

4. **Where to get more information:** If a station is unwilling to break automated programming, it should at least inform listeners of a phone number, web site, EM information point, or an alternative frequency where additional and updated information about the event can be obtained.

### **The Composition and Role of Local and State EAS Committees (LECC's and SECC's)**

The BWWG finds it ironic that while the Commission and its Enforcement Bureau rely on local and state volunteer efforts to write plans that are the basis of assessing compliance<sup>12</sup>, yet do not currently spell out who appoints members of local and state committees, nor what the proper composition of these committees should be to best meet the needs of the EAS. As an example of how little attention the Commission has paid to this issue, there are states like California where the current SECC Chair was actually appointed by the Commission decades ago in the days of the old Emergency Broadcast System (EBS).<sup>13</sup> LECC and SECC Chairs want to but don't know where to send the resignation and have not been replaced because there is no one to appoint a replacement.

Accordingly, the Commission needs to address this vital issue as part of the Part 11 re-write.<sup>14</sup>

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<sup>12</sup> All entities subject to EAS compliance are supposed to have copies of their local plans available at their EAS control points to tell them what their EAS monitoring assignments should be. Commission Enforcement Bureau inspectors are supposed to check to make sure not only that these local plans are properly posted, but that the monitoring assignments they describe are reflected in the settings of EAS equipment. Failures of entities subject to EAS compliance to have a copy of their local plan posted, and/or failure to have proper monitoring assignments set have resulted in the assessment of fines.

<sup>13</sup> James Gabbert, the current California SECC Chair, has recounted in many meetings with the Commission and FEMA that if he wanted to resign, there is not only nothing in the current Rules to tell him who to resign to, but nothing in the rules stating who would appoint his replacement!

<sup>14</sup> The BWWG will go into more detail on the proper composition and duties of SECC's and LECC's, and who should make such appointments on Reply, and sincerely hopes other stakeholders will support this effort. While the BWWG recognizes that it will be a challenge to write on this topic in Part 11 of the Code of Federal Regulations (CFR), we feel

## **Emergency Management: The Heart and Soul of Public Warnings**

In the BWWG's considered opinion, the main reason that there is such a wide discrepancy in opinions about the effectiveness of the EAS is that local and state emergency management was never properly connected to the process. Part of the problem is the lack of mandate on the emergency management community, but perhaps more importantly, no "One Size Fits All" plan can be successful in every corner of the country. Local efforts to bring stakeholders together to determine what will work best are essential.

In the EAS Assessment released by the Partnership for Public Warning (PPW) in 2004, several recommendations were made, among them<sup>15</sup>:

- Integrate the EAS and NWR systems with the emergency management community, by providing a cost effective, reliable, and secure method of activating the EAS system by state and local emergency management agencies.
- Develop and administer procedures and standards for the requirement, analysis, evaluation, and approval of state and local plans and a needs assessment of system equipment and connectivity.

The BWWG believes that while some progress has been made toward these suggestions, not nearly enough will have been done by September 30, 2011 to make sure they are achieved.

## **The EAS: Fixing What Has Always Been Broken**

### **Proper Installation of EAS Devices (11.35)**

Since its inception on January 1, 1997 there have been various interpretations of Part 11 by both the EAS user community and the manufacturers of EAS devices. Since the original FCC EAS equipment certification process never fully tested devices in real world station environments, we have been living with a patchwork of devices - and opinions on their installation and operation - that simply do not serve the public warning cause wisely or well.

For example: the EAN national code is according to 47 CFR Part 11 supposed to be a mandatory carry for all stations that have not applied for and been issued a non participating letter from the FCC for NN status<sup>16</sup>. According to 47 CFR Part 11.35<sup>17</sup>, EAS equipment can be operated compliantly in the so-called manual mode as long as an operator is on duty who can comply with the mandatory EAN provisions to make sure the EAN message is carried in its entirety, and make decisions on relaying non-mandatory weather, local and state EAS events.

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that NOT doing so will lead to continuing the current patchwork of functional and dysfunctional volunteer committees that, like it or not, are supposed to formulate policies on which CFR compliance is based!

<sup>15</sup> Please see the archived reports of the Partnership for Public Warning at:  
<http://www.partnershipforpublicwarning.org/ppw/docarchive.html>

<sup>16</sup> per 47 CFR Part 11.19

<sup>17</sup> 11.35 (a): EAS Participants are responsible for ensuring that EAS Encoders, EAS Decoders and Attention Signal generating and receiving equipment used as part of the EAS are installed so that the monitoring and transmitting functions are available during the times the stations and systems are in operation.

Unfortunately, some EAS community user-members believe that 11.35 can be complied with even if their EAS device is NOT always inserted in the main program stream(s)<sup>18</sup> – as long as that operator is present. The BWWG is of the opinion that “mandatory” means “mandatory. That means to us that the proper way to install all EAS equipment is in the main program stream in a manner that can always properly interrupt the main program stream(s).

Therefore, the BWWG strongly suggests that 11.35 be amended to clearly state that all EAS devices must be installed in a way that assures they can interrupt all streams for which the operating entity is legally responsible.

The one exception: Part 11 Cable Rules should clearly state that cable EAS equipment should henceforth default to no interruption of any on-air television stations carried. The current cable interrupt waiver procedure currently allowed by the FCC should be reversed. Namely, a waiver request by a given television station carried on a given cable system should be filed and honored if the TV station wants the cable system to interrupt them. 47 CFR 11.35 (g) should therefore be re-written to reflect this change. Since there will be legacy cable EAS headend equipment that may not comply with this and other new EAS requirements, provisions for compliance at some future date certain have to be included.<sup>19</sup>

### **EAS: Audio Modulation Requirements**

47 CFR 11.51(f) specifies minimum audio modulation levels, and goes into some detail on how to measure the SAME codes and attention signal for compliance. State-of-the-art broadcast audio processing for analog and digital streams introduces uncertainty into exactly how EAS device modulation level compliance can be achieved, and how easily compliance can be measured in accordance with this section of the Rules. For the record, the BWWG knows of no instance in the nearly 15 year history of the EAS where a properly operating EAS SAME encoder’s signal that has been subject to standard processing used in broadcast radio and television did not properly trigger proper response in EAS decoders monitoring said source according to the appropriate EAS local plan. Each broadcast audio path for each facility should have one finite yardstick for audio level setting, namely, that stream’s maximum established level as expressed in decibels (dB) referenced to the characteristic electrical impedance of the path and allowing for technically accepted “headroom.”

The BWWG believes that as long as a properly operating EAS device can achieve an output level that does not exceed that reference level and does not fall below –10 dB of that level at the input to analog or digital audio processing will always produce on air (or in stream) proper triggering of EAS devices. Therefore, the BWWG suggests that 47 CFR 11.51(f) be re-written accordingly.

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<sup>18</sup> When the EAS was launched, broadcast radio and television stations usually had only one program stream. This, to state the obvious, has been changed forever.

<sup>19</sup> The BWWG acknowledges that much of the installed base of cable equipment is based on a blanket override model, and cannot, as much as we would like it to be, be changed out overnight. The Commission, in a separate inquiry, should request Comments on a strategy requiring all cable systems by some date-certain, to install equipment allowing selective override.

## **BWWG RESPONSES TO STATEMENTS AND QUESTIONS POSED BY THE COMMISSION IN THE ITEM**

### **Preface**

For the record, the FNPRM Discussion Section carries within it at least 316 question marks and many other discussion points begging answers. In this Section, The BWWG will attempt to answer many but not all of the Commission's questions asked in the FNPRM. In the *Third Further Notice of Proposed Rulemaking*, the Commission sought comments on what changes should be made to the Part 11 Rules to set in motion the CAP-related obligations adopted in the *Second Report and Order*, as well as other rule changes and clarifications intended to streamline Part 11 and generally improve the effectiveness of the EAS. The BWWG will quote or paraphrase portions of the FNPRM to help readers assess the BWWG's answers. Quoted paragraphs from the FNPRM will be indicated by being presented in **bold type**.

### **Legacy EAS Liabilities / Assets: We Need to Mitigate its Liabilities and Maximize its Assets**

In the *Second Report and Order*, the Commission said that EAS Participants should maintain the existing legacy EAS, including use of the SAME protocol. It is significant that the Commission specifically mentions the deficiencies of the daisy-chain message dissemination process used by the legacy EAS but is apparently on a course to memorialize this dissemination model in the Part 11 re-write for an undetermined period of years. How? By leaving in place for an unspecified time "Legacy EAS" and suggesting nothing definite on how to address legacy EAS "daisy chain" problems, the Commission is at risk of hanging the proverbial albatross around the figurative neck of the Common Alerting Protocol. The BWWG will make suggestions on what do about this "albatross" from "Legacy EAS" as we answer several questions that the Commission does pose.

Because the Next Generation EAS is not yet operational, and no date certain set for it to become operational, the BWWG understands why the Commission focused on revising the Part 11 Rules to accommodate the processing of CAP-formatted messages within the existing EAS SAME framework. To directly answer the Commission's request for comment on whether this is the correct approach, the BWWG respectfully thinks it is not. The problems that exist with the SAME format will continue as long as the FCC accepts SAME, even though CAP can provide a solution.

CAP, may be a lot of things, but it can never be a parallel mechanism to alleviate the shortcomings of the "daisy chain" distribution method unless, among other measures, special accommodations and practices are outlined to foster and implement local/state wired and wireless Local Relay Networks (LRN's), and reinforce an EAS message distribution infrastructure that was never properly designed and built for "legacy EAS." CAP-EAS must be set up so local warning centers can distribute CAP and "Classic EAS" messages directly - with a minimum of LP or other distribution intervention - to as many cable, satellite entities, and TV and radio station entry points as possible.

As we have seen from recent real life experience based on a number of devastating tornados in 2011, time delay from origination to reception by people at risk for warnings can mean the difference between life and death. While the FCC cannot mandate wired and wireless multipoint distribution by local emergency management for local relay, it must, in concert with DHS/FEMA and other Federal partners, do everything possible to encourage that such relay systems be built and maintained.<sup>20</sup>

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<sup>20</sup> FEMA has told stakeholders including the BWWG that they are working on training modules for the National Incident Management System (NIMS) that could lead to a "compliance carrot" for local emergency management. The way the "carrot" would work is that NIMS training is a prerequisite for reimbursement by FEMA for some types of local expenses during federally declared emergencies.

The BWWG believes that one way to build multipoint wireless distribution for EAS is to set up a Warning Center override for Digital Television for one or more DTV sub channels when CAP messages are originated. In this way one or more DTV channels in a market become high power multipoint distribution systems for not only CAP messages, but for follow-on information from emergency managers. The BWWG reminds the Commission that the Partnership for Public Warning (PPW) reports recommended not only multiple warning systems, but multiple ways to stream, streamline and reinforce those systems so they can better serve the real world warning needs of a public at increasing peril from natural and human-caused disasters.

Another approach, but one without the wideband and multimode throughput of DTV sub channels, is for the Commission to set aside a small block of UHF public safety radio channels capable of sufficient data throughput to serve as CAP wireless LRN's.

Further, the BWWG believes that Part 11 should spell out clearly, probably in 47 CFR 11.20, that broadcasters should not bear either the licensing, construction, operation or maintenance of EAS distribution from warning centers to EAS entry points.<sup>21</sup> Such is the proper purview and consequent duty of the emergency management community that is legally responsible for issuing public warnings. The role of broadcasting and other public warning entry points, as clearly described in PPW reports, and generally recognized by public warning experts, is to *relay* warnings from emergency management. Use of broadcast licensed resources by warning centers for relay purposes should clearly not be allowed.<sup>22</sup>

Yet another approach would be to arrange for override of aggregated UHF or high band public safety radio channels capable of adequate CAP data throughput. This approach has been used (in single channel narrowband mode) in some areas such as Los Angeles County for "Classic EAS LRN's."<sup>23</sup>

While the BWWG agrees with Monroe, Sage, TFT and others that "legacy EAS" needs to stay in place for the foreseeable future, we remind the Commission of the benefits that direct distribution of CAP messages to each broadcast and cable entry point carries with it great benefits for the public at risk. The longer the delay, the longer those benefits will be withheld from the public.

The BWWG agrees with NAB and Botterell that CAP has tremendous advantages over SAME in improving public warnings and should be phased in as quickly as is practical. There is no doubt that SAME effectively

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<sup>21</sup> 47 CFR 11.20 now talks about the topic of "State Relay Networks." The BWWG believes that this is where language describing the function and architecture for Local Relay Networks (LRN's) should be.

<sup>22</sup> The BWWG believes that the Commission should seek a legal opinion on this topic. We believe such opinions will ultimately support our position that use of broadcast resources for Local Relay Networks could potentially put licensees at risk and incurring a liability that should properly be borne by those entities who have the legal duty and responsibility to issue public warnings. As an example of a relay network from authorized warning centers that is properly licensed and maintained by the warning entity, the NOAA National Weather Service (NWS) Weather Radio system relays weather warnings to broadcasters as part of EAS monitoring assignments using a radio system supplied and maintained by the NWS.

<sup>23</sup> According to an email communication received by the BWWG on May 22, 2011 from SAGE, one of the vendors of CAP EAS equipment, the estimated requirements for a CAP LRN would be: "For day to day alerts sending CAP without audio and letting the CAP/EAS device do text to speech, any simple modem will do, even at 1200 bps, it would be 30 seconds or so to send a CAP message without audio, about 4 seconds at 9600 bps. If you want to use UHF/VHF, and you want to be able to stream the EAN, you need something in excess of 64 kbps. That is too much for a narrowband FM channel, though with a lot of playing around and maybe two channels you could do the CAP message data at 9600 bps without embedded audio on one channel and use a 2nd channel for analog audio. You could use the same channel but at that point you might as well just use EAS for the EAN. That method (sending audio in the clear) is not secure, though you could use radios with security for the audio."

“dumbs down” a CAP message. The BWWG suggests to the Commission that a formal review of EAS be conducted every two years to identify when a realistic SAME “sunset date” could be set – the sooner the better.

In recent years, broadcasters have been doing the job Jamie Barnett assigned us and educating emergency managers, public safety and law enforcement officials about CAP and the changes it can bring to EAS and Public Warning. Requiring CAP-equipped stations in states with the ability to deliver CAP messages to continue with SAME messaging betrays the trust that broadcasters have recently built with these officials. Stations in these states should be allowed to provide complete CAP messaging services immediately without being penalized for doing so.

The BWWG must again remind the Commission that a nationwide state and local relay infrastructure was never properly built out for “classic EAS”. Deploying a resilient, redundant CAP-enhanced EAS relay system means much more than filling in the blanks and repairing the “Classic EAS” relay system. The BWWG believes as outlined elsewhere in our Comments that this relay structure should be described in some form in Part 11, probably in 47 CFR 11.20 that now just contains language about state networks.

The BWWG hopes that while the Commission is wisely supporting continuance of “Classic EAS”, it should do everything it can to work with its Federal partners and all EAS stakeholders to foster dissemination of best practices, and encourage outright and/or matching government grants so local emergency management can provide a CAP-EAS relay infrastructure. Such progress will do more to encourage adoption of the new generation of EAS receivers than simply establishing a date for such adoption, with no assurance there will be anything to receive.

The BWWG will even go so far as to suggest such a relay system should be financed through a portion of telecommunications taxes that already are used to fund 9-1-1 projects.

Finally on this topic, the Commission should address the issue of some broadcasters originating EAS messages and tests. While a broadcast licensee is the ultimate arbiter of what goes out over the airwaves, it is a dangerous practice for those who should be taking responsibility for alert-message issuance to shirk that responsibility, or to rely on broadcasters to originate the message. In extreme circumstances, such as the tsunami in American Samoa in September of 2009<sup>24</sup>, only quick and decisive action by the radio licensee averted greater loss of life when public officials neglected to act. Broadcasters should have some sort of blanket waiver of liability to protect them should they be forced to take such action.

**FNPRM Question: Should we amend the existing Part 11 Rules to more fully codify the basic obligations to receive CAP-formatted messages?**

The BWWG suggests that obligations to receive CAP messages must be coupled closely with obligations in the warning origination community to do their part. Nothing in Part 11 has or can do this, but absent a concerted effort to bring the entire emergency management community and NOAA/NWS in as key CAP-EAS stakeholders, CAP-EAS will see the same pattern of spotty successes and failures that have characterized “Classic EAS,” and the Emergency Broadcast System (EBS) before it.

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<sup>24</sup> <http://www.radioworld.com/article/tsunami-hits-american-samoa/4744>;  
[http://www.wavy.com/dpp/news/us\\_news/local\\_wavy\\_tsunami\\_images\\_video\\_20090930](http://www.wavy.com/dpp/news/us_news/local_wavy_tsunami_images_video_20090930)

**FNPRM QUESTIONS: Alternatively, are the deficiencies of SAME relative to CAP identified by NAB and Botterell sufficiently significant as to outweigh the benefits of retaining the legacy EAS system until such time as it can be replaced by the Next Generation EAS system? How long will it take to switch to a CAP-centric EAS system? Would switching to a CAP-centric EAS system better accommodate FEMA's plans for IPAWS? What would such a CAP-centric approach entail, and how would it affect EAS Participants? Have there been any developments since the *Second Report and Order* that would suggest that an alternative approach is warranted? What are the cost and benefits associated with a CAP-centric EAS system? How could any requirements we might consider be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?**

The BWWG suggests the answers to the above Commission's questions on a CAP-EAS transition timeline cannot be answered UNLESS stakeholders first are invited to sit down and carefully map out a transition road map leading from combo Legacy EAS. /CAP, to CAP with Legacy EAS as a last ditch backup. This must start at the local level, cognizant of local needs and resources.

The BWWG strongly recommends that a panel of industry and emergency management experts be convened to come up with a transition plan and monitor progress towards full implementation of CAP-EAS every two years with an eye to phasing out SAME messaging. We firmly believe that with such a plan and the national will to implement it a complete transition could be accomplished in 5-10 years. Part of the Commission's contribution to this plan must be a date-certain by which all "Classic EAS" equipment will be phased out.

#### **CAP-Formatted Message Translation to SAME**

**As indicated above, the *Second Report and Order* required that EAS Participants be capable of receiving CAP-formatted EAS messages but did not specify what EAS Participants are required to do with such messages upon receipt. The *Second Report and Order* also required that EAS Participants maintain the existing SAME-based EAS. The BWWG believes that the CAP EAS Profile designed by the ECIG should be adopted forthwith by the FCC in its Part 11 Rules. This Profile deserves recognition by including it in the FCC's Rules because of its careful attention to details needed to properly parse CAP messages for EAS on radio, television and cable.**

**FNPRM QUESTION: What are the costs and benefits of striving for uniformity in how EAS Participants decode CAP-formatted messages and present them to the public?**

Any cost/ benefit analysis (CBA) has to factor in the benefits to the public at risk. Too often CBA studies are done purely from a vendor or industry perspective, and with the emphasis and consequent actions based on economics, not the public good. The BWWG believes that DHS/FEMA is on the right track in their efforts to build true stakeholder public/private exchange forums so the EAS user experience of all people at risk (including the hearing and sight impaired communities) can be properly factored into the equation. The BWWG notes that the Commission has apparently left out consideration of non-English warnings within its questions in this item.

There is by no means a simple answer the BWWG can give on this issue, but we do suggest that the Commission issue a separate NPRM on this issue. The BWWG does believe that along with the legal duty of the emergency management community to issue warnings may come a parallel duty to provide said warnings in a number of languages other than English. The BWWG believes we should not overlook language translation programs that might be employed to automatically parse CAP messages for translation for broadcasters with a need to relay warnings to their non-English-speaking audiences.

