

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

In the Matter of)
)
Review of the Emergency Alert System;) EB Docket No. 04-296
)
) August 4, 2011
)

To The Commission:

**Reply Comments of Sage Alerting Systems, Inc.
In Response To The Third Further Notice Of Proposed Rulemaking**

I. Introduction

1. We note that, once again, the EAS community has provided ample comments for the record. We discuss three important issues here, Compliance, Intermediary Devices, and Governors Must Carry.

II. Delay for CAP/EAS Compliance

2. The commission has been inundated with requests for additional delay. We believe the reasons stated fall into two categories, Uncertainty, and Budget.

a. Delay Based on Uncertainty

3. Proponents of a delay cite several areas of uncertainty, in two main areas, technical, and regulatory. Sage believes that the majority of technical issues have been addressed, certainly in the area of the CAP protocol itself, the IPAWS use of that protocol to encode EAS messages, and in the technical descriptions of how to convert an IPAWS encoded CAP message and turn it into an EAS message for air.
4. One technical area of uncertainty often cited is how a CAP message will be delivered. In the last few days, FEMA has circulated a second draft of its ATOM

based delivery method, and has stated¹ that it will be in production by the end of September. The remaining delivery uncertainties are on a state by state basis, and will not be completely resolved until every state has a running CAP delivery system. Sage states the obvious; the EAS upgrade should **not** wait to start until every state has a running system. Several states already have a viable method up and running.

5. The other technical uncertainties are incremental performance and access enhancement that won't become clear until the system is up and running.
6. The majority of the uncertainties are regulatory, having to do with changes to Part 11 rules and possible certification requirements. The line items in the FCC review of the new rules have now had the popular answers revealed, (yes, use the CAP text as a video crawl), or involve vast simplifications (remove most of the attention signal rules, demote EAT, simplify the handbook). While hard work lies ahead for the writers of Part 11, the actual technical changes from what is currently implemented and in the field are minor.
7. The start of the use of the new technology is not the time to build in too many preconceptions about its use, before anyone has had the real chance to use it. It is especially not the time to remove the old system before the new system is in place. Sage believes that changes to EAS should be minimal at this time. The specificity in CAP delivery should be minimized while all of the stakeholders are still learning what they can do, and what they should do. That the system is currently sufficiently specified to be useful can be shown by the states that are actually using it.
8. Based on the comments in the records from filings of NAB,, BWWG and others, Sage believes that the FCC should move quickly to reduce the uncertainty. Decide on those items that will have an effect on the existing software. Admit that, with more than half of the systems already upgraded, that it is too late to make radical hardware changes. Take advantage of the fact that the new devices in the field can be easily updated with new software.

¹ Reply Comments on Behalf of Federal Emergency Management Agency Integrated Public Alert and Warning System Program Management Office, August 3, 2011

9. The uncertainty issues are now all within the control of the Commission. If, for instance, the FCC accepts comments from Sage and others that the FEMA compliance testing is sufficient for full CAP/EAS devices without a new round of FCC sponsored testing,(that will only cover the same ground FEMA has already covered) we can all move on to providing the public with an enhanced alert system.
10. Should the FCC decide to add further delay, Sage urges the Commission to allow those states that are ready to use CAP (and are already using CAP) to use it to the fullest. Permit the use of CAP text In the crawl. Permit non-internet CAP dissemination methods. Allow states to use the Must Carry feature.
11. Should the FCC decide to add further delay, we urge the Commission to set near term hard dates, though with enforcement of the ability to receive specific messages to not begin until those messages are being sent. As we've seen from FEMA, the wait is not projected to be long.

b. Delay for Budget

12. Many of the remaining stations are simply waiting until the last possible moment to upgrade their systems for budget reasons. A further lengthy delay won't help these broadcasters, and it won't help the manufacturers. It is unlikely that a currently unknown, low cost solution will present itself, given that the market is now only 25% of what it was. Manufacturer's costs will go up as we make units in smaller quantities in the future, not down. At this point, Sage recommends (temporary) waivers be used, on a case by case basis based on financial hardship or availability of internet access, and not the blanket waiver of an across the board delay.

c. A Valid Reason For Delay

13. The most compelling reason for delay that Sage sees is one of engineering resources at smaller stations. Once new equipment has been procured, smaller stations must wait for contract engineers, or shared engineering resources, to install the equipment. Minimizing the number of trips to a broadcaster by contractors is critical in controlling costs for smaller stations. Unless a source of CAP messages is

known and is available for testing, it is difficult to install EAS/CAP equipment in one trip.

14. Sage again states that splitting the installation date and the operational date may be of some value in giving stations the time needed to get the system running before they are subject to possible non-compliance penalties.

