

**BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, DC 20554**

In the Matter of)
)
The Commercial Mobile Alert System) PS Docket No. 07-287
)
)

To: The Commission, *en banc*

**COMMENTS OF
AMERICAN ASSOCIATION OF PAGING CARRIERS**

The American Association of Paging Carriers (AAPC), by its Task Force on Emergency Communications, respectfully submits its comments to the Federal Communications Commission in response to its Notice of Proposed Rulemaking (NPRM) in the captioned proceeding, FCC 07-214, released December 14, 2007 and published at 73 Fed. Reg. 545 (January 3, 2008). As its comments on the NPRM, AAPC respectfully states:

Introduction and Background

In this proceeding the Commission seeks public comment on a variety of issues concerning the report and recommendations of the Commercial Mobile Service Alert Advisory Committee (CMSAAC) dated October 12, 2007.¹ The Report and this rulemaking, in turn, are mandated by Sections 602 and 603 of the WARN Act passed in 2006,² and will lay the foundation for a nationwide Commercial Mobile Alert System (CMAS), in which emergency alerts will be transmitted to the public by those Commercial Mobile Radio Service providers (as defined in

¹ Commercial Mobile Alert Service Architecture and Requirements, October 12, 2007 (the "Report"), annexed as Appendix B to the NPRM.

² Warning, Alert, and Response Network (WARN) Act, Pub. L. No. 109-347, §§601-613, 120 Stat. 1936-1943 (2006).

Section 332(d)(1) of the Communications Act, 47 U.S.C. §332(d)(1),³ and implementing Commission regulations)⁴ electing to participate in the service.

AAPC is the national trade association representing the interests of paging carriers throughout the United States. Paging carriers are classified as Commercial Mobile Radio Service providers pursuant to Section 20.9 of the Commission's rules,⁵ and thus may elect to participate in the CMAS that will be implemented as a result of this and companion rulemaking proceedings. One of the standing committees operating under AAPC's umbrella is the Paging Technical Committee, which is responsible for common protocols and industry accepted device specifications for all of the paging industry. AAPC's members include the majority of paging operators holding nationwide licenses under Parts 22, 24 and 90 of the Commission's rules; a representative cross-section of operators of regional and local paging systems licensed by the Commission; as well as equipment suppliers, subscriber device manufacturers and other vendors to the carrier industry. A representative from AAPC also served on the CMSAAC that issued the report under consideration in this rulemaking proceeding.

AAPC commends the work of the CMSAAC and generally supports the conclusions and recommendations in the Report. Accordingly, AAPC's comments are primarily intended to underscore and validate CMSAAC's work insofar as the key issues of importance to the paging industry are concerned.

Available Transport Technologies (NPRM ¶¶8-11)

For the reasons detailed in its report, the CMSAAC concluded that “[p]oint-to-point and unicast delivery technologies are not feasible or practical for the support of CMAS”. (Report at

³ Although the WARN Act uses the term “commercial mobile service,” it expressly equates that term with “commercial mobile radio service” as defined in 47 U.S.C. §332(d)(1). See WARN Act at §602(b)(1)(A).

⁴ 47 C.F.R. §20.9.

⁵ See 47 C.F.R. §20.9(1), (6), (11).

p. 49). The NPRM cites this conclusion, inquiring generally as to “the availability of technologies now and in the future for the transmission of alerts over the CMAS” and the extent to which “point-to-point and point-to-multipoint technologies provide viable solutions for a national CMAS”. (NPRM at ¶8). The NPRM also inquires whether the “higher layer protocol” envisioned by CMSAAC for the CMAS “is necessary” and how point-to-point, point-to-multipoint and broadcast models could carry this information and provide the recommended authentication information.” (NPRM at ¶11).

CMSAAC is unquestionably correct that point-to-point and unicast technologies are not feasible or practical to use for CMAS. If for no other reason, the latency in message delivery inherent in such modes of transport render them essentially useless for any sort of mass alerting system like CMAS. By contrast, point-to-multipoint or “broadcast” technologies such as used in paging networks are ideal for such an application. A paging message that is transmitted nationwide, for example, typically is delivered to receivers across the country in less than two minutes. Even under congested conditions, such as might occur during extreme emergencies, the length of time necessary to delivery an alert nationwide on a paging network would be extended by only a few minutes, and alerts would still be delivered to receivers nationwide in less than ten minutes.

No doubt there will be other point-to-point and broadcast technologies deployed in the future, or those that are only beginning to be deployed today, that ultimately may prove suitable for CMAS. It is important, therefore, that the standards and procedures adopted today do not preclude future participation by these technologies. It is equally important, however, that the standards and procedures adopted today likewise do not as a practical matter preclude participation by the one class of CMRS provider whose point-to-multipoint and broadcast networks are already suitable for participation in CMAS and are already in service and widely deployed.

With respect to the higher layer protocol issues flagged by the NPRM, AAPC submits that the mandatory aspects of the protocol should be confined to the A and C interfaces, and should not extend to the subscriber device level. That is, all necessary authentication of alerts should be performed at the A and C interface levels, and the participating carrier should be able to decide for itself how much, if any, of the protocol should be transmitted to the subscriber device. In that way, the different point-to-multipoint or broadcast networks would not in fact have to carry this information at all; and authentication of the alerts at the subscriber device level likewise would not be necessary.