**FNPRM QUESTION: Given that CAP-formatted messages can only convey audio messages as audio files or links to alternate sources (such as URLs) for streaming audio, is it technically feasible to encode that portion of a CAP-formatted message in a SAME-compliant message for rebroadcast to monitoring stations?**

The BWWG agrees with other CAP-EAS experts that the rebroadcast of CAP messages in program streams is not practical. CAP messages must be conveyed from warning centers originating them to broadcast and cable entry points through out of band wired and wireless means. Furthermore, simply rebroadcasting text messaging (as in text to audio) may lead to misunderstandings or interruptions in programming that do not inform. Local Relay Networks, wired and unwired, must be built and maintained to not only deliver CAP-EAS messages without using broadcast relay, but, more importantly, to get CAP-EAS messages to as many EAS broadcast and cable entry points as possible as quickly as possible.

**FNPRM QUESTION: If an EAS Participant cannot encode the audio portion of a CAP-formatted message in a SAME-compliant manner, would the audio portion of CAP messages be limited to EAS Participants that initially receive such messages via IP-based connections?**

Yes, and this is why CAP local relay networks (LRN's) need to be encouraged. The BWWG's hope is that over time enough CAP LRN's will be established so most broadcast and cable entry points will receive all CAP messages directly.

**FNPRM QUESTIONS: Does this approach represent a cost-effective means for achieving uniform consistency across devices and delivery platforms in how CAP alert messages are presented to the public, or are there alternative approaches that could be less burdensome to equipment manufacturers and/or EAS Participants that would achieve the same result?**

Asking local and state governments to make available suitable wideband UHF radio links on an override basis, and entering into Memoranda of Understandings (MOU's) with DTV broadcasters are two low-cost and creative ways to build out CAP LRN's. For DTV reception of overridden channels, the cost at the station level comes down to a DTV tuner, or single channel UHF radio.

**FNPRM QUESTION: To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?**

The BWWG sees no limitations for overridden DTV channels used for local relay network (LRN) construction and/or reinforcement, but does see the need for minimum standards to be set for UHF radio channels used as LRN's. For day-to-day alerts sending CAP without audio and letting the CAP/EAS device do text to speech, any simple modem will do, even at a rate of only 1200 bps. It would take 30 seconds or so to send a CAP message without audio, and about 4 seconds at 9600 bps.

For streaming CAP messages on UHF/VHF, a bit rate of 64 kbps is required, too much for a single narrowband FM channel. The BWWG suggests that the Commission set up a block of channels in the public safety spectrum for this use, following up on a suggestion made in the past by the Society of Broadcast Engineers.

**FNPRM QUESTION: Should the Commission directly regulate CAP-to-SAME conversion, or is it enough to specify in Section 11.56 that EAS equipment must be capable of outputting CAP-formatted messages in EAS protocol-compliant form?**

The BWWG believes that the ECIG guidelines be memorialized in Part 11 so there is no confusion about where the process is leading: A 100% national, state and local CAP-enhanced warning system free of the “albatross” that is the SAME protocol.

**FNPRM QUESTION: What are the cost and benefits associated with ensuring that CAP-formatted EAS messages are converted into SAME-compliant messages?**

Again, the BWWG reminds the Commission that a strict economic cost/benefit analysis misses the point of the human value that accrues from an improved warning infrastructure. We live in an increasingly dangerous world. Anything that can be done to give people at risk the timely information they need to take proper protective action carries immense value in any cost/benefit analysis, and far outweighs, in the opinion of the BWWG, short-term concerns about dollars-and-cents costs.

**FNPRM QUESTIONS: How could any requirements we might consider be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?**

The BWWG believes that neither the broadcast and cable industries, the Commission, FEMA, nor the emergency management community have either the sole right or the exclusive expertise to answer this question. We should look to reforming a national warning stakeholder group along the lines of the Partnership for Public Warning (PPW) to pull in the resources to provide the answers to these questions in the form of reports and white papers. State stakeholder groups might be formed with the help of state broadcaster associations and emergency management associations to support this effort.

### **CAP-Related Monitoring Requirements**

As the item states, Section 11.52 sets forth the basic monitoring requirements that EAS Participants must follow to facilitate receipt of EAS alert messages. This Section requires EAS Participants to monitor two EAS sources, which are assigned in the State Area EAS Plan. While the *Second Report and Order* codified in Section 11.56 the general obligation of EAS Participants to receive CAP-formatted EAS alerts, it did not specify any associated monitoring requirements.

**FNPRM DISCUSSION: AND IMPLIED QUESTION: Commenters made several recommendations with respect to clarifying federal and state CAP-related monitoring requirements. CSRIC stated, “A new subparagraph is needed [in Section 11.52] to require EAS participants to monitor multiple IP-based CAP alert sources (i.e., CAP servers); in addition to legacy (audio) EAS alert sources.” According to CSRIC, “EAS participants should monitor at least one state and/or local CAP EAS source (i.e., CAP server) in addition to a Federal CAP source.” SpectraRep suggested, “Multiple CAP sources should be monitored to ensure redundancy, to provide direct delivery of State and Local CAP messages, and to permit monitoring of national CAP messages from future proposed sources such as IPAWS.” SpectraRep recommended that we add a subparagraph to Section 11.52 requiring EAS Participants “to monitor at least two CAP sources [one state and one federal] in addition to the requirements of existing subparagraph §11.52 (d).”**

The BWWG agrees with CSRIC, with the following caveats: Said monitoring should go into effect when relevant local and state plans can take advantage of wired and wireless Local Relay Networks (LRN’s) that

can accommodate CAP payloads. This will provide a more orderly transition and prevent confusion to stations buying new receivers but finding themselves unable to implement the CAP aspects due to none being available in their area.

Going back to recommendations made by the Partnership for Public Warning, not only are multiple warning systems desirable, but multiple means of relaying warnings for systems are essential to assure resiliency and reliability of public warnings conveyed to the public through broadcast and cable entry points.

### **RSS Feeds: A Bad Idea for CAP EAS**

The Commission observed correctly that the technical construction and distribution methodologies of CAP messages are different from SAME messages. The Commission cited the example, under the current EAS system, of SAME-formatted messages that are conveyed as AFSK-modulated data messages that are received by monitoring the over-the-air broadcasts of designated broadcast stations. As the Commission also correctly points out, CAP messages are IP-based data packets that can be distributed using various distribution models. In the item, the Commission goes on to point out that FEMA has indicated that the IPAWS system will employ Really Simple Syndication, version 2.0 (RSS), to distribute CAP-formatted alerts to EAS Participants.

**FNPRM QUESTIONS: For example, would our proposed approach be sufficient to ensure that EAS Participants receive federal CAP-formatted messages? Would such an approach to federal CAP monitoring be sufficient to capture the technical elements of monitoring, including any specific machine-to-machine interface requirements that may govern communications between the EAS equipment and the source of the RSS feed? Is or should there be any limit as to how many federal RSS feeds EAS equipment can technically and/or practically monitor? Would use of RSS as the CAP message transport medium limit the utility of CAP, such as its ability to include audio messages as audio files or links to URLs for streaming audio? Should we specify authentication and/or digital verification standards or requirements governing any aspect of this approach? Should we specify the timing intervals governing when the EAS equipment will poll the RSS feed in the Part 11 Rules or leave timing intervals to EAS Participants, and if the former, what interval would be appropriate? Would an RSS-based monitoring requirement present any unique equipment certification concerns? Would the ability to distribute alert messages in either the SAME-format via station-to-station broadcasts or CAP format via IP-based RSS connections enhance redundancy? What are the costs and benefits of using the RSS approach to monitor federal CAP sources? Are there alternative approaches that would be less burdensome to equipment manufacturers and/or EAS Participants that would achieve the same result? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action? Is direct regulation of federal CAP monitoring necessary or is it enough to specify in Section 11.56 that EAS equipment must be capable of converting CAP-formatted messages into EAS protocol-compliant messages?**

First, mandating RSS in Part 11 would be a serious FEMA and Commission mistake without taking into account and mitigating the liabilities of RSS feeds. The newer and more flexible ATOM format is a far better choice. RSS was designed for the syndication of human-readable HTML (web) pages. ATOM works the same way as RSS but it is a "generic" format usable with any sort of XML and, according to CAP expert Art Botterell, it is more easily extensible to future uses.

Second, the idea of including an entire (and potentially large) CAP message in a single RSS file defeats the

whole purpose of an RSS/ATOM style feed. History records that NOAA tried the one-big-file approach when it first launched CAP half a decade ago and subsequently abandoned it as a bad idea. FEMA's contractors and the Commission should forthwith consult with NOAA to confirm the history of NOAA's abortive foray into the RSS world.

Further, according to CAP subject expert Art Botterell, no other CAP-based system in the world is set up to work that way for very good reasons. Therefore the Commission and FEMA should not go down this road. The whole point of an ATOM or RSS index file is that a client should be able to get a concise summary of what alerts are current, determine whether a) any are new to it, and b) of interest to it based on location, urgency, severity, certainty or whatever other fields are included in the index. Only if both a) and b) are true can the client then retrieve the referenced document, in this case the particular CAP message. Putting all the messages in a single file means that every client will download every active message for the entire nation every time it polls the server, potentially several times a minute! An analogy would be downloading the entire Sunday edition of the New York Times® when all that is needed is just one or two articles.

Such an approach imposes a huge and quite unnecessary bandwidth requirement on CAP EAS messaging – and could be especially burdensome to stations with only dialup or satellite Internet access. It also complicates the security picture considerably, since one cannot actually include a digitally signed XML document inside another XML document without either invalidating the signature or creating an invalid XML "wrapper" document.

Finally, simply signing the big single file means there will be no effective "auditability" of individual alerts unless FEMA agrees to allow an access "audit" of their whole system, which, in expert opinion, is unlikely something they will do for Operational Areas and states.<sup>25</sup>

The BWWG believes that the Commission must not specify any feed type in Part 11. While ATOM feeds are better than RSS feeds for the reasons the BWWG stated above, some new feed format may be devised next year that is better than ATOM. Knowing that technology is a moving target, the FCC must not hobble improvements by specifying any type of feed in Part 11.

### **Monitoring Requirements for CAP-formatted Messages**

#### **FNPRM DISCUSSION: AND IMPLIED QUESTION**

**As stated in the Item: "The Commission did not specify monitoring requirements for CAP-formatted messages initiated by state governors (or their designees), although it did require that the State Area EAS Plan submitted for FCC approval specify the methodology for aggregating and delivering such messages. Accordingly, we tentatively conclude that we should amend Section 11.52 to include a requirement that EAS Participants monitor the RSS feed(s) designated by a state as the source of governor-originated CAP messages (and identified in the state's EAS Plan submitted to and approved by the Commission)."**

If the Commission feels it has to mandate a feed format, it should mandate ATOM, assure the EAS user community that the liabilities of RSS can truly be mitigated, or far better, and specify no feed format. That said, the BWWG believes the simplest and best answer to the issue of monitoring local and state CAP is to (1) not authorize governor-mandatory messaging and (2) simply state in Part 11 that all CAP-EAS messages, national, state and local, are to be received at broadcast and cable entry points by monitoring CAP feeds designated by local and state emergency management agencies -- with no mention of feed format.

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<sup>25</sup> Email communication to the BWWG from Art Botterell dated June 4, 2011

**FNPRM QUESTIONS:** Would such an approach to state CAP monitoring be sufficient to capture the technical elements of monitoring, including any machine-to-machine interface requirements that may govern communications between the EAS equipment and the source of the RSS feed? Is or should there be any limit as to how many state RSS feeds EAS equipment can technically and/or practically monitor? Is there a potential for variation among state CAP systems that might create additional considerations for monitoring that should be taken into account? Should we specify authentication and/or digital verification standards or requirements governing any aspect of this approach? Should we specify the timing intervals governing when the EAS equipment will poll the state RSS feed in the Part 11 Rules, leave it to the States to develop in their State EAS Plans or leave the timing intervals to EAS Participants? If we set the timing intervals in the Part 11 Rules, what interval would be appropriate? Would the ability to distribute alert messages in either the SAME-format via station-to-station broadcasts or CAP format via IP-based RSS connections enhance redundancy? What are the costs and benefits of using the RSS approach to monitor state CAP sources? Are there alternative approaches that would be less burdensome to equipment manufacturers and/or EAS Participants that would achieve the same result? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action? Is direct regulation of state CAP monitoring necessary, or is it enough to specify in Section 11.55 that EAS equipment must be capable of converting gubernatorial CAP-formatted messages into EAS protocol-compliant messages (where the methodology for such CAP system has been detailed in a State Area EAS Plan approved by the Commission)?

Whatever answer the Commission decides to implement in Part 11 language, it should be totally consistent for both federal and CAP-formatted messages initiated by state governors or their designees, and give clear direction to state and local committees (SECC's and LECC's) on how to write their plans to comply. Again, the BWWG states that governor-mandatory EAS is a bad idea and should not find its way into Part 11 to further muddy the public warning waters, and further alienate broadcast and cable entities.

### **Next Generation Distribution Systems**

Quoting the Item, "In the *Second Report and Order*, the Commission concluded that it should enhance the distribution architecture of the existing EAS."

As outlined in the item, Commenter Gary E. Timm (Timm) contended that the Part 11 Rules are not clear regarding the obligation of EAS Participants to receive CAP-formatted alerts from Next Generation EAS platforms. Specifically, Timm asserted, "It is unclear whether the terms 'receive CAP-formatted EAS alerts' and 'FEMA transmissions' [in Section 11.56] are meant to allude to implemented FEMA Next Generation EAS delivery systems." According to Timm, "As it stands now, most EAS Participants interpret that Section 11.56 requires only that they acquire the ability to decode a CAP message with no reference as to its possible origin." Timm stated that "if the Commission truly intends to require EAS Participants to implement any Next Generation EAS delivery systems within 180 days of FEMA adopting them it should be more clearly stated." BWWG agrees.

**FNPRM QUESTION:** In particular, is there a need to codify our interpretation to prevent any confusion that may exist concerning the above-quoted language in the *Second Report and Order* addressing Next Generation EAS distribution platforms?

The Commission must avoid implementing a Rulemaking Section on this topic that only builds half a bridge over troubled warning waters. If FEMA's IPAWS initiative and corollary work done regarding CAP is our Federal government's roadmap based on the conclusions offered by the Partnership for Public Warning, rules that manufacturers of CAP-EAS equipment and broadcasters must be true to that roadmap. If as the

Commission suggests that FEMA might never complete the roadmap, FEMA, the FCC and all stakeholders have done a grave disservice to the effort to improve public warnings.

The BWWG suggests that the Commission leave itself room in Part 11 for completion of a fully fleshed-out Next Generation EAS strategy that is itself rooted in a national warning strategy that will require more work by FEMA and the stakeholder community. PPW said in its reports that the United States needed a national warning strategy. It is BWWG's hope that the Commission stays true to this idea in its rewrite of Part 11.

### Equipment Requirements

***FNPRM DISCUSSION: ON INTERMEDIARY DEVICES:*** Various parties responding to the *Part 11 Public Notice* suggested that EAS Participants be allowed to meet their obligation to receive and process CAP messages by deploying intermediary devices that essentially would carry out the function of receiving and decoding a CAP-formatted message, and translating and encoding such message into a SAME-formatted message that could then be inputted into a legacy EAS device via its audio port (just as an over-the-air SAME-formatted message would be) for broadcast over the EAS Participant's transmission platform. The BWWG has come to believe that allowing vendors to build and market so-called CAP converters may have been a mistake. Legacy EAS first generation equipment bought in 1996 and installed for 1997 compliance is now 15 years old. There are known problems in legacy EAS vendor products that have embedded printers, keep-alive battery memory, external power supplies and more. Some manufacturers are no longer in business meaning questionable support for orphaned EAS devices. While the BWWG knows it may be too late to rectify this mistake, setting a date-certain for retirement of legacy EAS equipment must be done. Since new EAS equipment is capable of receiving and relaying SAME messages, a graceful and planned strategy to migrate to 100% Next Generation EAS should be carefully planned and executed without having to deal with the baggage of unreliable and balky first generation EAS equipment. No matter what the capability of intermediary CAP converter devices; they all have the effect of "dumbing down" information-rich CAP EAS messages. They are at best a patchwork solution that takes that portion of the EAS user experience down a dead end road.

**FNPRM QUESTIONS:** Accordingly, we also seek comment on whether we should subject intermediary devices to some or all of the encoder requirements set forth in Section 11.32 and the transmission requirements in Section 11.51. Is there any reason to treat these devices differently from an EAS decoder that decodes both SAME and CAP-formatted messages? Specifically, should we subject intermediary devices to some or all of the decoder requirements set forth in Section 11.33 and the monitoring requirements in Section 11.52? Are there any requirements not currently specified in Part 11 to which we should subject intermediary devices?

See above answer for question in FNPRM paragraph 21.

### Encoder Requirements.

**FNPRM DISCUSSION:** As the item states, "the functional requirements for EAS encoders are set forth in Section 11.32. As discussed below, CSRIC and parties responding to the *Part 11 Public Notice* made various CAP-related recommendations for revising these requirements. We seek comment on these recommendations generally and on any of the encoder requirements not addressed below that commenters believe we should revise to accommodate CAP."

**Section 11.32(a).** Section 11.32(a) specifies the minimum requirements for encoders. This Section requires that encoders be capable of encoding the EAS Protocol set forth in Section 11.31, providing the EAS code transmission requirements described in Section 11.51, and meeting various other specifications. CSRIC recommended that the Commission “[m]odify [the] EAS encoder minimum requirement,” so that “EAS encoder[s] [are] capable of [r]endering a fully CAP compliant message.” We seek comment on this proposal.

The BWWG sees CSRIC’s response here as useful only if a broadcast or cable entity is going to relay a CAP-encoded message out of their main program stream. It is the BWWG’s hope that sometime in the future consumer receivers will have CAP decoders that can listen to wired or wireless out-of-band relay channels.<sup>26</sup> Digital television has both the bandwidth and capability to do this already. It remains an open question if FM radio or AM radio will. Getting to this point will require cooperation from the consumer electronic industry that may not be forthcoming without rulemaking that will accomplish this from the Commission.

**Section 11.32(a)(2).** Section 11.32(a)(2) specifies the input configuration requirements for encoders. This Section currently requires that encoders be configured with two inputs: one for audio messages and one for data messages (RS-232C with standard protocol and 1200 baud rate). CSRIC recommended that the Commission modify the input requirements to “[i]nclude [a] requirement for a single Ethernet input with support for multiple IP sources.” Although CSRIC did not indicate specifically whether we should retain the 1200 baud RS-232C input requirement, Trilithic, Inc. (Trilithic), suggested that we should “[r]emove the requirement for 1200 BAUD RS-232C interface” with respect to both the input configuration requirements and the output configuration requirements set forth in Section 11.32(a)(3).

The BWWG wishes to point out that there is legacy third party equipment in place that relies on RS-232 connectivity. Since all manufacturers have built it in to CAP-EAS devices that have been on the market for the past year, we see no point in deleting the requirement.

Further, it must clear up the confusion that Part 11 has caused by specifying the minimum EAS monitoring burden – two sources. Several EAS manufacturers have taken this to mean that they only have to supply two analog inputs. Many state and local plans attempt to encourage broadcasters and cable systems to both reinforce and go beyond the minimum two source monitoring requirement in Part 11. Stations that have or intend to purchase EAS equipment with only two analog inputs potentially thwart efforts to reinforce links from EAS originators. If we are ever to free ourselves of remaining single-point failure modes for EAS (both CAP-EAS and legacy SAME EAS) additional analog inputs will be needed for the foreseeable future.