III. Governors Must Carry

15. On aspect of the Governors must carry, is “Hey, put this on the air because we think it is important”. The other, more compelling aspect from a technical point of view is “Hey, this unexpected thing has just occurred, and we didn’t anticipate it, and we didn’t have it in the state plan, and no one has a filter enabled for it, but it needs to go on the air”. One of the flaws of the legacy EAS system is that it is too easy for a station to “opt out” of carrying many types of alerts, and too hard to pick the right types of voluntary alerts to carry. The EAS event codes are too broad to be effectively used as a filter, and uncertainty about what a “law enforcement warning” really means, and under what circumstances it would be used led many stations to leave it out of their air event list. CAP adds more ways of trying to solve the problem of identifying what is important and what isn’t, by adding severity, urgency, and certainly elements, as well as additional event types and categories. EAS has had trouble effectively using the very limited number of fields available to it, adding several more adds to the flexibility of the system, but doesn’t make the average broadcaster’s job any easier. Once (or if) the full range of CAP elements can be used to filter messages, Sage believe it could be even harder for emergency managers to determine if an alert they are sending will get picked up for air. Getting an alert on the air would require setting several elements of the message correctly. Simpler is better. A single “put this on the air” indication will get better results. A forced carry facility is in use in areas of Canada that are already using CAP.
16. In reality, the Governor’s Must Carry will reduce the complexity of state plans, and remove the necessity of trying to foresee every eventuality, reducing the workload on the emergency managers, the SECCs, and the broadcasters. By setting

the “must carry” indicator, the emergency manager can be assured that the alert will air. Broadcasters won’t have to worry that they don’t have the filters set just right, or reset them when the state makes changes to the plan.

17. It only requires trust that whoever is responsible for setting the must carry indicator knows what they are doing, and won’t abuse the privilege. We all hope the system upgrade now under way will result in a more efficient use of that system. The must carry facility, used correctly, will be a major step in getting state and local government to effectively use the modernized EAS system.
18. Sage does not believe that a list of events that are “must carry” is a suitable replacement for the Governors Must Carry. It is more complex for both sender and receiver, and doesn’t allow for the unexpected. It does nothing to reduce abuse; issuing a required event or issuing the “must carry” tag in a CAP message is the same, either one results in the message going on the air.
19. One argument for flexibility in programming devices with the Governors Must Carry: some stations specializing in children’s programming do not carry Amber Alerts due to the nature of the alerts and their audience. A limited opt-out for some types of must carry should be considered by the Commission.

IV. CAP Converters

20. Sage agrees with the Broadcast Warning Group (BWWG) filing not to “dumb down” EAS with the limitation of a CAP converter/legacy pair. We urge the commission to require broadcasters to provide CAP text messages on any video crawl or other text outlet, and handle must carry, no matter what technology they have chosen to implement their CAP/EAS obligations.
21. BWWG said²:
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

² Comments of the Broadcast Warning Working Group, July 19, 2012, page 2

EAS devices or CAP converters, or “dumbed down” by legacy capabilities built in to new broadcast and cable entry point CAP decoders.

22. Sage agrees. We don't know how many Intermediary Devices have been sold, but it is too late to mandate against them. It isn't too late to require them to provide an effective solution to the Must Carry problem, and the CAP Text on Video issue.
23. We were surprised to read³ that half of the members of the Association of Public Television Stations selected a technology where it is difficult to provide the CAP text to the video stream, requiring either the ability to receive text from both the legacy device and the CAP converter, or requiring a level of synchronization between the legacy device and CAP converters that does not exist with the most common legacy devices.
24. TFT, in its reply comments⁴, says of the problem with converter boxes and the Governor's must Carry *“The problem is not with intermediary devices but with legacy EAS encoder/decoders and decoders (only).”* Indeed. However, the point is that the broadcaster must comply with the rules. If the broadcaster has selected a pair of devices, such as a CAP converter and a legacy device, to meet the Part 11 requirements, then that **pair** of devices must enable them to follow the rules. If a cap converter and a legacy device can't be made to follow the rules, or to provide the same level of information to the public that others do, then the broadcaster has made a bad choice. Pushing the problem from the CAP converter to the legacy device is disingenuous. Some legacy devices are no longer supported; for others, manufacturers would need to implement new interface protocols, and charge a software upgrade fee. The FCC should close the loophole in the CAP certification that allows a converter box to follow only a part of the rules, leaving to the station the near impossible task of following the rest of them, the most obvious examples being the Governors Must Carry and the use of CAP text for video crawls.

³ Comments of the Association Of Public Television Stations and The Public Broadcasting Service, July 20, 2011, page 3, “Public television stations have already begun purchasing and deploying intermediary devices to fulfill their CAP-compliance obligations. We estimate that nearly half of our member stations have already purchased equipment in response to the Commission's earlier proceedings and deadlines.¹⁵ We believe that the vast majority of those have purchased intermediary devices.”

⁴ TFT, Inc. Reply Comments, August 4, 2011.

V. Conclusion

25. Sage believes in a 2 phase approach to getting the modernized EAS system on the air without endless cycles of requests for delay. Hardware systems should be installed by one date, AND a 90 to 120 day *tuning period* should be instituted to connect to the network and optimize this 20,000 point IP network that is EAS CAP. All stations should be required to take advantage of the richer and more granular information that CAP brings and it should be aired accordingly. Governors must carry is an important component of getting State and local emergency managers on board with the modernized EAS.

Respectfully submitted:

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