**FNPRM QUESTIONS:** As a preliminary matter, if we were to decide not to require EAS Participants to encode messages in CAP format, would there be any reason to require that an encoder be configured with an Ethernet port? If so, would a single Ethernet port be sufficient to capture data streams from multiple sources and distribution platforms? Are there any other types of interface ports that it would be appropriate to require be included in these devices to maximize their ability to accommodate various data inputs, such as a USB port? Would an Ethernet port permit receipt of CAP messages over a dial-up modem (for instances in which broadband Internet access is not available)? Assuming we require inclusion of an Ethernet and/or other data ports, would there be

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<sup>26</sup> CAP holds within it the so far unrealized promise of implanting CAP message awareness into a wide range of consumer electronic devices (including radio receivers, television receivers, and cable set top converters) turning them into what the BWWG would call WARNING APPLIANCES that have the potential to do far more with CAP information than can or should be done in main program streams. To illustrate several potential WARNING APPLIANCE benefits, warnings captured when listeners or viewers are not tuned in would be stored, external alarms could be triggered, and capabilities introduced that would be of great value to people at risk who are sight or hearing impaired.

any utility to retaining the RS232C connector and 1200 baud rate specifications, or should we delete these altogether? Should any configuration requirements we adopt for encoder inputs also be applied to encoder outputs? Would requiring an Ethernet and/or USB port(s), with the RS232C connector and 1200 baud rate or some other specifications, be a cost-effective means of ensuring a data-reception capability in EAS encoders, or are there alternative approaches less burdensome to equipment manufacturers and/or EAS Participants that would achieve the same result? What are the cost and benefits associated with requiring the inclusion of Ethernet or other data ports in encoders? How could any requirements we might consider with respect to encoder inputs be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?

EAS manufacturers have already built in the ability to monitor multiple CAP sources. It would seem that the Commission should not limit the type of feed to RSS by specifying only RSS in Part 11 since some state systems are already successfully using other modes. As with all types of feeds, there are benefits and liabilities, but the BWWG has to put in its vote for ATOM feeds today, while recognizing a better feed format may be devised tomorrow.

The FCC should structure Part 11 to always leave room for future improvements that maximize benefits, improve reliability, and permit adjustments to minimize liabilities. While RS-232 and Ethernet port requirements should be derived from compliance with Part 11 requirements, BWWG cautions the Commission about the lesson learned from “legacy EAS” that building limitations into EAS (especially in Part 11) severely constrains future solutions.

#### **Decoder Requirements.**

**FNPRM DISCUSSION:** The functional requirements for EAS decoders are set forth in Section 11.33. As discussed below, CSRIC and parties responding to the *Part 11 Public Notice* made various CAP-related recommendations for revising these requirements. We seek comment on these recommendations generally and on any of the decoder requirements not addressed below that commenters believe we should revise to accommodate CAP.

**FNPRM QUESTIONS:** Is direct regulation, in this case specifying CAP-to-SAME conversion as a minimum requirement for decoders, necessary to ensure decoder compliance or is there an alternative approach that would achieve the same end? What are the cost and benefits associated with requiring decoders to carry out CAP-to-SAME conversion? How could any requirements we might consider regarding CAP-to-SAME conversion be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?

The BWWG believes that the ultimate answer to this question is assuring that present Commission actions do not erect hardware, software, or other barriers to the eventual migration to Next Generation EAS that will free the EAS public warning process from the constraints of “legacy EAS.” The American public deserves better.

## RS-232 Connectivity for EAS Devices

### **FNPRM DISCUSSION:**

**Section 11.33(a)(1).** Section 11.33(a)(1) specifies the input configuration requirements for decoders. This Section currently requires that decoders be configured with three inputs: two for audio messages (from EAS monitoring assignments) and one for data (RS-232C with standard protocol and 1200 baud rate). CSRIC recommended that the Commission “[a]dd Ethernet input and multiple IP source requirements.” As in the case of encoders, CSRIC did not indicate specifically whether we should retain 1200 baud RS-232C input requirements; however, Trilithic suggested that we should remove them with respect to both the input and output configuration requirements set forth in Section 11.33(a)(7).

The BWWG recommends leaving well enough alone in the current crop of CAP EAS devices. The BWWG also sees value in continuing RS-232 connectivity (and possibly encouraging USB connectivity) as additional ways to communicate, control and update CAP EAS devices, literally a hardware back door for emergency diagnostics, maintenance and control by authorized parties.

### **FNPRM QUESTION: Is there any reason to require that a decoder be configured with an Ethernet port?**

The requirement for more than one port would only make sense if more than one port is needed to assure either connections to state and/or local CAP servers, or as a means to assure resiliency and redundancy. The BWWG does want to mention that both external RS-232 and USB port expansion technologies do exist, and do work. Stating the technological obvious, we submit that USB would be a better option than RS-232.

### **FNPRM QUESTIONS: Would a single Ethernet port be sufficient to capture data streams from multiple sources and distribution platforms? Are there any other types of interface ports that it would be appropriate to require be included in these devices to maximize their ability to accommodate various data inputs, such as a USB port? Would an Ethernet port permit receipt of CAP messages over a dial-up modem (for instances in which broadband Internet access is not available)?**

The BWWG believes that as long as a single Ethernet port can be internally configured to poll multiple CAP servers, one port will suffice. If a manufacturer cannot implement multiple CAP server polling with one port, one or more additional ports will have to be supplied by manufacturers. How many is “multiple”? Some regional EAS entry points might want to monitor six or more. How many more? The BWWG has no answer for that.

The BWWG believes that the ultimate decision to incorporate USB ports should be left to manufacturing stakeholders (possibly as represented by the ECIG) to decide based on an assessment of the ability of CAP-EAS devices to fully comply with Part 11 (as re-written). We also believe that if an individual manufacturer wishes to offer USB connectivity as an enhancement to their feature set, nothing in the Rules should prevent that. The BWWG hopes that the rules will be written in such a way to encourage development of future improvements.

We also believe that creating a Part 11 requirement to build internal provisions for a 56 kbps dial-up modem port in CAP EAS devices is not necessary at this late date in the CAP EAS device design cycle. That horse has left the barn.

It would appear to the BWWG that while external dial-up modems that have an Ethernet output exist, a 56 kbps data stream represents a significant limiting factor in data throughput and should only be used if no other options for better/faster connectivity exist. The BWWG also want to remind the Commission that

polling over a dial-up link could actually result in higher costs to entry points than full period IP connectivity. BWWG therefore asks its own question, "How many times a day would a dial-up connection have to be made to properly poll even the Federal CAP server?"

**FNPRM QUESTIONS:** Assuming we require inclusion of an Ethernet and/or other data ports, would there be any utility to retaining the RS232C connector and 1200 baud rate specifications, or should we delete these altogether? Should any configuration requirements we adopt for decoder inputs also be applied to decoder outputs? Would requiring an Ethernet and/or USB port(s), with the RS232C connector and 1200 baud rate or some other specifications, be a cost-effective means of ensuring a data-reception capability in EAS decoders, or are there alternative approaches less burdensome to equipment manufacturers and/or EAS Participants that would achieve the same result? What are the cost and benefits associated with requiring the inclusion of Ethernet or other data ports in decoders? How could any requirements we might consider with respect to decoder inputs be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?

The BWWG believes these are questions best addressed by the manufacturers and looks forward to reading their comment on this topic.

### Visual Displays and Logging Requirements for Decoders

#### **FNPRM DISCUSSION:**

**Section 11.33(a)(4).** Section 11.33(a)(4) specifies certain visual display and logging requirements for decoders. This Section currently requires, among other things, the development of visual display information from header codes, including the originator, event, location, valid time period of the message, and the local time it was transmitted. This Section also requires that existing and new models of EAS decoders manufactured after August 1, 2003, provide a means to permit the selective display and logging of EAS messages containing header codes for state and local EAS events. Sage suggested, "If the message was derived from CAP, the contents of the Alert Text, assembled as defined by the [ECIG] Implementation Guide, should be added to the log." We seek comment on this proposal.

**QUESTIONS:** What are the potential costs and benefits of this proposal? Would this proposal represent a cost-effective means for recording CAP-formatted alerts, and is it necessary to codify CAP message logging, or are there alternative approaches less burdensome to equipment manufacturers and/or EAS Participants that would achieve the same result?

The BWWG agrees with SAGE on this point. Such logging information for CAP EAS messages will be a benefit to the EAS management and oversight process. Moreover, since this capability is already built into devices being marketed, that horse has left the barn as well.

**Section 11.33(a)(10).** Section 11.33(a)(10) specifies certain error detection and message validation requirements for decoders. This Section currently requires, among other things, that decoders not relay duplicate messages automatically. CSRIC recommended that this Section be revised "to handle duplicate messages [where one is CAP-formatted] and use [the] CAP message by default," as specified in the ECIG Implementation Guide. The BWWG agrees.

#### **FNPRM DISCUSSION:**

This Commission is seeking comment above on whether EAS Participants will be required to translate CAP-formatted messages into SAME-compliant messages in conformance with the ECIG Implementation Guide within whatever time period they may establish in this proceeding. They are also seeking comment on whether and how we should incorporate such conformance into the Commission's equipment certification process. The duplication concerns raised by CSRIC are addressed in the ECIG Implementation Guide, with which EAS devices may be required to conform. The Commission is tentatively concluding that, no revisions to Section 11.33(a)(10) would be required if we were to require EAS Participants to translate CAP-formatted messages into SAME-formatted messages in conformance with the ECIG Implementation Guide.

The BWWG believes that the capabilities for translating CAP into SAME for legacy EAS compatibility should be a part of FCC compliance testing. In simple terms, we need to know if all new and legacy EAS equipment will "play nice" together.

#### **Header Codes**

#### **FNPRM DISCUSSION:**

*Section 11.33(a)(11)*. Section 11.33(a)(11) specifies that a header code with the EAN event code that an EAS Participant receives through any of the audio inputs must override all other messages. Although not raised by CSRIC or the parties responding to the *Part 11 Public Notice*, we seek comment as to whether we should update this provision to include CAP-formatted messages received through a non-audio input, as EAS Participants will not receive CAP-formatted messages through the audio port.

**FNPRM QUESTIONS: Is such an amendment to our Rules necessary? What are the potential costs and benefits of such an amendment? Is there an alternative approach that would be less burdensome to equipment manufacturers and/or EAS Participants that would achieve the same result?**

The BWWG believes this has to be done to be consistent with the existing Part 11 requirement that EAN messages take absolute and primary priority. EAN should override any "manual" operation and, as noted above, is sufficient reason to mandate the EAS unit be inserted in the program audio chain at all stations. Further, 11.45 should be modified to clearly state that all EAS decoders should either be installed in main program streams, or by using switchers or other means that automatically go to the EAS source when an EAN or other mandatory EAS code is detected.

#### **Miscellaneous Rule Changes Related to Fully Implementing CAP**

#### **FNPRM DISCUSSION:**

*Section 11.1*. Section 11.1 specifies the purpose of the EAS. Among other things, this Section provides that "[t]he EAS may be used to provide the heads of State and local government, or their designated representatives, with a means of emergency communication with the public in their State or Local Area." CSRIC recommended that we update this Section "to include new CAP related alert originators." CSRIC further explained, "Additional originators are tribal, territorial, and [state governors (or their designees)]." We seek comment on whether such action is necessary or whether the language currently in Section 11.1 is broad enough to capture these entities so that EAS Participants may or must carry their alert messages.

The BWWG believes that governor mandatory and governor-designee mandatory EAS is a mistake that should not find its way into the Rules. States should be allowed the flexibility to determine who should originate activations and which event codes should be mandatory for their broadcasters.

#### **FNPRM DISCUSSION:**

**Section 11.11.** Section 11.11 identifies the various categories of EAS Participants and specifies their minimum equipment deployment and audio/visual message transmission obligations. Various parties suggested that we incorporate the obligation to receive CAP-formatted messages into the minimum requirements for EAS Participants set out in Section 11.11(a). CSRIC, for example, asserted “the requirement for receiving and decoding CAP originated messages . . . also necessitates adding CAP reception in the definition of minimum requirements for EAS Participants.” CSRIC also stated that the “‘EAS Equipment Requirement’ tables need to be revised to reflect the range of new CAP EAS equipment necessary for the monitoring, reception, decoding, and video/audio display of alerts,” and recommended more generally that that we “[u]pdate [Section 11.11] to include [a] reference for interface requirements to IPAWS source.” SpectraRep suggested, “Under § 11.11(a) the addition of a requirement for receiving and decoding CAP originated messages [], also necessitates adding CAP reception in the definition of minimum requirements for EAS Participants.” TFT urged that we revise the analog and digital broadcast station equipment deployment table in Section 11.11(a) “to list CAP reception and decoding requirement . . . in accordance with § 11.56 of this part.”

The BWWG agrees with both the CSRIC and SpectraRep suggestions.

#### **FNPEM DISCUSSION:**

We note at the outset that the reference to “analog television broadcast stations” is obsolete in light of the fact that since June 13, 2009, all full-power U.S. television stations have broadcast over-the-air signals in digital only and seek comment on whether we should delete the reference to “analog television broadcast stations” from Section 11.11. We further seek comment on suggestions that incorporating CAP-compliance into Section 11.11 would further our goal of fully codifying the CAP-related obligations into Part 11. Specifically, we seek comment on whether we should amend the text of Section 11.11(a) to include as a minimum requirement compliance with the CAP-related requirements in Section 11.56. (What about remaining analog TV translators? If that is a concern, the analog language can go away when all analog translators are decommissioned, or the Commission may have to issue clarification on translator compliance.)

With respect to amending the various equipment requirement tables in Section 11.11 to incorporate CAP-related obligations, we observe that the purpose of these tables is to identify the type of equipment (encoder and/or decoder) that specified EAS Participants must deploy, along with their obligations to transmit audio and/or video messages, and the effective dates that apply to these obligations. The equipment deployment obligations are not changing due to CAP, and any CAP-related requirements specific to EAS encoders and decoders will be incorporated into the Part 11 Sections addressing these devices (specifically, Sections 11.32 and 11.33). We are, however, seeking comment on whether to allow EAS Participants to meet their obligations to receive and translate CAP-formatted messages by deploying intermediary devices that would interface with their existing deployed legacy EAS equipment. Accordingly, we seek comment on whether, for CAP purposes, we should amend the equipment deployment tables in Section 11.11 by adding a footnote to the “EAS decoder” entries in the tables, indicating that EAS Participants may elect to meet their obligation to receive and translate CAP-formatted messages by deploying an intermediary device in addition to the EAS decoder used to decode messages transmitted in the EAS Protocol.

The BWWG, as stated elsewhere, believes allowing so-called CAP Converter devices to be created may have been a mistake. This mistake should at best be rectified by not authorizing these devices, or, at worst, not be carried forward as authorized EAS devices any longer than is absolutely necessary. While this horse has already left the barn, a serious effort has to be made to corral the animal before it causes further damage to the EAS landscape.

The FCC also needs to recognize that a minority of broadcasters has invested in these devices, in some cases, against the recommendations of their SECC's and State Broadcaster Associations. Those that have invested in the new CAP equipment should not be penalized by having to conform to Rules that were set at the lowest common denominator.

#### **FNPRM DISCUSSION:**

**We also observe that all of the effective dates identified in the equipment deployment tables in Section 11.11 have long expired, and thus their inclusion in the Rule text appears superfluous. Moreover, because these dates have passed, some equipment deployment obligations that once were staggered among EAS Participants now apply equally to all of them. For example, all EAS Participants are required to deploy a decoder. The two-tone encoder entry in the table covering analog and digital broadcast stations appears similarly stale and indistinguishable from the general encoder deployment obligations. Accordingly, we seek comment on whether we should delete the date references in the equipment deployment tables in Section 11.11 (as well as cross-references to these dates in other Sections of Part 11, such as Section 11.51(c) and (d)), along with the entry for two-tone encoders. Is such a clarifying amendment necessary? We also seek comment on whether the equipment deployment tables covering analog, wireless, and digital cable and wireline video systems can be combined into a single table, as well as any other revisions we could make to Section 11.11 to streamline it and make it easier to follow.**

The BWWG agrees.

#### **FNPRM DISCUSSION:**

**In addition, parties responding to the *Part 11 Public Notice* recommended that we amend Section 11.11 to reflect the CAP monitoring obligations in Section 11.52(d). TFT, for example, asserted that “for all EAS participants, the Table [in Section 11.11(a)] needs to be revised to list ... a requirement to monitor CAP servers as defined by State and Local Area plans and in accordance with § 11.56 of this part.” We seek comment on whether we should incorporate monitoring requirements or references thereto into Section 11.11. Is such a change necessary? Our rules already require decoders to meet the monitoring requirements in Section 11.52, and we are seeking comment on incorporating CAP monitoring into that Section. This would mean that the basic requirement to deploy a decoder (or intermediary device) necessarily would trigger CAP monitoring obligations. We seek comment on this proposal.**

The BWWG believes that the specific means, structure and detail for monitoring such CAP messages should be clearly explained in local and state EAS plans. Part 11 should clearly state this requirement as part of clearly explaining the role of local and state EAS Committees<sup>27</sup>. The BWWG further believes that

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<sup>27</sup> The BWWG must point out among the uncertainties that should be addressed by the Part 11 rewrite should be clear directions on not only who should appoint local and state committee members, but what the duties of these entities should be. While pointing this out, the BWWG is fully aware that describing appointments and duties for volunteer groups where no compensation is the rule rather than the exception is an extremely thorny issue with no easy answers.

there should be at least a 90-day period from the time a state plan calling for state and/or local CAP messaging is approved by the Commission to when monitoring compliance is required.

#### **FNPRM QUESTION**

**We seek comment on whether our proposed approaches for Section 11.11 are sufficient to capture the CAP-related obligations we address in this proceeding. Are these proposed amendments necessary? What are their potential costs and benefits? How could any requirements we might consider with respect to amending Section 11.11 be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?**

The BWWG believes that a clear path to an EAS based 100% on CAP must be the goal. The future of the EAS rests on the extent to which Part 11 .11 (and the rest of Part 11) can communicate this clearly.

**Section 11.20. Section 11.20 generally describes the functions and architectural elements of state relay networks. Among other things, this Section provides that state relay networks distribute “State EAS messages” and may be composed of “any ... communications facilities” and that “any ... communications technology may be used to distribute State emergency messages.” CSRIC recommended that we update Section 11.20 “to accommodate the relay of CAP originated messages to EAS participants via the addition of state CAP relay networks.” Some parties responding to the *Part 11 Public Notice* also suggested changing the language in this Section to reference CAP sources and networks. We seek comment on whether the existing language of Section 11.20 requires a specific reference to CAP because its language broadly covers “EAS messages,” which could be in the SAME or CAP formats and distributed over “any” communications facility and/or technology.**

While the language does seem to cover all authorized EAS modes, it seems to the BWWG that CAP should be mentioned into this Section so there is no doubt or uncertainty.

#### **FNPRM DISCUSSION:**

**In addition, SpectraRep suggested that we incorporate a requirement into Section 11.20 that EAS participants “monitor at least one state and/or local CAP server.” While monitoring state CAP messages might involve the state relay network in a given state, it may not apply to all states, because states may deploy differently architected CAP systems. As discussed above, we have tentatively concluded that EAS Participants must monitor the RSS feed(s) used by a state’s EAS system as the source of governor-originated CAP messages (provided such CAP system is described in the state’s EAS Plan submitted to and approved by the Commission). Accordingly, we seek comment on whether we need to incorporate CAP monitoring into Section 11.20.**

BWWG asks for ATOM feeds, not RSS, unless there is reassurance that the liabilities of RSS feeds we outlined above have been mitigated.

#### **FNPRM QUESTION:**

**We seek comment on whether our proposed approaches for Section 11.20 are sufficient to capture the CAP-related obligations we address in this proceeding. Are these proposed amendments necessary? What are their potential costs and benefits? How could any requirements we might consider with respect to amending Section 11.20 be tailored to impose the least amount of burden**

**on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?**

The BWWG agrees with the ECIG recommendation that with the amended monitoring requirements in §11.52, Part 11 Rules need to be amended to reflect CAP EAS monitoring within state relay networks. Underlying this course of action the BWWG reminds the Commission that it may be imposing a cost on local and state government that they may be unwilling or unable to fund. The BWWG suggests that existing and future public safety grants and funding sources be encouraged to broaden their thinking to make sure that not only internal public safety communications needs are met, but also “external” public safety emergency communications that stem from assuring that a public at risk receives timely and informative warnings that can help them take better protective action to preserve lives and property. We are indeed calling for what we are call a **“Warning Bill of Rights”** based on public need underscored by the social and economic costs of not having in place a proper public warning infrastructure. As far as performance objectives, the BWWG recommends that our recommendation that a national stakeholder group modeled on the Partnership for Public Warning (PPW) be convened to, once and for all, give the United States the overall public warning strategy and infrastructure it has for so long gone without.

#### **FNPRM DISCUSSION:**

**Section 11.21. Section 11.21 generally specifies the contents of State and Local Area EAS Plans and the FCC Mapbook. Among other things, Section 11.21(a) indicates that such plans should identify the “monitoring assignments and the specific primary and backup path for the EAN from the PEP to each station in the plan.” With respect to this Section, CSRIC recommended that we “[i]nclude language on EAN distribution via IPAWS.”**

The BWWG certainly agrees with CSRIC that IPAWS should become an additional distribution means for PEP. The BWWG must however state that the original reasons for using AM radio stations as the vehicle for Primary Entry Point (PEP) was and is valid. AM radio remains the most robust and most effective wireless means of communications with the public who could be deprived of utility power, IP connectivity, cellular phone service at any time by natural or human-created disasters. PEP was envisioned as the last ditch way for the President or designee to communicate with the largest possible number of people, as rapidly as possible, when all other means of doing so are not available.

#### **FNPRM QUESTION**

**In contrast to the distribution of SAME-formatted EANs, which are relayed from station-to-station using the same distribution chain that states use for transmitting intra-state SAME-formatted messages, under our tentative proposal for CAP monitoring, EAS Participants will obtain CAP-formatted EAN messages from RSS feeds that they are required to monitor and may receive state CAP-based EAS alerts from RSS feeds as well. We have tentatively proposed to specify this monitoring arrangement in Section 11.52 (which would be cross-referenced in Section 11.56). To prevent any confusion on this point, we tentatively conclude that we should revise the language in Section 11.21(a) to make clear that the State Area EAS Plans specify the monitoring assignments and the specific primary and backup path for SAME-formatted EANs and that the monitoring requirements for CAP-formatted EANs are set forth in Section 11.52. We seek comment on this tentative conclusion. Is such a clarifying amendment necessary?**

**CSRIC also recommended that the “‘State and Local Area plans and FCC Mapbook’ should be updated to include CAP.” With respect to the State Area EAS Plan requirements in Section 11.21(a), we observe that this Section specifies that these plans must describe “how state-level and geographically targeted EAS messages initiated by a state governor ... will be transmitted to EAS Participants” in order to trigger the obligation to process CAP-formatted messages initiated by state**

governors but does not specify that the obligation applies to CAP-formatted messaging. The same omission also occurs in Section 11.55(a), which specifies that “[a]ll EAS Participants within a state (excepting SDARs and DBS providers) must receive and transmit state-level and geographically targeted EAS messages, as aggregated and delivered by the state governor” but fails to make clear that the EAS messages at issue are CAP-formatted EAS messages. These were inadvertent omissions, and we tentatively conclude that we should amend the text of both Sections to make clear that they apply to CAP-formatted EAS messages. We seek comment on this tentative conclusion.

The BWWG agrees these omissions should be corrected.

## **FNPRM DISCUSSION**

**As described in Section 11.21(c), the FCC Mapbook is based upon the State and Local Area EAS plans and “organizes all broadcast stations and cable systems according to their State, EAS Local Area, and EAS designation.” We seek comment on whether and, if so, how we should revise the FCC Mapbook content requirements to identify federal and state CAP message origination and distribution. Would such a revision be useful or necessary? Are State and Local EAS Plans sufficiently specific or reliably updated at sufficiently regular intervals to be accurately reflected in the latest version of the FCC Mapbook?**

The BWWG believes that all federal and state CAP servers should be available for FEMA, the FCC as well as EAS stakeholders in some form, preferably on a website requiring a high level of security and password protection. The general public and the hacker community have no need to know these details of the EAS-CAP or EAS “classic” distribution infrastructure.

**All SAME and CAP monitoring sources and assignments should be clearly described in each local plan. While state plans are at their base an aggregation of local plans, they should also be required to clearly describe statewide wired and unwired distribution systems for SAME and CAP, as well as all connections to the Federal aggregator that may be distributed in SAME format as a means for backing up IP distribution.**

The BWWG agrees, and hopes such information will be handled in ways to assure that persons without a specific “need to know” should be prevented from accessing this information. Further, as is already the practice of some Local and State Committees (LECC’s and SECC’s), copies of their plans with critical/sensitive information should only be distributed to known EAS entry points and not made available to the general public.

**As a separate matter, Timm asserted with respect to Section 11.21(c) that “rather than generating a list of each individual station in the state, a simple representation of how the EAN is distributed from the PEP/NP to the PN/NN stations in the state (usually via the SP to the SR to the LP) is adequate to demonstrate what the Commission is interested in documenting.” We seek comment on Timm’s proposal, including whether such an approach would be useful. We observe, however, that any State Area EAS Plan drafted according to Timm’s recommendations would lack the data to enable the Commission to assemble a mapbook beyond the LP level and would not include information concerning many EAS Participants, including all cable providers. We also observe that the *National Test Order* requires EAS Participants to submit various test data to the Commission, including identification of the monitored station whose EAS broadcast was decoded, which might aid in preparing accurate information on EAS monitoring assignments.**

The BWWG agrees with Timm on this point.

## **FNPRM DISCUSSION:**

**We seek comment on whether our proposed approaches for Section 11.21 are sufficient to capture the CAP-related obligations we address in this proceeding. Are these proposed amendments necessary? What are their potential costs and benefits? How could any requirements we might consider with respect to amending Section 11.21 be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?**

As CSRIC has pointed out, IPAWS can (and should) augment distribution of Primary Entry Point (PEP) messages. BWWG agrees.

## **FNPRM QUESTION**

**Section 11.31(a)(3).** Section 11.31(a) specifies the components of an EAS message that comprise the EAS Protocol. Section 11.31(a)(3) states that the actual message “may be audio, video or text.” TFT asserted that “the provision for video or text in [Section 11.31(a)(3)] is no longer necessary” because “CAP messages have the ability to contain video, audio, graphics and text [and] CAP receiving equipment may (optionally) have additional features such as text-to-speech.” As discussed above, we have tentatively concluded that we should not change the output elements of the EAS Protocol but rather should revise the Part 11 Rules to ensure that CAP-formatted messages are converted into the existing EAS Protocol. We also seek comment on TFT’s proposal, which is premised upon changing the EAS Protocol to accommodate CAP’s capabilities. What are the potential costs and benefits of this proposal? How could any requirements we might consider be tailored to impose the list amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?

First, the BWWG does not believe that the FCC should implement governor mandatory EAS in any formal way. Therefore, BWWG does not agree that a separate new GOV originator code is needed. To put it simply and clearly, emergencies are event driven - not governor driven.

## **FNPRM QUESTION**

**Section 11.35(a).** Section 11.35(a) specifies certain operational readiness requirements for EAS equipment. This Section currently requires, among other things, that EAS Participants install EAS equipment so that the monitoring and transmitting functions are available during the times that the EAS Participants’ stations and systems are in operation, that EAS Participants determine the cause of any failure to receive the required tests or activations during tests, and that EAS Participants make appropriate log entries indicating reasons why they did not receive any tests. CSRIC recommended that we update this Section “to include the CAP receiving requirement.” We observe that the obligation to receive CAP is specified in Section 11.56, and we have tentatively proposed to include this as a minimum requirement in several other rule Sections. Accordingly, we tentatively conclude that it is unnecessary to include a CAP-receiving requirement in Section 11.35(a). We seek comment on this tentative conclusion.

Since 11.56 requires EAS participant to receive CAP messages, the BWWG agrees with the Commission on this point.

#### **FNPRM DISCUSSION:**

**Section 11.45.** Section 11.45 prohibits false or deceptive EAS transmissions. This provision specifies that “[n]o person may transmit or cause to transmit the EAS codes or Attention Signal, or a recording or simulation thereof, in any circumstance other than in an actual National, State or Local Area emergency or authorized test of the EAS.” CSRIC recommended that we “[m]odify [the] Prohibition to reference CAP ‘Actual’ status indicators” and noted that the “actual” status for CAP messages is defined in the ECIG Implementation Guide. We are seeking comment on whether to require all EAS Participants to translate CAP-formatted messages pursuant to the ECIG Implementation Guide. Should we decide to require all EAS Participants to translate CAP-formatted messages pursuant to the ECIG Implementation Guide, any restrictions in the Guide against broadcasting CAP-formatted messages would apply. Beyond that, the language of Section 11.45 prohibiting false or deceptive EAS transmissions applies regardless of whether such transmissions were initiated by a CAP-formatted message or a SAME-formatted message. We seek comment on whether we should make any revisions to Section 11.45 to accommodate CAP-formatted messages. What are the potential costs and benefits of any recommendations? How could any requirements we might consider with respect to requiring all EAS Participants to translate CAP-formatted messages pursuant to the ECIG Implementation Guide be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?

To the knowledge of the BWWG, there have never been any intentionally false EAS transmissions. The errors that we do know about that are also well known to all EAS subject experts are origination problems in the emergency management domain, that arise from poor or inadequate training lack of emergency management commitment to using the EAS to help better protect a public at risk, and lack of public/private state level stakeholder partnership activities to monitor EAS activity.

The BWWG is aware that there have been advertisements and promotions that have gone over the line regarding existing prohibitions. The BWWG sees no need for further prohibitions, but does hope that the Commission will do more to enforce existing prohibitions on the books. It is especially important that this provision be enforced prior to the first National live code EAN Test.

#### **FNPRM DISCUSSION:**

**Section 11.51.** Section 11.51 specifies EAS code and Attention Signal transmission requirements. This Section currently lists, among other things, certain basic encoder requirements for the various classes of EAS Participants. For example, Sections 11.51(g)(1), (h)(1), (i)(1), and (j)(1) require that the applicable EAS Participants must, among other things, “install, operate, and maintain equipment capable of generating the EAS codes.” CSRIC recommended changing this language to state that “[e]quipment must be capable of rendering a CAP compliant message to EAS[,] [a]s opposed to simply generating an EAS code.”

The BWWG agrees with the recommendations of the CSRIC.

#### **FNPRM DISCUSSION:**

As discussed above, we have tentatively concluded that EAS Participants should only be required at this time to be capable of retrieving CAP-formatted Federal EAS alerts from RSS feeds and converting them into SAME-compliant messages for transmission to the public (and, as applicable and technically feasible, encoding them in SAME for rebroadcast). Assuming that EAS Participants are not required to encode EAS messages in the CAP format, there would appear to be no basis for revising Section 11.51 to require EAS Participants to transmit (or “render”) a CAP-compliant

**message. Accordingly, we tentatively conclude that we should not adopt CSRIC's recommendation to include "rendering a CAP message" in Section 11.51. We seek comment on this tentative conclusion.**

Again, the BWWG must remind the Commission that FEMA's choice of RSS feeds without taking into account and mitigating the liabilities of RSS feeds is a mistake. ATOM feeds as mentioned previously in detail would be a better choice. We do however agree with the Commission that the change to 11.51 is unnecessary for broadcast and cable entry points. That said, broadcast or cable equipment that relays a CAP message intact using an out-of-band SHOULD be capable of accurate rendering any feed format, present or future. The BWWG suspects that all EAS CAP devices that have past FEMA conformance testing either already have this capability, or can be easily modified.

#### **FNPRM DISCUSSION:**

**Sections 11.51(d), (g)(3), (h)(3), and (j)(2) establish when EAS Participants must transmit visual EAS messages – typically aired in the form of a video crawl – and requires that such messages contain the originator, event, location, and the valid time period of the EAS message. Timm recommended that we "add a note in the above Sections stating that for assembling the visual message the Originator, Event, Location and valid time period of the EAS alert may be derived from pertinent fields within the CAP message, as opposed to being required to be derived only from the EAS header code." According to Timm, "With the advent of CAP messaging, EAS Participants will now have the availability of more descriptive alert information than the generic information derived from the EAS header code."**

The BWWG agrees with the Timm recommendation, emphasizing the need to clearly defined location information.

#### **FNPRM DISCUSSION:**

**As discussed above, we have tentatively concluded that, as long as FEMA is using CAP solely to activate SAME-based alerts over the current EAS, we will only require EAS equipment to produce a SAME-compliant output. While we appreciate the fact that CAP allows for the delivery of more detailed and varied information than the SAME protocol, our tentative view is that during the interim period until the Next Generation EAS is fully implemented, the message that EAS Participants transmit to the public should be uniformly consistent whether it is originated in SAME or CAP. Allowing EAS Participants to derive some messages from CAP data fields that do not correlate to SAME data fields could result in inconsistencies in the alerts disseminated to the public and potentially result in confusion. In this regard, we observe that the primary purpose of the ECIG Implementation Guide is to ensure consistency across devices and delivery platforms in how EAS Participants decode CAP-formatted messages and present them to the public. As the ECIG Implementation Guide explains, the need for precise translation of CAP into SAME is also necessary to prevent disruptions to EAS Participant operations:**

**All CAP-to-EAS devices MUST generate the EXACT same EAS message for a given CAP message. To do otherwise could result in EAS messages for the same CAP alert that would not be detected as duplicates, resulting in multiple interruptions to broadcasters.**

The BWWG agrees with the language and intent of the ECIG implementation guide.

## **FNPRM QUESTION**

We also observe, however, that the ECIG Implementation Guide provides procedures for the CAP-formatted message video crawl translation to include not only the EAS codes required under the Part 11 rules, but also additional text relating to the event that presumably would provide more information to alert message viewers. This means that the video crawl developed from a CAP-formatted message could contain elements that are identical to the video crawl developed from an identical SAME-formatted message, and thus would appear to be compliant with the requirements in Section 11.51, but would include additional alert-related text, and thus be more descriptive. Because we have tentatively concluded that we will not require EAS Participants to encode EAS messages (whether for initial broadcast or rebroadcast) in CAP format, this additional descriptive information would only be available to viewers of stations that received the CAP-formatted version of a given EAS alert messages and not to stations that receive the SAME-formatted version of such EAS alert message.

We seek comment on whether we should continue to use the SAME-based protocol codes as the baseline for deriving the visual EAS message requirements in Section 11.51. As explained above, the video crawl procedures set forth in the ECIG Implementation Guide appear to allow an EAS Participant to provide more descriptive information. Would there be any potential for confusion if the viewers in one area were presented with a video crawl developed from an EAS message received and formatted in SAME, while viewers in another area were presented with a video crawl developed from the identical EAS message received and formatted in CAP? Is there any likelihood of such an occurrence, given (i) that the default for processing identical SAME- and CAP-formatted EAS messages under the ECIG Implementation Guide is to process the CAP-formatted message; and (ii) the restriction against processing duplicate messages?

The BWWG believes that the risk of confusion alluded to is greatest when the amount of information people at risk would get is hobbled by being presented using the SAME format. The BWWG therefore believes that while continuing use of SAME as the baseline may be unavoidable, the period of “unavoidability” needs to be as short as possible. We should not wait another 10 or 15 years, possibly longer, for this to happen.

## **FNPRM QUESTION**

We seek comment on whether our proposed approaches for Section 11.51 are sufficient to capture the CAP-related obligations we address in this proceeding. Are these proposed changes necessary? What are their potential costs and benefits? How could any requirements we might consider with respect to amending Section 11.51 be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?

The BWWG agrees with all recommendations regarding 11.51 made by the CSRIC

**Section 11.54.** Section 11.54 specifies the operational requirements that apply to EAS Participants during a national level emergency. Section 11.54(b) lists the actions an EAS Participant must take upon receipt of an EAN. CSRIC recommended that we add a new subparagraph to Section 11.54(b) specifying “EAS Messages will be broadcast only if the scope of CAP alert is ‘Public.’” As discussed above, we have tentatively concluded that we will only require EAS equipment to produce a SAME-compliant output. We observe that there is no requirement in the EAS Protocol requirements, or more broadly, the Part 11 Rules, to broadcast only “Public” EAS messages in the processing of SAME-formatted EAS messages. Moreover, the ECIG Implementation Guide already specifies that EAS Participants must ignore CAP-formatted messages with a value in the “scope” field other than “Public.” We are seeking comment on whether to require EAS Participants to translate CAP-formatted messages pursuant to the ECIG Implementation Guide. If we were to do so, any

restrictions against processing CAP-formatted messages without the “Public” value in the scope field would be satisfied. We seek comment on whether to adopt CSRIC’s recommendation to mandate that CAP-formatted messages be broadcast only if the scope of the alert is “Public.”

The BWWG agrees with the CSRIC recommendations on 11.54

#### **FNPRM QUESTION**

**CSRIC also recommended that we revise Section 11.54(b)(1) to include IPAWS monitoring. Section 11.54(b)(1) requires that, immediately upon receipt of an EAN, EAS Participants monitor the two sources identified in the State Area EAS Plan. As discussed above, we have tentatively concluded that we will specify federal CAP monitoring requirements in Section 11.52. In addition, we are seeking comment in Section III.F of this item on several revisions to Section 11.54 that would obviate this issue. To the extent that we retain Section 11.54(b)(1) in the final rules that result from this proceeding, we seek comment regarding whether we should revise the language to reflect federal CAP monitoring obligations by adding a cross-reference to the monitoring requirements in Section 11.52 or otherwise revise this Section of the Rules.**

The BWWG agrees with CSRIC that EAS Messages will be broadcast only if the scope of CAP alert is “Public”.

The BWWG believes that while the issue of IPAWS monitoring is covered in 11.52, 11.54 should be amended as CSRIC asks. The benefit: Greater clarity and less chance for ambiguity.

#### **FNPRM DISCUSSION:**

**We seek comment on whether our proposed approaches for Section 11.54 are sufficient to capture the CAP-related obligations we address in this proceeding. Are these proposed changes necessary? What are their potential costs and benefits? How could any requirements we might consider with respect to amending Section 11.54 be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?**

(See above answers to the question in the FNPRM Item, paragraph 64)

### **EAS Equipment Certification**

#### **FNPRM DISCUSSION:**

**Section 11.34 of the Part 11 Rules requires EAS encoders and decoders to be certified in accordance with the equipment authorization procedures set forth in Part 2, subpart J, of the Commission’s rules. Among other things, certification under Part 2 requires device testing to demonstrate compliance with the applicable specifications set forth in the Part 11 rules. Telecommunications Certification Bodies (TCBs) typically perform these tests, which include testing for compliance with the provisions in Sections 11.31, 11.32, and 11.33, as applicable.**

The BWWG agrees with arguments for FCC conformance testing by a number of the vendor stakeholders. Since IPAWS NIMS conformance testing only provides verification of a project-specific CAP data format, and is therefore necessary for the IPAWS project, FEMA testing is NOT sufficient for the overall CAP-EAS endeavor and compliance assurance with Part 11. The proper CAP-to-EAS translation function (the ECIG EAS CAP Profile) is not included in the IPAWS NIMS conformance tests. Therefore, the FCC must carry

out its statutory role in EAS certification for new CAP EAS devices. All new CAP-capable systems, both hardware and software based, needs to be FCC-certified. CAP-Converter devices, if allowed under revised Rules, need to be tested for compatibility with existing “classic” EAS devices. As we in the BWWG put it, the Commission must certify that the installed base of legacy and new EAS equipment will all “play nice” together.

#### **FNPRM DISCUSSION:**

**As a threshold matter, CSRIC, along with several parties responding to the *Part 11 Public Notice*, proposed that CAP-compliant EAS equipment, and in particular the CAP-to-SAME formatting conversion, generally be subject to certification. CSRIC observed that the ICAP program “only provides verification of a project-specific CAP data format, and is therefore necessary for the IPAWS project, but not sufficient for the overall CAP-EAS endeavor.” More specifically, according to CSRIC, “The proper CAP-to-EAS translation function is not included in the [ICAP] conformance tests.” Thus, CSRIC advocates, “it is necessary that the FCC continue and extend its statutory role in EAS certification to CAP EAS devices.” To that end, CSRIC proposed that we amend Section 11.34 to “[a]dd FCC certification for CAP EAS devices.” Similarly, Monroe stated “[Section] 11.34 should be amended to add a provision for FCC certification of CAP EAS devices, in line with current provisions for FCC certification of current EAS devices.” Timm contended that if FEMA’s ICAP program is not going to test for compliance with the ECIG Implementation Guide, the “FCC should then require equipment conformance testing to the [ECIG] Implementation Guide criteria.”**

It stands to reason to the BWWG that if Part 11 shows either or both specific hardware and software requirements, the FCC should follow through with a formal certification process. Users/purchasers should have no duty or burden in this regard other than assuring that manufacturer distributed updates are installed properly. However, many users/purchasers assume that the FCC has “signed off” on the equipment and that means it should work as advertised.

#### **FNPRM QUESTION**

**Sage contended that “it is important to add conformance to the CAP protocol, IPAWS profile, and the [ECIG] Implementation Guide, to the Part 11 Rules.” According to Sage, the ICAP SDoC “should become part of the Part 11 certification requirements, [such that] no device can be sold for the purpose of meeting the updated Part 11 requirements without an SDoC. Sage added that “The SDoC should be filed with the rest of the Part 11 certification application in the normal manner.”**

**We seek comment on whether and how we should incorporate compliance with respect to CAP functionality into the Commission’s existing certification scheme. There appear to be two CAP-related standards with which conformance could be certified: (i) CAP v1.2 USA IPAWS Profile v1.0; and (ii) the ECIG Implementation Guide. With respect to the former, we observe that while the CAP v1.2 USA IPAWS Profile v1.0 standard specifies requirements and guidelines for constructing a CAP v1.2 message that broadly complies with the EAS requirements, it does so in the context of sending a message through the IPAWS system. The primary users of the CAP v1.2 USA IPAWS Profile v1.0 standard are thus CAP-based alert message originators, as opposed to EAS Participants, all of which are FCC licensees and regulated entities. As explained above, we have tentatively concluded that we should maintain a SAME-only output for the EAS and by extension not require EAS equipment to encode messages in anything other than the SAME format. Under this tentative approach, the Part 11 rules would not cover CAP message originating equipment. Further, we observe that FEMA’s ICAP program is designed to establish conformance with the CAP v1.2 USA IPAWS Profile v1.0 standard. Accordingly, we tentatively conclude that it would be inappropriate to incorporate conformance with the CAP v1.2 USA IPAWS Profile v1.0 into the Commission’s certification process. We seek comment on this tentative conclusion.**

The BWWG suggests that the FCC partner with FEMA to set up an FCC conformance testing procedure that the BWWG believes should be spelled out clearly in Part 11 language. This strategy will have the benefit of assuring that any subsequent changes in EAS CAP equipment, or problems uncovered during the FCC phase of conformance testing, are fully coordinated between the two agencies that have, like it or not, joint responsibility for various aspects of conformance and compliance.

#### **FNPRM QUESTION**

**With respect to the ECIG Implementation Guide, we ask whether it would be appropriate for the Commission to certify conformance with this document. We observe, for example, that the Commission has historically certified the output side of the EAS system – specifically, that EAS equipment is outputting SAME-formatted EAS messages in conformance with EAS Protocol and other specifications in Part 11 (whether decoding and broadcasting a SAME-formatted message or encoding to originate or rebroadcast a SAME-formatted message). By contrast, certifying compliance with the ECIG Implementation Guide covers the input side – specifically, that incoming CAP-formatted EAS messages are being converted into SAME-compliant messages for broadcast (and, to the extent technically feasible, rebroadcast, in the case of stations responsible for encoding EAS messages received for other stations to monitor) in conformance with the ECIG Implementation Guide.**

The BWWG says, “Definitely YES!”

#### **FNPRM DISCUSSION:**

**We seek comment on whether and how we should implement conformance testing for the ECIG Implementation Guide. Should we adopt conformance testing for the ECIG Implementation Guide? Should we request that ECIG or FEMA develop a test plan and/or test messages to demonstrate CAP-to-SAME conversion in conformance with the ECIG Implementation Guide (that presumably could be incorporated into the existing ECIG Implementation Guide as an amendment or addendum)? Assuming that test procedures could be incorporated into the ECIG Implementation Guide as an amendment or addendum, would FEMA’s adoption of the ECIG Implementation Guide with amendments or an addendum be sufficient or necessary to make compliance with the test procedures mandatory? How soon prior to the compliance date for meeting the CAP-related obligations in Part 11 (whether that date is September 30, 2011, or extended further, as a result of this item) would such test procedures need to be finalized (and, if applicable, adopted by FEMA) so that manufacturers have sufficient time to complete device certification? Should we leave it to manufacturers to develop their own conformance test regime, perhaps based upon test procedures developed informally by ECIG but not necessarily incorporated into an amended version of the ECIG Implementation Guide, in concert with third party test laboratories or TCBs? Is it necessary or useful for the Commission to directly regulate the conformance testing procedures associated with the ECIG Implementation Guide?**

The BWWG believes the FCC phase of testing should be conducted to simulate the widest possible range of wired and wireless CAP and SAME relay methods, conditions, and messages. For SAME, all current authorized warning codes should be tested. Elements such as assuring that two-minute internal recorders for messages works properly should be tested.

The BWWG respectfully submits that since governor mandatory was not a part of FEMA conformance testing, the Commission has an excellent reason to consign this ill-advised change to the history books, not the rule books.

#### **FNPRM QUESTION**

**If conformance testing is desirable, and assuming that uniform test procedures can be established, what entity or entities should perform such tests? If FEMA elects to add compliance testing for the ECIG Implementation Guide to its ICAP program, should we, as proposed by SAGE, mandate ICAP certification to cover the EAS equipment's CAP-to-SAME translation requirements, presumably as a prerequisite to obtaining FCC certification? Would the FCC's lack of control over the ICAP certification process, and uncertainty as to how long the ICAP program will remain in effect, make it imprudent to tie FCC certification to ICAP certification? For example, if FEMA were to adopt an updated CAP standard (as determined by OASIS) or revise its ICAP certification process, such that manufacturers were required to recertify previously certified equipment, would the manufacturer also have to obtain a new FCC certification?**

The BWWG suggests a joint testing strategy as explained above.

#### **FNPRM QUESTION**

**If we were to make ICAP certification a prerequisite to obtaining FCC certification for a CAP-decoding EAS device, how would manufacturers demonstrate ICAP certification compliance? Should we, as Sage suggests, require the inclusion of an ICAP SDoC along with the other FCC certification application materials? Alternatively, should we require inclusion of the final test report produced by the ICAP test laboratory along with the other FCC certification application materials, so that the Commission could maintain some level of oversight of the CAP-related testing process?**

The BWWG believes that the SdoC procedure has so far not proven to be terribly informative, easy to use or helpful to buyers of EAS CAP equipment. What is needed is for formal FCC notification to the EAS equipment buying community that simply says a given piece of equipment has passed.

#### **FNPRM QUESTION**

**If FEMA elects not to add conformance testing for the ECIG Implementation Guide to its ICAP program, and assuming that FEMA or ECIG (or some other appropriate body) can develop suitable test procedures, should we allow TCBs to perform testing pursuant to such test procedures, just as the TCBs currently test for Part 11 compliance? Alternatively, should we make such conformance testing a requirement for FCC certification and permit third party test laboratories to perform such testing and then submit the test reports to a TCB for review? Whether formal test procedures are developed by FEMA or ECIG (or some other body) – either at all or in a timely manner that allows manufacturers to complete device certification prior to the deadline for compliance with the CAP-related obligations in Part 11 – should the Commission permit manufacturers to demonstrate compliance with the ECIG Implementation Guide via the Declaration of Conformity provisions in Part 2 of the Commission's rules? Should we consider alternative approaches to ECIG Implementation Guide testing that would minimize costs or burdens to equipment manufacturers and/or EAS Participants yet would achieve the same goal of ensuring that EAS devices can convert CAP-formatted messages into EAS Protocol-compliant messages in conformance with the ECIG Implementation Guide requirements?**

The BWWG believes the responsibility for ICAP conformance and tests assuring legacy and new equipment will all work properly under real world conditions is the statutory responsibility of the FCC that should not be abdicated or delegated. While the BWWG has great respect and confidence in the ECIG, this is simply not something that should be left to private industry. This should certainly not be done if fines to stations might be assessed.

## **FNPRM QUESTION**

**What, if any, effect would a requirement that EAS Participants monitor RSS feeds associated with IPAWS and state CAP systems have on any of the foregoing considerations related to device testing and certification? For example, should there be conformity assessment requirements for RSS functionality, and if so, how would the testing be carried out and by whom?**

The BWWG hopes that all state emergency management stakeholders will offer their input to this question during either the COMMENT or the REPLY phase of this proceeding.

## **FNPRM QUESTION**

**Finally, regardless of whether we make compliance with the ECIG Implementation Guide a component of FCC certification, we seek comment generally as to whether the current FCC certification process is sufficient or whether there are any revisions specific to EAS equipment that would make that process more effective and efficient.**

The FCC Certification process is critical, given the need for stations to know that the equipment meets the Part 11 requirements and does not leave them open to potential liabilities. Stations have no way to know their gear meets such requirements unless the FCC does so certify.

## **Intermediary Devices**

### **FNPRM DISCUSSION:**

**As discussed above, we are seeking comment on whether EAS Participants should be permitted to use intermediary devices to meet their CAP-related obligations where feasible. Sage proposed that “[a]ny portion of a multi-device Part 11 solution that receives CAP messages and converts them to EAS for use by an old Part 11 device must also [complete FEMA’s conformity assessment program].” While we take no position here as to whether intermediary devices should be subject to any ICAP conformity assessment adopted by FEMA, we observe that such intermediary devices would appear to function as a CAP decoder combined with a SAME encoder. We seek comment on whether we should classify such devices as stand-alone devices as opposed to modifications to existing equipment, such as software or firmware upgrades, which would make them subject to the same certification requirements that apply to stand-alone decoders and encoders (*i.e.*, equipment that carries out all the functions required for an EAS Participant to meet its EAS obligations, including compliance with any applicable portions of the Part 11 (and Part 15) Rules (including compliance with ECIG Implementation Guide, if required)). Is it necessary or useful for the Commission to regulate intermediary devices directly and subject such devices to certification? What are the potential costs and benefits of this approach? How could any requirements we might consider to ensure that intermediary devices are capable of carrying out the functions for which they are designed and which are required for an EAS Participant to meet its EAS obligations be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?**

The BWWG reiterates that intermediary devices, so-called CAP Converters, are in the long run a waste of time, effort and dollars for the vendor community, the user community, as well as the Commission. It would be better to make a clean break with the underlying technology that was designed nearly 20 years ago that uses components like built-in thermal printers that were considered unreliable and barely adequate when new, require an ongoing supply of special, expensive and difficult-to-obtain printer paper, and that always

seemed to run out of paper at the wrong time.

All such equipment has been fully depreciated for tax purposes and should be decommissioned as soon as possible. CAP Converters will not only delay the inevitable replacement as these devices age more, their manufacturers mislead uninformed buyers into believing that they will be installing a cost-effective solution. EAS equipment buyers should realize that the cost to get completely new CAP-capable equipment is really a long-term wise investment decision. SECC's LECC's and State Broadcaster Associations should be encouraged to recommend that their members not purchase the so-called CAP Converters.

## **Modified Equipment**

### **FNPRM DISCUSSION:**

**Section 2.1043 of the Commission's rules delineates the types of modifications (or permissive changes) that manufacturers can make to previously certified equipment that do not require equipment recertification. In general, under these rules, manufacturers can permissively make changes that do not degrade radiofrequency characteristics and performance. As with all certified devices, these rules apply to EAS equipment generally. In addition, Section 11.34(f) specifies that modifications to existing authorized EAS equipment that are necessary to implement revisions to the EAS codes (set forth in Section 11.31) or to implement the selective displaying and logging feature for state and local events are Class I permissive changes.**

**With respect to modifications to certified equipment, Sage observed, "As the CAP system evolves, the portion of the EAS encoder/decoder that interfaces with the CAP system will require updates." Sage pointed out that "[r]equiring manufacturers to recertify at each update will place an unnecessary load on the certification system, or will limit the ability of EAS Participants to use new CAP servers or transport mechanisms." TFT stated, that "there is no need for re-certification of CAP equipment for transparent CAP standard changes but that there is a need for recertification when the version of the CAP standard changes, that, in the opinion of the Commission, affects translation of CAP messages into EAS Protocol." According to TFT, "Re-certification for this type of circumstance could be achieved either by re-submission to a testing laboratory or by certification of the manufacturer that the CAP reception device has been modified or upgraded to comply with a newer version of the CAP standard."**

The BWWG agrees with Sage.

### **FNPRM QUESTION**

**We seek comment on the certification requirements that should apply to modified EAS equipment. Specifically, are the existing rules governing modifications to certified EAS equipment sufficient to permit periodic updates to EAS equipment without over-burdening manufacturers or the certification process, or would some embellishment of these rules be desirable for EAS equipment? Is there any point at which changes to the general CAP standard or CAP v1.2 USA IPAWS Profile v1.0 would necessitate recertification of previously certified CAP-enabled equipment? For example, if we were to adopt OASIS updates to the CAP standard that necessitated corresponding changes to the ECIG Implementation Guide, should we require recertification for previously certified CAP-enabled equipment to ensure that the equipment is still able to convert CAP-formatted messages into messages that comply with the EAS Protocol and other requirements set forth in Part 11? With respect to any EAS equipment that is capable of receiving CAP-formatted messages and translating such messages into SAME-compliant messages, and which may already have received FCC certification prior to the effective date of any new certification requirements we may adopt in this**

proceeding, should such equipment be subject recertification under the new certification rules? In addition, if we were to require device certification via FEMA's ICAP program as a prerequisite to FCC certification, and FEMA were to revise the CAP standards, or the testing process, such that manufacturers would have to recertify equipment previously certified under the ICAP program, should the manufacturer also have to obtain a new FCC certification?

The BWWG submits that the only way to make sure a future modification will not "break" ICAP or IPAWS conformance is to run said equipment through both processes again.

#### **FNPRM QUESTION**

**We seek comment on whether our proposed approaches to modifications to certified equipment are sufficient to capture the CAP-related obligations we address in this proceeding. Are these proposed changes necessary? What are their potential costs and benefits? How could any requirements we might consider with respect to recertification requirements be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?**

The BWWG knows that modifications and improvements to all technology, including CAP EAS devices, are both inevitable and desirable. Inevitable from the point of view that all technology gets improved, and desirable from the point of view that the goal of providing better warnings to a public at risk was, is and always should be a moving target. The Part 11 rewrite should be flexible enough to allow for future developments.

#### **180-Day CAP Reception Deadline**

#### **FNPRM DISCUSSION:**

In the *Second Report and Order*, the Commission established a deadline for compliance with CAP-related obligations of 180-days from the date FEMA adopted CAP. As indicated above, on September 30, 2010, FEMA published the technical standards and requirements for CAP-formatted EAS alerts, triggering the CAP reception requirement's 180-day clock and establishing March 29, 2011, as the initial deadline for compliance with CAP-related obligations. Also as indicated above, on November 18, 2010, we adopted the *Waiver Order*, which extended the 180-day deadline until September 30, 2011. We also explained in the *Waiver Order* that we would seek comment on whether such extension is sufficient and reserved the right to further extend the CAP-compliance deadline in whatever rule revisions we may adopt in this proceeding.

We now seek comment on whether the September 30, 2011, deadline for CAP-compliance set forth in the *Waiver Order* is sufficient or whether we should extend or modify it to be triggered by some action other than FEMA's adoption of CAP. As a threshold matter, we seek comment on what action or event, if any, should trigger the time period for compliance with the obligation to process CAP-formatted messages. For example, if we must implement new certification rules to ensure that all EAS devices process CAP-formatted messages in a consistent and standardized manner, should the time period for compliance be triggered by the effective date of any new certification requirements that we may adopt in this proceeding? Are there other external requirements that could affect manufacturers' ability to certify equipment that could impact the trigger date, such as completion of procedures for testing conformance with the ECIG Implementation Guide (assuming that is mandated)?

While FEMA's goals for IPAWS are on target for a September 30 compliance date, and there is a faction within the Commission that feels that its administrative ducks may be lined up by that time, there are other reasons to delay implementation. The BWWG wants to list four such reasons here.

- 1) A goodly percentage of the fifty state committees (SECC's) have to be rebooted / re-invigorated.
- 2) Many local committees (LECC's) simply have gone out of existence.
- 3) The emergency management community at large needs to be bound tightly to the process.
- 4) Sticking to the September 30 deadline will put LECC and SECC efforts on the back burner, and take away our ability to present the emergency management community with a good reason to bring them into the process sooner rather than later.
- 5) State Plans will have to be re-written, published and distributed.
- 6) Training programs for broadcasters and emergency officials will have to be developed and conducted.

A 180-day further extension of the September 30, 2011 compliance deadline is our recommendation at this time.

#### **FNPRM QUESTION**

**Assuming that a certification regime suitable to permit marketing and deployment of CAP-compliant EAS equipment is in place (whether under the current rules or amended rules adopted in this proceeding), how much time would manufacturers reasonably require to design, certify, and market CAP-compliant EAS equipment? Similarly, how much time do EAS Participants require to acquire, deploy, and test such equipment and to train personnel to use the equipment? For example, assuming that a time period of 180 days from the effective date of a suitable certification regime for CAP-enabled EAS equipment were sufficient for manufacturers to certify and begin to market CAP-compliant EAS equipment, would an additional 90 days be sufficient for EAS Participants to acquire, deploy, and test such equipment and to train personnel to use such equipment? Under this example, the CAP-compliance deadline would be 270 days from the effective date of revised rules governing EAS device certification. Should we consider alternative timeframes? If so, what are they and why are they justified? Are there other factors, such as the time required for EAS Participants located in rural or underserved areas to obtain IP connectivity, that we should take into consideration in establishing a new deadline, or should these situations be addressed on a case-by-case basis through the waiver process? What are the potential costs and benefits of extending the deadline for CAP-compliance? How could any requirements we might consider with respect to extending the deadline for CAP compliance be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?**

An additional six months should be sufficient time. However, the BWWG points out that unless there is a CAP distribution mechanism in place in a given state/area, there only "source" would be FEMA's server.

The BWWG is aware of at least one solution for IP connectivity for Internet unserved and underserved areas at this time. This solution is offering symmetrical 500 kbps connectivity via Ku band service on the AMC-3 satellite for existing and future syndication customers at a cost of only \$120 per month, plus a one-time charge for equipment. Current syndication customers on AMC-3 already have the basic reception requirements, namely a 1.2-meter dish and receiver. For IP connectivity, a small block up converter (BUC)

and IP interface box are added. This company has already been promoting this solution for their satellite syndication customers, many of which do not currently have IP connectivity where their current EAS devices are located.<sup>28</sup>

## CAP Messages Originated by State Governors

### **FNPRM DISCUSSION:**

In the *Second Report and Order*, the Commission mandated that all EAS Participants within a state (other than SDARS and DBS providers) be able to receive and transmit state-level and geographically targeted CAP-formatted EAS messages, as aggregated and delivered by the state governor or his/her designee or by FEMA on behalf of such state governor, within 180 days from the date FEMA adopts CAP, provided that the methodology for such delivery is explicitly described in the State Area EAS Plan that is submitted to and approved by the Commission. This obligation is codified in Sections 11.21(a) and 11.55(a) of Part 11.

Several parties sought clarification of this mandate. CSRIC, for example, stated with respect to Section 11.55 that “[t]he mandatory Gubernatorial Must-Carry message requires additional definition.” As detailed below, CSRIC and parties responding to the *Part 11 Public Notice* sought more specific clarification with respect to how EAS Participants will compile and process state CAP messages, how state CAP messages will be implemented within the EAS Protocol coding scheme, what constitutes a “geographically targeted area EAS message,” who can serve as the governor’s “designee,” and other related issues.

***Basic Obligation to Receive and Transmit Gubernatorial CAP Messages.*** A few parties suggested that the basic obligation to receive and transmit gubernatorial CAP messages requires clarification with respect to how those messages will be formatted. Monroe, for example, suggested that “the Commission needs to clarify how mandatory Governor’s message[s] are to be compiled and processed.” SpectraRep stated that “[a]dditional guidance or suggestions are needed from the FCC ... to ensure interoperability among [state] CAP system/server providers and EAS CAP equipment providers.”

As a threshold matter, while our Rules accommodate state CAP systems by requiring EAS Participants to process gubernatorial CAP-formatted EAS messages, some measure of uniformity appears warranted to ensure that EAS equipment does not need to be designed to accommodate multiple variations of state CAP systems that might be deployed now or in the future. More specifically, while FEMA has adopted one set of CAP standards to implement federal CAP processing via its IPAWS system, it seems entirely possible that a given state could adopt a different set of CAP standards for its state CAP alerting system. For example, a state might deploy a CAP-based system that does not interface with IPAWS at all. It has never been the Commission’s intent that EAS Participants be required to deploy multiple variations of EAS equipment to meet their basic CAP-related obligations. Instead, the Commission’s efforts have been directed primarily towards implementing rules that will enable and obligate the processing of federal CAP-formatted alert messages over the existing EAS. Against this backdrop, the Commission sought to provide an incentive for state governors to similarly obtain mandatory processing of their CAP-formatted messages when (and only when) they deploy systems that are fully compatible with federal CAP systems.

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<sup>28</sup> <http://kayoucommunications.com/wp-content/uploads/2011/04/CAPSEAS1.jpg>

**Accordingly, we tentatively conclude that the obligation to receive and transmit CAP-formatted messages initiated by state governors applies only to the extent that such CAP messages have been formatted using the CAP standard adopted by FEMA for federal CAP messages – specifically, OASIS CAP Standard v1.2 and CAP v1.2 USA IPAWS Profile v1.0. EAS Participants, working with state alerting authorities, may of course voluntarily deploy a state CAP message receiving capability that differs from the basic requirement to receive CAP messages formatted pursuant to the standards adopted by FEMA. We seek comment on this tentative conclusion.**

The BWWG agrees with the Commission's strategy on this point, as well as SpectraRep and Monroe.

#### **FNPRM QUESTION**

**The obligation to receive and transmit CAP messages initiated by a state governor also necessarily requires that CAP messages be translated into SAME, as we have tentatively concluded that EAS Participants will only be required to broadcast SAME-compliant messages. For the same reasons articulated above, we tentatively conclude that the obligation to receive and transmit only CAP-formatted messages initiated by state governors necessitates that such CAP messages will be translated into SAME-compliant messages consistent with the CAP-to-SAME translation standard adopted for federal CAP messages – specifically, the ECIG Implementation Guide. EAS Participants, working with state alerting authorities, may voluntarily implement a capability to translate CAP messages in a manner that differs from this basic requirement. However, a state must fully describe any state CAP system in a State Area EAS Plan submitted to the Commission for approval. We seek comment on this tentative conclusion. Is it necessary or useful for the Commission to specify CAP-to-SAME requirements for gubernatorial CAP messages?**

The BWWG believes that governor mandatory EAS would be a mistake and should therefore as explained elsewhere in our Comments, not be put into the Rules.

We do believe that state and local EAS messaging should all migrate to CAP as soon as possible. While there will be a period of time where legacy SAME EAS must be supported, it is our fervent hope that this time period can be as short as one to two years.

#### **FNPRM QUESTION**

**We seek comment on whether our proposed approaches to the obligation to receive and transmit gubernatorial CAP messages are sufficient to capture the CAP-related obligations we address in this proceeding. Are these proposed changes necessary? What are their potential costs and benefits? How could any requirements we might consider with respect to the obligation to receive and transmit gubernatorial CAP messages be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?**

The BWWG believes that, if the FCC persists in implementing governor mandatory EAS, each state must make its own cost/benefit decision regarding implementation of governor mandatory messaging, including how deep designation for such messages goes in each state. For instance, while it appears to the BWWG that it would be counterproductive to extend the designee provisions of governor mandatory to each police department, it might be deemed appropriate by a given state's warning stakeholders to designate emergency management leadership in each Emergency Operational Area. We also must note that this is one of the very reasons that have led the BWWG to the position that governor mandatory EAS would be a huge mistake.

However, if the Commission does implement governor mandatory EAS in their Rules, the BWWG advises that the Commission to impose a two-minute time limit, the same as now applies to legacy local/state EAS

messages, to all governor mandatory EAS. No state should be able to construe Part 11 in a way that its governor could use the mandatory provision of EAS to lock in stations for extended periods. This would be counter-productive to the vital role of local broadcasters in the overall coverage of major emergencies and interfere with National Weather Service EAS events.

#### **FNPRM QUESTION**

***Gubernatorial CAP Message Originator and Event Codes.*** Section 11.31 sets forth the EAS Protocol requirements. Among other things, this Section specifies certain codes that identify the originator of the EAS alert and the type of event involved (e.g., the event code for a severe thunderstorm warning is “SVR”). CSRIC and several parties responding to the *Part 11 Public Notice* observed that alert originators may need separate EAS originator and event codes to implement the obligation to process mandatory gubernatorial CAP-formatted alerts. CSRIC recommended that the Commission “[c]larify how [the] Governor Must Carry messages are to be implemented in [the] EAS Protocol” and suggested, for example, that we “create [a] GOV originator code.” CSRIC also suggested that “a separate EAS event code may be needed for this function.” TFT stated that “the Commission needs to clarify how ‘Governor’s Must Carry’ messages are to be processed because there is no Event or Originator code to correspond to this requirement.” The National Cable & Telecommunications Association (NCTA) asserted that “to carry the CAP data through for dissemination to the public, the EAS protocol would need to be changed to add the governor origination code, and software would need to be installed to ensure that it is always passed through the [cable] system.”

Since legacy EAS devices will not recognize new codes and retrofitting legacy EAS devices is counterproductive to holding down costs of an improved public warning strategy, the BWWG suggests that governors live within the range of existing EAS codes.

If state plans incorporating governor mandatory provisions are approved, the BWWG believes the word “mandatory” itself is a sufficient descriptor for Part 11 compliance purposes. As the BWWG has suggested a sunset for legacy EAS equipment in three to five years, the issue will hopefully become moot. Yet further reasons to NOT implement governor mandatory EAS!

#### **FNPRM QUESTION**

**We seek comment as to whether we must adopt a new origination and/or event code to fully implement the obligation of EAS Participants to process CAP-formatted messages initiated by state governors and, if so, what those codes should be. We also seek comment on how adoption of new originator and/or event codes might impact the existing base of deployed EAS equipment. In this regard, for example, Monroe asserted that “[l]egacy EAS decoders likely cannot be forced to automatically air an alert,” adding that “[t]his can present a compliance problem for older EAS decoders that are not directly integrated with a CAP receiver.” Could new originator and/or event codes be implemented in legacy EAS equipment via software or firmware modifications? Alternatively, could intermediary devices process gubernatorial CAP messages in a manner that would ensure full compliance with the gubernatorial CAP message carriage requirements without impeding legacy EAS equipment from meeting other origination and event codes requirements, such as the decoder display and logging requirements in Section 11.33(d)? Would some of the existing base of deployed legacy EAS equipment have to be replaced if we were to adopt new originator and/or event codes? If so, what percentage?**

The BWWG suggest no new codes at this time, a position totally in keeping with our hope that the Commission will reconsider implementing governor mandatory EAS. Until the CAP Converters are phased out, it would appear that no new codes are really going to be implemented effectively. The few cases where a GMC is likely to be needed can be managed now with CEM and other such codes.

## **FNPRM QUESTION**

**Would adoption of new originator and/or event codes to facilitate the obligation to process CAP-formatted messages initiated by state governors have any impact on CAP-to-SAME translation? For example, would such action require amending the ECIG Implementation Guide to ensure proper CAP-to-SAME translation of CAP-formatted gubernatorial messages? Would adoption of an event code corresponding to gubernatorial CAP-formatted messages overly constrain the utility of other data that can be relayed using the EAS Protocol? For example, because only one event code can be used in an EAS message, if we were to require an event code for gubernatorial CAP-formatted messages, other important information describing the nature of the alert, such as a tornado warning (represented by the event code “TOR”), could not be conveyed. Alternatively, would it be possible to implement the obligation to process CAP-formatted messages initiated by state governors without having to implement new originator or event codes by using the originator code for civil authorities (“CIV”)? What are the potential costs and benefits of adopting new originator and/or event codes for CAP-formatted messages originated by state governors? How could any requirements we might consider be tailored to impose the least amount of burden on those affected? To the extent feasible, what specific performance objectives should we specify to facilitate monitoring the success of any potential cause of action?**

The BWWG believes that introducing new originator codes before the sunset date for legacy SAME EAS would do more harm than good. Legacy EAS devices are memory-bound to the extent that some codes would have to be taken out in order to put in new codes, and since that process would involve changing Program Read Only Memory (PROM), it would represent a significant hardship to both the EAS manufacturing community and operators of the devices they sell.

## **Geographic Application and Targeting of Gubernatorial CAP Messages**

### **FNPRM DISCUSSION:**

Section 11.55(a) specifies that the obligation to carry gubernatorial CAP-formatted messages applies to “[a]ll EAS Participants *within a state* [except for SDARs and DBS providers].” Section 11.21(a), however, requires the State Area EAS Plan to specify how state-level and geographically-targeted EAS messages initiated by a state governor or his/her designee will be transmitted to “all EAS Participants who *provide services in the state.*”

Timm questioned how the obligation to process CAP-formatted messages initiated by state governors applies to EAS Participants that provide service that overlaps state borders and whether localized geo-targeting of EAS messages is feasible. With respect to cross-border service providers, Timm observed, “For stations located on or near state borders, the Rule [requiring EAS Participants to process CAP-formatted messages initiated by state governors] does not define if these stations must carry alerts from governors of all nearby states, or merely the governor of the state in which the station is located.” To the extent that EAS Participants are expected to carry CAP-formatted EAS messages delivered by the state governor (or its designee) of any state in which an EAS Participant provides service, Timm asserted that “the term ‘provides service’ must be defined.” Timm further stated, “Presumably this definition would be tied to some level of the station’s FCC-defined coverage area.” With respect to localized geo-targeting of the gubernatorial message, Timm asked, “Who or what defines the must-carry geographically targeted area for each broadcast station?” According to Timm, “This appears to involve defining the geographically targeted area as some level of the station’s FCC-defined coverage area.”

We seek comment on whether we should revise the current obligation to process CAP-formatted messages delivered by the governor of the state in which the EAS Participant is located to include governors of any adjacent states in which the EAS Participant provides service. Are instances of cross-border service provision sufficient in number and scale to warrant revisions to Section 11.55 to address them? Presumably, this issue already exists with respect to SAME-based state alerting. How are cross-border situations currently being addressed with respect to SAME, and would those approaches make sense for state CAP-formatted messages? What would happen if we were to apply the obligation to process CAP-formatted messages initiated by state governors based upon the location of the EAS Participant's signal contour or service area and such signal contour or service area overlapped one state that utilized a CAP system and another that did not? Is there a need for the Commission to address this issue in the Part 11 rules? Should this issue instead be resolved by the affected states, with the result reflected in the respective State Area EAS Plans?

While all emergencies are local, and some are regional, all are event (not governor) driven. The BWWG believes that regional EAS is a resource that should be managed under basic and well known Incident Command and mutual aid guidelines. This issue is beyond the scope of the FCC to regulate. Some events involve two states without being state-wide. The emergency management stakeholder community must be invited to the party forthwith.

#### **FNPRM DISCUSSION:**

When adopting the geo-targeting requirement, the Commission explained in the *Second Report and Order* that it sought to provide governors with the ability deliver a geographically-targeted alert to "particular regions" as opposed to just state-wide distribution. The Commission recognized, however, that "terrestrial broadcasters may not presently have the technical ability to restrict delivery of a targeted alert solely to the affected portion of their service area." Accordingly, the Commission observed that EAS Participants could comply with this requirement "by utilizing geographic-specific alerts such as subscribers utilizing localized information."

As discussed above, CAP is a versatile data protocol that has the potential to provide a great deal more capacity for geo-targeting message content than a SAME-based alert message. However, we have tentatively concluded that, for the time being, CAP messages must be converted into SAME-compliant messages. Accordingly, the geo-targeting capabilities for state CAP-formatted messages will by definition be no different than they are for SAME-formatted messages, which the states have used for many years. Specifically, under this approach, state CAP messages must correspond to the geographic codes set forth in Section 11.31(f), which limit the geographic scope of an EAS alert to states and counties. We also observe, however, that because the geographic codes set forth in Section 11.31(f) are limited to states and counties, they may lack the flexibility to precisely define the geographic parameters of every alert. Accordingly, for state SAME-based EAS messages, EAS Participants often make determinations as to whether they will broadcast a given state EAS message based upon the event code, location code, and if applicable, the audio message. While we require EAS Participants to acquire and transmit gubernatorial CAP-formatted messages generally, we expect that this same process will apply to CAP-formatted messages initiated by state governors. Accordingly, we tentatively conclude that the geo-targeting requirement associated with mandatory state governor alerts shall be defined, at least for the time being, by the location provisions in the EAS Protocol. We seek comment on this tentative conclusion.

We seek comment on whether our proposed approaches to geo-targeting are sufficient to capture the CAP-related obligations we address in this proceeding. Are these proposed changes necessary? What are their potential costs and benefits? How could any requirements we might consider with respect to geo-targeting be tailored to impose the least amount of burden on those

**affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?**

The greatest benefits of geo-targeting for EAS will not be realized until we sunset legacy EAS equipment, and there are CAP-aware consumer devices that can make use of CAP geo-targeting information. Until that day arrives, CAP geo-targeting will have its greatest positive impact when it is applied to cell phone and personal device (PDA) alerting.

### **Governor's "Designee."**

#### **FNPRM DISCUSSION:**

**The obligation to process CAP-formatted messages initiated by state governors also applies to CAP-formatted messages initiated by state governors' "designees." Several parties responding to the *Part 11 Public Notice* raised concerns regarding which authorities the governor could designate to serve in that capacity. In particular, broadcast interests raised concerns that the "designee" language could become a mechanism for local activation of the obligation to process CAP-formatted messages initiated by state governors. The Named State Broadcasters Associations, for example, urged that the obligation to process CAP-formatted messages initiated by state governors "should not be expanded to other governmental authorities below the level of Governor." NAB indicated "concerns with the delegation of mandatory EAS activation below the gubernatorial level" and encouraged the Commission "to limit the officials who may qualify as a governor's designee." According to NAB, "expanding the universe of officials who may issue EAS alerts may lead to unwarranted alerts, confusion among officials over who is supposed to trigger an alert for a particular event, and public desensitization to emergency alerts."**

First and foremost, the BWWG recommends that the Commission NOT adopt governor mandatory EAS, thus making moot any discussion of "governor designee."

However, the BWWG agrees, with qualifications, with NAB's to date position on Governor "Designee". We believe that opening up a discussion with the National Emergency Management Association (NEMA), the International Association of Emergency Managers (IAEM) should be done before any states make a unilateral decision on this issue, let alone a decision by the Commission on putting governor mandatory into the Rules.

Recognizing the need to be sensitive to local needs and resources, the BWWG believes that the Commission should, after those consultations, establish only the basic ground Rules needed that will apply to all states, and Rules that do not include a mandatory provision. No one-size-fits-all Rule can properly address all local concerns and situations.

While this dialog may be possible within the context of this proceeding during the Reply period, this is such an important issue that it needs to be carefully explored with those best qualified to advise, namely the local and state emergency management community, the National Alliance of State Broadcaster Associations, the NAB, and state broadcaster associations.

Lest we forget, there are already AMBER alerts, blue alerts, silver alerts, etc, There is a risk that each advocacy group will want mandatory carriage of their issues (drunk drivers, smog alert, water pollution on a beach, etc) The ultimate answer will need to be come out of dialog with NAB/NASBA and the emergency management community couple closely to a hopefully common understanding of what the non-EAS role of broadcast and cable licensees should be during declared emergencies, delivering the follow-on information that goes far beyond the warning phase of emergencies. More reasons to not go forth with governor mandatory, and to end the use of SAME as quickly as possible.

## Non-Participating National (NN) Sources

### **FNPRM DISCUSSION:**

The Part 11 Rules permit EAS Participants to request FCC authorization not to participate fully in the national level EAS activation. Essentially, these non-participating stations follow all of the EAN-related requirements except broadcasting the Presidential audio message.

Timm asked for clarification as to whether the non-participating stations (defined in Section 11.18(f)) are subject to the obligation to process CAP-formatted messages initiated by state governors. Specifically, Timm asked whether “the NN authorization exempt[s] a station from the governor’s message as well” and “[i]f so, must they sign off for that alert as well [,] [o]r will a category of NS, Non-participating State, be created?” Timm observed, “As an SECC Chair, I would hope that all stations would be required to carry the governor’s message with no exceptions, but it seems somewhat incongruous to offer an exemption for National messages but require the broadcast of State messages.” Timm suggested that it might be time to “re-examine the policy of NN authorizations,” further observing that “[w]ith the current automated equipment, it appears it would be easier to carry the National message than try to automate signing off, monitoring for the [Emergency Action Termination message], and returning to the air.” Elimination of NN authorizations would mean that all EAS Participants would be required to transmit the Presidential EAS message as well as gubernatorial CAP-formatted messages (assuming a state has met the State Area EAS Plan requirements).

We seek comment on whether the obligation to process CAP-formatted messages initiated by state governors should apply to NN stations. If NN stations were required to process CAP-formatted messages initiated by state governors, how should the rules reflect such a result? For example, NN stations are required to broadcast the EAS codes, Attention Signal, and sign-off announcement in the EAS Operating Handbook. What provisions would be analogous as applied to gubernatorial CAP-formatted messages? Alternatively, should we adopt Timm’s proposal to eliminate NN status altogether, in which case all EAS Participants would be required to transmit both the Presidential EAS messages and the CAP-formatted EAS messages initiated by state governors? In this regard, we observe that there are relatively few NN stations in existence, they are already required to deploy a decoder that complies with all EAS message processing requirements, and they follow most of the EAN processing requirements. What are the potential costs and benefits of eliminating NN stations or requiring them to process CAP-formatted messages transmitted by state governors? How could any requirements we might consider be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?

The BWWG has no idea how many NN stations are authorized nationwide. We do know is that there are none in the state of Nevada. The BWWG believes the provision for NN status is a hold-over from the days of CONELRAD. CAP, for all practical purposes, eliminates most if not all of the problems that led to the NN designation. The BWWG believes it is time for the NN to go, with one qualification. A CAP-specific NN waiver of some sort may be necessary if the Commission grants compliance relief to broadcasters or cable systems that cannot achieve IP connectivity, and can prove it.

## Miscellaneous Rule Changes Related to Fully Implementing the Obligation to Process CAP-Formatted Messages Initiated by State Governors

### FNPRM DISCUSSION:

**Section 11.33(a)(9).** Section 11.39(a)(9) allows EAS Participants to set their decoders to automatically reset to the monitoring state if they do not receive an EOM code within a predetermined minimum time frame (not less than two minutes). This Section further provides that a decoder must disable this reset function if it receives an EAN event code (so that the President's message is not interrupted). Although not raised by CSRIC or the parties responding to the *Part 11 Public Notice*, we seek comment as to whether we should revise this Section to accommodate gubernatorial CAP-formatted messages. For example, if we were to adopt a new originator (or event) code for gubernatorial CAP-formatted messages, should EAS Participants be required to disable the reset function for CAP-formatted EAS messages that include such a governor origination code? Alternatively, should we allow automatic reset, with the existing two-minute minimum or some time frame greater than two minutes? Would any of these approaches require adoption of an origination code specific to the governor (such as GOV)? If not, how would an EAS device know that it is receiving a gubernatorial CAP-formatted message? How would an EAS device know that the Commission has approved a state's State Area EAS Plan, since that is a prerequisite to triggering the obligation to process CAP-formatted messages initiated by state governors? Is it necessary or useful for the Commission to address this issue?

The BWWG believes that if a warning is issued that conforms to the governor mandatory provisions set out and approved in local and state plans; they should be relayed without delay. The BWWG believes that the two-minute time frame is adequate for governor mandatory and will serve to focus governors and their designees on formulating more effective warning messages in less than two minutes. On-air broadcast news coverage has been and should continue to be the place for long form follow-on information to EAS events. Warnings are merely the headlines for the unfolding story of an emergency.

All that having been said, we must reiterate our recommendation that governor mandatory not be placed into the Rules.

As far as CAP distribution is concerned, states will have to realize that they will have to feed an IP CAP distribution structure in order to comply with Part 11. That said, for the foreseeable future, state CAP messages will have to be translated into SAME messages as long as legacy EAS equipment is authorized.

Let us be clear. The BWWG is definitely not against state and local EAS originators using CAP, just that governor mandatory CAP is a bad idea and should not be placed in the Rules. All EAS messaging should be CAP-based in one to two years so SAME can be phased out.

### FNPRM DISCUSSION:

**Section 11.44.** Section 11.44 sets forth an EAS message priority scheme under which EANs take priority over (and preempt) all other messages and EAS Participants transmit other EAS messages in the following order: (1) Local Area Messages; (2) State Messages; and (3) National Information Center (NIC) Messages. CSRIC recommended that we modify the EAS Participants' priority scheme in Section 11.44(b) to include a "reference to additional messages from Tribal, Territorial and [Gubernatorial] Must Carry." As detailed more fully below (in Section III.F of this item), the Commission originally established the priority scheme in Section 11.44 under the Emergency Broadcasting System (EBS) Rules to apply during a National Level emergency condition (*i.e.*, the time period between the receipt of an EAN and an Emergency Action Termination (EAT)) to facilitate manual processing of EAS messages. Also as discussed below in Section III.F of this item, we are

seeking comment on whether this priority scheme is obsolete and we should delete it. Further, the question of whether and how we might incorporate tribal and territorial messages into the rules codifying the obligation to process CAP-formatted messages initiated by state governors is not within the scope of this item.

The BWWG agrees.

#### **FNPRM DISCUSSION:**

**We seek comment on whether there is any practical need to provide gubernatorial CAP-formatted messages with priority over local EAS messages and whether such a scheme is technically feasible. Since most local EAS messages likely would be carried over the same network as state EAS messages, would EAS equipment airing a local area EAS message be able to differentiate between an EAS message that was originated and broadcast in the SAME format and a gubernatorial CAP-formatted message that was originated in CAP but was converted into and rebroadcast in SAME format? What would happen to a local area EAS message when EAS equipment detects a gubernatorial CAP-formatted EAS message – would the arrival of the latter terminate processing of the former? Since most local EAS messages likely would be carried over the same network as state EAS messages, would this issue best be left to the states to manage within their EAS systems?**

The BWWG would hope that each state's emergency management, weather and broadcast stakeholders are the proper people to work this issue through. However, the BWWG believes that a governor mandatory message should NEVER have a higher priority than a warning of immediate clear and present danger issued by the Weather Service or a local emergency manager. Finally, the issue of Gubernatorial Must-Carry CAP priority will not arise if governor mandatory is not placed in the Rules.

#### **FNPRM DISCUSSION:**

**Section 11.51(m). Section 11.51(m) sets forth certain minimum EAS transmission requirements. Among other things, this Section requires EAS Participants to transmit all EAS messages in which the header code contains the EAN, EAT, and RMT event codes and when the accompanying location codes include their state or state/county. CSRIC recommended that we “[a]dd Gubernatorial Must-Carry CAP status” to Section 11.51(m). Because the obligation to process CAP-formatted messages initiated by state governors is a minimum obligation that applies to all EAS Participants (except SDARs and DBS providers), it seems appropriate to incorporate it in Section 11.51(m). Further, if we were to adopt a new origination code for gubernatorial CAP-formatted messages, we could simply include that event code in this Section.**

The BWWG believes that the Gubernatorial Must-Carry CAP should never arise if the Commission follows our recommendation to not put it in the Rules.

### **Revising the Procedures for Processing EANs**

#### **FNPRM DISCUSSION:**

**The Part 11 Rules specify that the EAT message is used to terminate an EAN. More specifically, as set out in Section 11.13, the EAN is the notice to EAS Participants that the EAS has been activated for a national emergency, while the EAT is the notice to EAS Participants that the EAN has terminated. This relationship is described in Section 11.54, which specifies the actions an EAS Participant must take upon receiving an EAN. Under these provisions, the EAN commences a**

**“National Level emergency” condition, during which EAS Participants must discontinue regular programming, make certain announcements set forth in the EAS Operating Handbook, and broadcast a “common emergency message,” as prioritized under Section 11.44. EAS Participants are required to follow this process until receipt of the EAT.**

Since an EAN is inherently "Capture and Hold" rather than "Store and Forward" and must (as all EAS events must) contain a valid End of Message SAME code (EOM) message terminator, the continued existence of the EAT code as explained in the Commission's current EAS Handbook is at best, confusing. If there is a need to manually terminate an EAS sequence, any existing valid EAS message containing an EOM will do just that.

There is only one reason for the continued existence of the EAT code, and that has to do with actions to be taken by non-participating stations what must go off the air when an EAN is sent and are not supposed to return until the EAN is terminated, and followed by an EAT message. The added complications introduced by the EAT code would disappear if the non-participating option if 11.13 were stricken from the Rules and 11.13 were re-written to state that the EOM at the conclusion of an EAN event tells all participating industry entities that the EAN has been concluded, and that non-participating entities can go back on the air.

Since even non-participating entities have EAS decoders, must maintain them in working condition and comply with all monitoring requirements, they can be returned to the air automatically when their decoders receive the EOM at the conclusion of an EAN event.

#### **FNPRM DISCUSSION:**

**We received several comments and questions regarding the EAT, and there appears to be considerable confusion concerning the EAT's function. SpectraRep, for example, stated, “There should be greater specificity as to the usage of the EAT event code, including message duration as well as that an EAT is a separate message from an EAN.” TFT observed, with respect to the EAN and EAT descriptions in Section 11.13, “This Section is sometimes incorrectly interpreted by EAS Participants to imply that a condition that would result in an EAS or EAT EAS message may necessitate a special EAS message with an Event code of EAN or EAT.” Parties also pointed out various inconsistencies in the codification of the EAT. For example, TFT argued that the message priority provisions in Sections 11.33(a)(11) and 11.44(a) will prevent an EAT from terminating an EAN and cause equipment lock-ups in cases where EAS Participants receive an EAN that does not include an EOM.**

The BWWG believes that the heart of this matter is what participating and non-participating stations are supposed to do during extended declared major national emergencies that could go on for hours, or even days until an EAT message is sent. To put it simply, participating stations according to the handbook are supposed to repeat a designated script, and non-participating stations are supposed to stay off the air. The BWWG believes that:

- 1) much more specificity must be placed directly in 11.13 about actions during extended emergencies and actions participating and non-participating stations must take and
- 2) that Part 11 should take into account that participating stations will likely lose audience if they are made to repeat the same script for hours or days. In fact, they will probably lose most of their audience early in the first hour of the repeated script, defeating the purpose of an EAN.

The BWWG suggests that entities participating in the EAS have a valid local role during extended national emergencies that should not be stifled by a perceived need to broadcast a standard script until the next

national EAN event airs. Had an EAN been issued on September 11, 2001 for what was arguably a significant national emergency, local participating broadcasters in New York City and in the Washington, DC region would not have been able to broadcast local information. In the New York City case, if an EAN had been issued and participating stations strictly followed Part 11 and the Handbook, valuable life saving information about evacuation routes would not have been broadcast.

The BWWG further believes that the collateral damage done by the desire to have participating stations be ready for the next EAN announcement during an event where an EAN is used could be significant and harmful. There is a saying in emergency management that "All Emergencies Are Local." DHS/FEMA and the Commission need to keep this in mind.

The issue of equipment "lockups" as described by TFT should be thoroughly researched by the Commission during its own conformance testing. If proven to be an issue, it may take some time to come up with a strategy to address this issue with legacy EAS equipment still in place and operational. The BWWG suggests that perhaps EAN might come to have a one-half or one-hour termination built in, with an explicit "extend" code to be reissued for events that require longer time periods.

The BWWG suggests that while the national live code EAN test scheduled for November 9, 2011 may offer an opportunity to test TFT's concern, the stated goal of the first live code EAN test will not have a CAP component. So, doing testing under laboratory conditions is a better and faster way to find out.

#### **FNPRM DISCUSSION:**

**Commenters also raised questions regarding the overall construct for processing EANs set forth in Section 11.54. Trilithic, for example, observed, "Current EAS regulations appear to state that an EAN indicates the beginning of a national emergency, an EAT indicates that the national emergency has been resolved or is over, and in between the two, perhaps for several hours or days, emergency communications, including EAS, are available for local coordination." TFT also stated that Section 11.54(b) "suggests that an operator be present to monitor EAS sources, discontinue normal programming, and make announcements." Timm asserted that EAS Participants cannot comply with the obligation in Section 11.54(b)(1) to monitor the two EAS sources assigned in the State or Local Area EAS Plan or FCC Mapbook for any further instructions following receipt of an EAN because "[w]hen an EAS ENDEC receives an EAN code, it immediately puts that EAS monitored source on the air and is delivering whatever audio is being furnished by the National government as part of that EAN message." Timm also questioned how EAS Participants can make the various announcements specified in Section 11.54 and the EAS Operating Handbook.**

The BWWG believes that it may indeed be time for the Handbook to go away to be replaced, as the Commission suggests, by newly written and approved local plans that both outline compliance provisions of Part 11 and fully describe local compliance and monitoring assignments and actions thereby make the existence of the Handbook no longer necessary. Those entities subject to EAS compliance should only have to reference one document to guide them. The BWWG further suggests that "best practices" local EAS plan templates be made available to local EAS committees (LECC's) that will accomplish this goal.

Many broadcasters and cable operators originally believed the Handbook provided specific operating instructions for any EAS activation for any EAS Event Code. The differences in EAS equipment are such that this is not possible. The only way such a Handbook might be helpful would involve the FCC redesigning all EAS equipment to have the same switches, connectors and ports in the same place on every unit. The Handbook should be replaced with a new publication, a "Field Operations Guide" or FOG, that would contain basic information for broadcasters and cable operators and have room for inserting instructions for

dealing with tests and activations that are specific to each station or cable operator. Such a publication could easily be incorporated in state and local plans.

#### **FNMPRM DISCUSSION**

To remedy any confusion that may exist with respect to the EAT function and, more generally, how EANs are processed within the EAS, Timm suggested eliminating the EAT altogether and relying solely on the EOM code. Timm proposed a simplified process, under which “[t]he federal government will send the EAN code, deliver all needed information, and the National EAS Activation will thus end with the EOM code which follows the EAN code.” According to Timm, “the EAT code no longer has a place in this scenario and should be eliminated.” Timm added, “Eliminating the EAT, and bringing the National EAS Activation into alignment with the way all other EAS alerts are handled (simply an Event Code followed by an EOM code), seems prudent and will clear up confusion.” Trilithic supported “elimination of [the] EAT, and the ending of the National Activation with the EOM code.”

Again, the BWWG suggests that the only positive value of an EAT may be to tell non-participating stations when to come back on the air. That “positive” is dramatically outweighed by the “negative” of potentially preventing local participating stations from fulfilling not only their monitoring roles under local plans, but also from airing potentially life-saving local information.

#### **FNPRM DISCUSSION:**

We seek comment on whether the procedures set forth in Section 11.54 for processing EATs and, more broadly, EANs, are problematic and technically impractical for automated operation. As indicated, Section 11.54 describes a process whereby the EAN initiates a national emergency condition, during which EAS equipment must discontinue regular programming and air various announcements; air alternate emergency messages in accordance with the priority scheme in Section 11.44; and in between, air standby script, all of which continues until receipt of the EAT. The Commission derived this framework from the former EBS rules, under which EAS Participants processed all EAS alerts manually and EANs were distributed to broadcast and cable entities via a separate, dedicated network. When the Commission adopted the EAS rules in 1994, it carried over this framework for manually processing EANs – including the use of the EAT – from the EBS rules into Section 11.54, primarily because EANs were then still carried over a separate network. Accordingly, while the EAS rules provide for automated processing of EAS messages and use the EOM to terminate EAS messages, Section 11.54 is still structured for manual processing of EANs, using the EAT to return EAS equipment to regular programming.

The BWWG suggests that the continued existence of the EAT code may do more harm than good and should be deleted. Its intent should be replaced by more specificity in Section 11.13 that allows local broadcasters to help during EAN events, not stand helpless by, effectively stuck in limbo if they comply with what the existing Rules ostensibly tell them to do.

#### **FNPRM DISCUSSION:**

We therefore seek comment regarding whether we should substantially simplify the procedures for processing EANs set forth in Section 11.54 and related Part 11 Rule Sections so that EAS Participants process EANs like any other EAS message, only on a mandatory and priority basis.

Under this streamlined EAN processing approach, whether EAS Participants operate their EAS equipment in automated or manual mode, receipt of an EAN would effectively open an audio channel between the originating source and the EAS Participant's facilities until the EAS Participant receives an EOM. After the EAS Participant receives the EOM, the EAS equipment would return to regular programming until receipt of the next EAS message. If that message is another EAN, then the process would repeat; if that message is a state or local EAS message, including a gubernatorial CAP-formatted message, then that message would be aired in accordance with the specifications in the State and/or Local Area EAS Plan. Are there reasons to maintain the framework in Section 11.54 for reserving EAS Participant facilities for extended periods of time? Is that framework technically feasible for implementation in EAS equipment? Does that framework make any sense for automated operation of EAS equipment? Does this framework make sense for CAP-formatted messages received as RSS feeds?

While the BWWG agrees the Rules must be simplified, they must be crystal clear and specific on what actions are to be taken by participating and non-participating stations. Furthermore, the Rules should make it clear that participating stations have a local role to play even during extended national emergencies where one or more EAN EAS events occur.

#### **FNPRM QUESTION**

We also invite comment on whether we should eliminate the option for EAS Participants to manually process EANs (but not state or local EAS messages). Is there any practical or technical reason to maintain the option to set EAS equipment to manual mode for EANs? Would eliminating the manual mode for EANs reduce the risk of operator errors in the processing of EANs? How many EAS Participants operate their EAS devices in manual mode for EANs? Is an EAS Participant more likely to process a SAME-formatted or CAP-formatted message in manual mode, or does it not make a difference? Would message-by-message processing of EANs have any impact on CAP-to-SAME translation? For example, would message-by-message processing of EANs require amending the ECIG Implementation Guide to ensure proper CAP-to-SAME translation of CAP-formatted EANs? Would using message-by-message processing potentially make some deployed EAS equipment obsolete? If so, what percentage?

The BWWG believes that there is a definite public warning benefit to eliminating the manual mode for EAN to eliminate possible intentional or accidental local use.

#### **FNPRM QUESTION**

It appears that the EAT would serve no purpose when there is streamlined, message-by-message processing of EANs. Accordingly, we seek comment on whether we should eliminate the EAT and replace it where necessary with the EOM in the Part 11 Rules. For example, are the current decoder display requirements for the EOM sufficient to alert EAS Participants operating in manual mode that they have received the EOM? If not, should we add display or audio alerting requirements to serve this purpose? Does it matter whether the EAN is SAME-formatted or CAP-formatted? Would deletion of the EAT have any impact on CAP-to-SAME translation? For example, would such action require amending the ECIG Implementation Guide to ensure proper CAP-to-SAME translation of CAP-formatted EANs? Would such deletion potentially make deployed legacy EAS equipment obsolete?

The BWWG suggests again that more specificity about actions for participating and non-participating following an EAN will make the EAT code unnecessary.

## Revising Section 11.54

### **FNPRM DISCUSSION:**

With respect to the procedures in Section 11.54, we observe that adopting message-by-message processing of EANs would render Sections 11.54(b)(1), (3), (4), (10), and 11.54(c) superfluous. Specifically, Section 11.54(b)(1) sets forth monitoring requirements which are already spelled out in Section 11.52(d) and the State Area EAS Plan; Section 11.54(b)(3) and (10) establishes “common emergency message” procedures that we would eliminate were we to adopt message-by-message EAN processing; Section 11.54(b)(4) requires airing of certain standby scripts in between airing common emergency messages, which has no relevance if we eliminate Section 11.54(b)(3); Section 11.54(b)(c) requires adherence to the termination procedures in the EAS Operating Handbook upon receipt of an EAT, and we are seeking comment about whether to eliminate the EAT. In addition, these provisions would not be necessary for automated or manual operation of EAS equipment to process EANs using the EOM to terminate the EAN.

The BWWG believes that properly written approved local plans could replace the Handbook. “Best Practices” templates for local plans should be made available to LECC’s and SECC’s. If the Commission ultimately decides to retain the Handbook, it should be produced in electronic form so it can be promptly updated or corrected if the need arises. Having erroneous national level information in the current Handbook (required to be physically posted at all EAS operating points) from its original publication date until present time has certainly not served the process well.

### **FNPRM QUESTION**

Accordingly, we seek comment on whether we should delete Sections 11.54(b)(1), (3), (4), (10), and 11.54(c). Are the provisions (as revised to delete the references to the EAT) in Sections 11.51(m) and 11.52(d) and (e) sufficient to ensure manual processing of EANs on a message-by-message basis? If we were to delete Sections 11.54(b)(1), (3), (4), (10), and 11.54(c), would we need to make any additional revisions to the Part 11 rules to facilitate manual processing of EANs on a message-by-message basis? Would deletion of these provisions have any impact on CAP-to-SAME translation? For example, would such action require amending the ECIG Implementation Guide to ensure proper CAP-to-SAME translation of CAP-formatted EANs? Would such deletion potentially make some amount of deployed EAS equipment obsolete? If so, what percentage? Would deleting Sections 11.54(b)(1), (3), (4), (10), and 11.54(c) present costs or burdens to equipment manufacturers and/or EAS Participants that could be ameliorated by alternative approaches that achieve the same goals of streamlining the Part 11 rules and removing outdated provisions therein to enhance the overall effectiveness and functionality of the EAS?

We seek comment on whether our proposed approaches to revising the procedures for processing EANs are sufficient to capture the CAP-related obligations we address in this proceeding. Are these proposed changes necessary? What are their potential costs and benefits? How could any requirements we might consider with respect to revising the procedures for processing EANs be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?

*Deleting Section 11.42.* We also observe that Section 11.42(b) specifies that the EAT is used to apprise “communications common carriers” that they must disconnect certain temporary connections between EAS Participants and selected “Test Centers.” This provision (like all of Section 11.42) was carried over from the former EBS rules and is designed to facilitate the transmission of EANs via landlines. Timm argued that this rule Section is no longer relevant.

Specifically, Timm explained, “In the past, broadcast stations were wired to ‘Telco Test Boards’ where many audio feeds were available for interconnections[, whereas] [t]oday, broadcast stations no longer have audio connections to the telephone exchanges, with most audio now being received via satellite direct at each broadcast station.” Timm suggested that this Section has become irrelevant and should be deleted altogether. We observe that the EAS Participants no longer use test provisions and transmission paths facilitated by Section 11.42. We therefore seek comment on whether Section 11.42 no longer serves any purpose in the EAS and whether we should therefore delete it. What are the potential costs and benefits of deleting Section 11.42? How could any requirements we might consider with respect to deleting Section 11.42 be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?

*Eliminating the EAS Operating Handbook.* As specified in Section 11.15, the FCC issues the EAS Operating Handbook, which summarizes the actions personnel at EAS Participant facilities must take upon receipt of an EAN, EAT, tests, and state and local area alerts. EAS Participants are required to maintain a copy of the handbook at their facilities for manual processing of EAS messages.

Yes!

#### **FNPRM QUESTION**

As a corollary to its suggestion that we delete the EAT, Timm observed that “if the National EAS is treated like any other EAS alert (Event Code followed by an EOM),” there would no longer be any National EAS Activation procedure to follow, and thus “there would be nothing left to describe in the EAS Operating Handbook regarding the National EAS Activation.” Timm further stated that the “other Section of the EAS Operating Handbook deals with generic state and local EAS activation procedures,” which he asserts could be eliminated in favor of requiring EAS Participants to post State and Local Area EAS Plans at their facilities (just as EAS Participants are currently required to post the EAS Operating Handbook). TFT agreed that if we eliminate the EAT, then we should also eliminate the EAS Operating Handbook. We observe that while the EAS Operating Handbook outlines operational procedures that are already contained in the Part 11 Rules, and in this sense may be redundant, it is unique in that it provides the announcements that EAS Participants are required to make at various points during manual processing of an EAN during a National Level emergency condition.

The EAS Operating Handbook may not serve any purpose with respect to the streamlined processing of EANs, on which we seek comment above. Specifically, the various procedures and announcements set forth in the EAS Operating Handbook were developed for the manual processing of EANs during the National Level emergency condition, and we are seeking comment on whether to eliminate the manual processing of EANs. In the context of the National Level emergency condition specified in Section 11.54, these announcements and standby script make sense because, as explained above, EAS Participant facilities are dedicated to airing only emergency messages that might involve multiple (President, state, and local) sources over an indeterminate period of time. If regular programming is only interrupted on a message-by-message basis, however, the announcements would simply apprise viewers and listeners of the start and stop of the President’s audio message, which presumably will be readily apparent to viewers and listeners. Moreover, it does not appear technically feasible for EAS equipment operating in automatic mode to insert such announcements before and after the Presidential message. In any event, the message originator can incorporate any special announcements into the audio message.

Accordingly, if we were to adopt the message-by-message processing of EANs described above, we seek comment on whether we should eliminate the EAS Operating Handbook and whether we

should require EAS Participants to maintain within their facilities a copy of the current, FCC-filed and approved versions of the State and Local Area EAS Plans. If we were to eliminate the EAS Operating Handbook, but did not eliminate the NN category of EAS Participants, what specific action(s), if any, should we require NN stations to take in between receipt of an EAN's header codes and its corresponding EOM?

Would posting the State and Local Area EAS Plans provide sufficient detail to EAS Participants about how they must manually operate or set EAS equipment for state and local EAS messages? Since EAS Participants that take part in the state EAS systems already adhere to these plans, would it be necessary, in the absence of the EAS Operating Handbook, to require that they maintain copies of these plans? Is it practical for EAS Participants to maintain up-to-date copies of the State and Local Area EAS Plans?

Yes, provided the approval process for all plans assures there is enough information in each plan so that there is no need for a Handbook.

#### **FNPRM QUESTION**

If we were to eliminate the EAS Operating Handbook, could we also delete the related provisions in Section 11.54(a), (b)(2), and (5)-(8)? Specifically, Section 11.54(a) indicates that the EAS Operating Handbook summarizes the procedures to be followed upon receipt of an EAN and EAT, which is superfluous if we were to delete the EAS Operating Handbook; Section 11.54(b)(2) requires EAS Participants to follow EAS Operating Handbook procedures and would also be superfluous if we were to delete the EAS Operating Handbook; Section 11.54(b)(5)-(8) sets forth certain requirements related to the announcements contained in the EAS Operating Handbook and, as with the foregoing Sections, is superfluous if we were to delete the EAS Operating Handbook.

The BWWG believes the answer to this question is, "yes"

#### **FNPRM QUESTION**

*Revising Section 11.11(a).* We also seek comment on whether, if we were to streamline EAN processing, we should revise Section 11.11(a) to remove the references therein to "participating broadcast networks, cable networks and program suppliers; and other entities and industries operating on an organized basis during emergencies at the National, State and local levels." In the EBS, these entities disseminated instructions to EAS Participants following receipt of an EAN, but it is not clear whether they have any role in the current EAS or in the streamlined version of EAN processing we are contemplating here. What are the potential costs and benefits of revising Section 11.11(a)? How could any requirements we might consider with respect to amending Section 11.11(a) be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action? Addition of the requirement for receiving and decoding CAP originated messages, also necessitates adding CAP reception in the definition of minimum requirements for EAS Participants.

As the CSRIC suggested, addition of the requirement for receiving and decoding CAP originated messages, also necessitates adding CAP reception in the definition of minimum requirements for EAS Participants. EAS Participants will require the ability to monitor and receive both CAP and legacy EAS protocol messages, and further transmit EAS protocol messages in formats congruent with other Part 11 subSections.

#### **FNPRM QUESTION**

**Deleting Section 11.16.** Section 11.16 describes the “National Control Point Procedures,” which are “written instructions issued by the FCC to national level EAS control points,” covering National Level EAS Activation, EAS Test Transmissions and the National Information Center (NIC).

Sections in Part 11 that are not related to CAP. We propose these revisions to streamline our EAS rules and to remove ambiguities. With respect to each, we encourage commenters to consider whether our proposed approaches are necessary in a proceeding primarily concerned with the CAP-related obligations we address herein. Are these proposed changes necessary? What are their potential costs and benefits? How could any requirements we might consider be tailored to impose the least amount of burden on those affected? To the extent feasible, what explicit performance objectives should we specify to facilitate monitoring the success of any potential course of action?

**Definitions.** Timm asked whether we should revise the definition of Local Primary One (LP-1) stations in Section 11.2(b), which defines such stations as radio stations, to reflect that these stations can be radio or TV stations. Our review of State Area EAS Plans confirms Timm’s assessment. Accordingly, we seek comment on whether we should revise the definition for LP-1 stations in Section 11.2(b) to reflect that these stations can be a radio or TV station.

The BWWG agrees with both the Commission and Timm on this point.

#### **FNPRM QUESTION**

Commenters made various proposals with respect to the definition of the PEP system in Section 11.2(a). This Section currently defines the PEP system as “a nationwide network of broadcast stations and other entities connected with government activation points” that is used to “distribute the EAN, EAT, and EAS national test messages and other EAS messages.” The definition also explains that “FEMA has designated 34 of the nation’s largest radio broadcast stations as PEPs,” which are “designated to receive the Presidential alert from FEMA and distribute it to local stations.” The PEP system is also defined in Section 11.14, which mirrors most of the language in Section 11.2(a).

CSRIC recommended that we “[u]pdate [the] PEP definition to be consistent with FEMA implementation and future plans.” CSRIC also recommended, with respect to Section 11.14, that we “[m]odify [the] PEP paragraph to include [a] reference requiring IPAWS interconnectivity.” Timm observed that the number of stations referenced in the definition “should be updated, or perhaps a number should not be listed as FEMA continues to expand the number of PEP stations.” TFT stated, “Because State, local relay networks, and other program distribution networks may serve as entry points for Presidential messages, the wording should permit rather than restrict these sources.”

As a preliminary matter, because the PEP system definition in Section 11.14 mirrors the definition in Section 11.2(a), it is superfluous. Accordingly, we tentatively conclude that we should delete Section 11.14 from the Part 11 rules. We seek comment on this tentative conclusion.

The BWWG agrees.

#### **FNPRM QUESTION**

With respect to the PEP system definition in Section 11.2(a), we seek comment on whether the use of actual numbers to reflect the number of PEP stations is so inflexible that it requires revision via an amendment to the rule every time FEMA adds another station to the PEP system and whether we should delete the numerical reference. With respect to CSRIC’s recommendation that we incorporate IPAWS connectivity into the current PEP system definition, it is not clear what purpose that would

serve, as the PEP stations only distribute SAME-formatted EAS messages. Instead, we seek comment on whether we should revise the language in Section 11.2(a) to clarify that the PEP stations distribute the EAN, EAS national test messages, and other EAS messages in accordance with the EAS Protocol requirements in Section 11.31.

The BWWG believes a better definition of the program would be, “ The FEMA Primary Entry Point program (PEP) is last ditch means for the President to communicate with the largest possible percentage of the American public to communicate reassurance of government continuity if traditional means for broadcast video and audio communication are disabled or otherwise not available. The majority of PEP outlets are AM radio stations, but network and other broadcast resources are used for backup and fill in.

#### **FNPRM QUESTION**

Although not raised by any commenter, we also seek comment on whether we should delete Section 11.13 and fold the definition of EAN into Section 11.2. Specifically, Section 11.13 defines the EAN and EAT. We are seeking comment above on whether we should delete references to the EAT from the Part 11 Rules Because the common definitions used throughout Part 11 are properly included at the beginning of the Part 11 Rules, in Section 11.2, we seek comment on whether we should delete Section 11.13 and move the definition for the EAN currently in Section 11.13 to Section 11.2.

If EAT is deleted as a code, it should be deleted from Section 11.13, so the BWWG agrees.

#### **FNPRM QUESTION**

**Geographic Codes.** Section 11.31(c) specifies the message formatting requirements for the EAS Protocol, including the formatting of the location code. This Section (and Section 11.31(f)) currently indicates that the location code “uses the Federal Information Processing Standard (FIPS) numbers as described by the U.S. Department of Commerce in National Institute of Standards and Technology publication FIPS PUB 6–4.FIPS number codes.” TFT observed that the “[FIPS] publication has been replaced by American National Standards Institute (ANSI) Codes INCITS 31.200x (Formerly FIPS 6-4), Codes for the Identification of Counties and Equivalent Entities of the United States, its Possessions, and Insular Areas” and suggested that we replace the references to FIPS in the rules with references to the relevant ANSI standard. We tentatively agree with TFT that the FIPS reference is outdated. Accordingly, we tentatively conclude that we should change the references to the FIPS standard in Section 11.31 (and 11.34(d)) to reflect the ANSI standard that superseded it. We seek comment on this tentative conclusion.

The BWWG heartily agrees with TFT that it is time to say ‘good-by’ to FIPS.

#### **FNPRM QUESTION**

**Attention Signal.** We received various proposals relating to the Attention Signal requirements.

Which, if any, of the equipment-related Attention Signal requirements in Sections 11.32(9) and 11.33(b) should we incorporate into Section 11.31(a)(2)? For example, should we incorporate the specification covering the duration of the Attention Signal in Section 11.32(9)(iv) into Section 11.31(a)(2)? Should we modify the duration limits for the Attention Signal, currently set at between 8 and 25 seconds? Could 25 seconds be too long to wait for emergency information in a situation where time is of the essence? Could we effect changes or deletions to any of these parameters in legacy EAS equipment via software or firmware upgrades? What effect, if any, would such changes potentially have on deployed EAS equipment? Would changing the Attention Signal parameters have any impact on CAP-to-SAME translation? For example, would such action require the ECIG to

**amend the ECIG Implementation Guide to ensure proper CAP-to-SAME translation of CAP-formatted messages?**

The BWWG agrees that retaining the attention signal serves a useful purpose as a necessary preamble to prepare the public to hear a warning. We have trained generations of people to understand that the attention signal means that they are about to hear critical information. Furthermore, the attention signal provides a useful aural warning to those people at risk who are visually impaired. If the attention signal is eliminated, marketers will use it to sell their wares, confusing the public while we try to educate them about whatever sound we decide should replace the attention signal.

Most (if not all) stations now use the 8 second signal so shortening the attention signal to a maximum length of 8 seconds in Part 11 will serve to limit the amount of time spent on this function while preserving the function's benefits.

#### **FNPRM QUESTION**

**We also seek comment on whether we should delete the Attention Signal from the Part 11 rules altogether. Is an audio signal necessary or useful to alert listeners that an EAS Participant is about to air an audio message? If listeners can hear an attention signal, they presumably can hear the audio portion of the EAS message. Alternatively, has the two-tone Attention Signal, which has been a part of the national alerting systems in one form or another for several decades, become so ingrained that listeners have come to accept it and might question the authenticity of an EAS alert that lacked the Attention Signal? Does the Attention Signal benefit the vision-impaired community, which may rely more heavily on audible sources of emergency information? Would deleting the Attention Signal potentially make some amount of deployed EAS equipment obsolete because it could not be upgraded via software or firmware? If so, what percentage? Would deleting the Attention Signal have any impact on CAP-to-SAME translation? For example, would such action require amending the ECIG Implementation Guide to ensure proper CAP-to-SAME translation of CAP-formatted messages?**

The BWWG believes as stated above that an 8 second long attention signal serves several useful purposes.

#### **FNPRM QUESTION**

**Regardless of whether or how we proceed with modifying the Attention Signal requirements, we observe that Section 11.12, which specifies that EBS Attention Signal encoders and decoders can remain in operation until January 1, 1998, is obsolete. Accordingly, we tentatively conclude that we should delete Section 11.12 from Part 11. We seek comment on this tentative conclusion. Is there any reason to keep Section 11.12 in the Rules?**

The BWWG agrees.

#### ***Miscellaneous Equipment Issues.***

#### **FNPRM DISCUSSION:**

**As detailed below, parties responding to the *Part 11 Public Notice* presented various suggestions and questions unrelated to CAP that involve the current encoder and decoder requirements.**

***Section 11.33(a)(9).* As described above, Section 11.39(a)(9) allows EAS Participants to set their decoders to automatically reset to the monitoring state if the decoder does not receive an EOM for**

any given EAS message within a predetermined minimum time frame (not less than two minutes). This reset function does not apply to EANs. This provision essentially allows EAS Participants to establish a maximum duration for state and local EAS messages that their equipment will air automatically (by ensuring that their EAS equipment will automatically reset for any state or local EAS messages exceeding such time period). Trilithic sought clarification regarding what happens on the encoder side of a combined decoder/encoder device when there is an automatic reset during receipt of an EAS message. Specifically, Trilithic observed that “the term ‘reset to monitoring’ would seem to indicate that the message is logged but discarded (not retransmitted), however a reset on the decoder side does not guarantee this.” Accordingly, Trilithic asked whether “the message should automatically retransmit.”

By definition, the reset activation in Section 11.33(a)(9) applies only when the EOM for a given EAS message has not arrived within the specified time period. Transmitting an EOM is a minimum requirement for encoders. Because there is no EOM associated with an EAS message that has been canceled via reset, there is no EOM for the encoder to transmit. Accordingly, as the rules are currently constructed, the encoder should not transmit an EAS message that has been canceled via reset. We seek comment on whether we should amend the rules to make this clearer or whether we should allow encoders to air EAS messages that have been canceled via reset. We observe that airing an EAS message that does not have an EOM runs the risk of airing a partial message that may cause confusion among listeners and viewers. On the other hand, a partial alert message may be better than none. We seek comment on these alternatives.

The BWWG wishes to remind the Commission that EAN is basically “Capture and Hold” in nature and not designed for “Store and Forward. It would be a very bad idea for Part 11 to allow airing of any EAS message without an EOM.

#### **FNPRM DISCUSSION:**

*Section 11.33(a)(3)(ii).* Section 11.33(a)(3)(ii) specifies certain header code storage requirements for decoders. Among other things, this Section requires storage of the header codes of the last ten valid messages received by the decoder that still have valid time periods and deletion of header codes as their valid time periods expire. TFT urged that we eliminate the requirement to delete messages upon expiration of their time periods because “there are cases in which such expired messages should be transmitted.” By way of example, TFT suggested that “a Tornado Warning may be received by an EAS Participant with a minimum validity and circumstances, [that] in the judgment of the EAS Participant, may warrant transmission of the message although expired or retransmission of the message.”

The BWWG agrees with TFT. There are such cases, and will be in the future.

#### **FNPRM QUESTION**

In general, the storage and deletion requirements in Section 11.33(a)(3)(ii) facilitate comparison of incoming EAS messages, which among other things should help prevent the automatic relay of duplicate messages. The alert message originator – not the EAS Participant – determines the valid time period specified for an alert. While TFT explained that an EAS Participant might determine in its own judgment that an expired EAS message is valid for the listeners and/or viewers in its area, others might argue that may be a judgment best left to the state and local public safety authorities whose purpose, training, information, and resources are designed to facilitate such determinations. Accordingly, we seek comment on whether we should revise 11.33(a)(3)(ii) as proposed by TFT. Should we allow EAS Participants to air alert messages after expiration of the effective time period set by the alert message originator? Could we revise Section 11.33(a)(3)(ii) in other ways to

enhance its usefulness and relevance to EAS Participants?

The BWWG agrees with TFT on this point.

#### **FNPRM QUESTION**

***LPTV and LPFM.*** Abbott-Gutierrez requested clarification on the EAS rules covering Low Power TV (LPTV) and Low Power FM (LPFM) stations, calling them “confusing at best.” After reviewing these rules, we observe that the analog and digital broadcast station equipment deployment table in Section 11.11(a) incorrectly identifies “LPFM” in the column that is supposed to contain Class A TV and incorrectly identifies “LPTV” in the column that should contain “LPFM.” In addition, it appears that the Commission inadvertently omitted “LPFM” from the test requirements in Section 11.61(a)(1)(i) (LPFM stations are only supposed to have to transmit test script, just like LPTV stations) and Section 11.61(a)(2)(ii) (LPFM stations are only required to log receipt of the test, just like LPTV stations). We tentatively conclude that we should correct these clerical errors. We seek comment on this tentative conclusion.

The BWWG agrees with Abbott-Gutierrez on this point.

### **Training**

#### **FNPRM QUESTION**

**Some parties responding to the *Part 11 Public Notice* called for the federal government to provide EAS training for state and local emergency managers. While we remain committed to aiding FEMA in its efforts to develop training and public outreach programs for EAS Participants; state, local, and tribal alert warning authorities; and the public generally, the Commission lacks the authority to raise or distribute funds for EAS-related purposes. We therefore tentatively conclude that the Commission cannot provide training for state and local emergency managers and seek comment on this tentative conclusion. In making this tentative conclusion, we draw the distinction between EAS (and other alert system training, such as that which FEMA will do for IPAWS), and the workshops and summits that the Commission holds as part of its outreach mission.**

The BWWG is forced, unfortunately, to agree with the Commission that FEMA will have to be responsible for training efforts. However, NOT mentioning training in Part 11 leaves room for the same uncertainties and issues that has existed since the EAS went into effect in 1997. The BWWG sincerely hopes that FEMA’s efforts to incorporate specific EAS training modules into the National Incident Management System (NIMS) bears fruit.

### **Persons with Disabilities**

#### **FNPRM QUESTION**

**Various other parties likewise have made suggestions concerning the need to improve the accessibility of EAS alerts for persons with disabilities. For example, the Rehabilitation Engineering Research Center for Wireless Technologies (Wireless RERC) submitted comments in our EAS docket that stated that the Wireless RERC “is concerned that people who are hard of hearing or who are deaf are missing important visual information when they receive an EAS alert, because EAS**

participants are not required to present the audio portion of the EAS message visually.” Accordingly, Wireless RERC recommended that “the Commission amend 47 C.F.R. Part 11.51 to require EAS participants to transmit the portion of an EAS message as defined in paragraph 11.31(a)(3) both aurally and visually.” The Wireless RERC indicated that such requirement “would not be requisite immediately but it would be included in the Next Generation EAS regulations for CAP.” The Wireless RERC added, however, that “if there is a considerable delay in implementing the Next Generation EAS or if there is a reason that an EAS participant cannot comply with the visual requirement in the Next Generation EAS regulations, it is recommended that the participant be required to install a speech to text capability or other means so that the audio message portion in an existing EAS message can be displayed visually.” As an alternative to installing speech-to-text capability, the Wireless RERC recommended that an EAS Participant be “permitted to access the Internet or other systems to obtain the text of the information provided in the audio portion of the EAS message.”

**NCTA suggested that “EAS message originators should provide emergency alerts in both audio and visual format so that individuals with hearing and visual disabilities receive functionally equivalent information.”**

The BWWG feels that CAP easily has within it the capability of being able to tell devices at cable systems and television stations anything that can be envisioned to enhance accessibility. We believe that equipment manufacturers may have already come up with those devices, or could design them. Let us not forget that the reason the Partnership for Public Warning conceived the concept of CAP (as a defined subset of the XML markup language) was to provide an international non-proprietary standard so originators could propagate warnings to any type of warning system, present and future. All we have to do is tell audio, video display devices for radio, television and cable what do with CAP messages to best benefit all the disabled communities.

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