Alert Aggregator (NPRM ¶¶12-13)

The NPRM notes that the CMSAAC recommends that a federal government entity fulfill the roles of Alert Aggregator, *i.e.*, receiving, accumulating and authenticating alerts originated by authorized alert initiators using Common Alert Protocol (CAP), and of Alert Gateway, *i.e.*, formulating an alert and transmitting it to gateways operated by participating CMRS providers. (NPRM at ¶12). The NPRM requests comment on these recommendations (*id.*), and inquires whether such a centralized system runs the risk of creating a single point of failure. (NPRM at ¶13).

In AAPC's view, having a federal government entity serve as a centralized Alert Aggregator and Alert Gateway is one of the single most important features of CMAS necessary to encourage broad participation by CMRS providers. With a centralized aggregator, a carrier will not face having to maintain connections to numerous different agencies in order to receive alerts, thus making it more feasible for smaller carriers as well as larger carriers to participate in CMAS. A centralized aggregator also will be able to prioritize alerts, a task that participating carriers should not have to undertake. Carriers should function basically as pipelines in the dis-

tribution of alerts delivered to the Alert Gateway, and should not have to make or be involved in making judgments about which alerts to distribute. AAPC believes that Aggregator and Gateway functions are thus quintessentially government rather than private functions, and are functions that the federal government is uniquely qualified to perform.

AAPC also points out that having a centralized aggregator does not inherently create a single point of failure. Both functions can readily be designed with diverse and redundant facilities to eliminate the risk of a single point of failure.

Alert Formatting (NPRM ¶¶15-20)

The NPRM also cites the CMSAAC's recommendations on alert payload limitations (90 characters of text) (¶15); the classification of emergency alerts (Presidential-level, Imminent threat to life and property, and Child Abduction Emergency) (¶16); a text-based common alerting message format (¶17); the elements of an alert message (event type or category; area affected; recommended action; expiration time with time zone; and sending agency) (¶18); use of automatic text generation and free-form text (¶19); and a standardized set of alerting messages (¶20). The NPRM requests comments on these recommendations and on possible alternatives.

AAPC believes that the CMSAAC has struck an appropriate balance in its recommendations between a reasonably sophisticated CMAS and a CMAS that is not unduly complex or complicated for the user. AAPC supports the balance struck by the CMSAAC and urges the Commission to accept the recommendations as presented.

Geo-targeting (NPRM ¶¶21-22)

The NPRM requests comment on the level of precision that should be required for the geographical targeting ("geo-targeting") of CMAS alerts. (NPRM at ¶21). More specifically, the NPRM seeks comment on the CMSAAC's recommendation that due to current capabilities,

“an alert that is specified by a geocode, circle or polygon . . . will be transmitted to an area not larger than the [CMRS provider’s] approximation of coverage for the county or counties with which that geocode, circle or polygon intersects,” as well as CMSAAC’s statement that technical limitations currently preclude dynamic geo-targeting at a level more granular than the county. (*Id.*). In this regard, the NPRM footnotes the concern expressed by a representative of New York City that it needs to receive alerts at a more granular level than county-wide. (NPRM at ¶22 & n. 40).

As an initial matter, AAPC respectfully but emphatically submits that requiring the type of dynamic geo-targeting at the county or sub-county level, as suggested by the NPRM, would be an unfortunate and serious mistake. AAPC understands the desire that persons directly in harms way of, say, a tornado or a hazardous materials spill, can be notified that their lives and property are in imminent peril. However, it is a fallacy to conclude from this laudable premise that the persons directly in harms way are the *only* persons who should receive an alert, and that all others should be *excluded* from receiving an alert.

The Commission needs to remember that persons served by the CMAS are, by definition, mobile. Physically, they could be anywhere at all when an alert regarding a particular area is sent, but that does not speak to whether they have a meaningful interest in an alert for a particular area or whether they should receive the information contained in the alert. For example, a hazardous chemical spill in Manhattan obviously would be of interest not only to those persons in the immediate area of the spill; but also those persons in surrounding areas who may be planning to go to the affected area within a short time after the disaster (whether for business reasons, commuting or otherwise), or even those who have relatives or friends living or working in the affected area. For similar reasons, the fact that a tornado is expected to touch down in, say, Fair-

fax City does not mean that others in the Washington, DC metropolitan area (who may live or work there, or have relatives or friends who do) who do not happen to physically be in Fairfax City at the time do not have a legitimate interest in the information and should be excluded from receiving such an alert. Accordingly, the Commission should not conclude that dynamic geo-targeting as evidently contemplated by the NPRM is necessary or even desirable for CMAS.

Historically, paging carriers have engineered their networks and service offerings to reflect the mobility needs and traffic patterns of their customers; and those needs typically are not confined to the county-wide or sub-county level travel. As a result, it may not be feasible for paging carriers to confine alerts transmitted over their systems to either a county-wide or sub-county distribution. Paging carriers will honor requests of the alert initiators to geo-target alerts to the extent permitted by their networks, but a rigid requirement to geo-target at no greater than the county or sub-county level is neither appropriate nor in the public interest.

Disabled and Elderly User Needs (NPRM ¶23)

The NPRM cites the CMSAAC recommendation that a common audio attention signal and common vibrating cadence be used solely for CMAS alerts, and inquires whether they are needed for all users. (NPRM at ¶23). The NPRM also seeks comments generally on the CMSAAC recommendations relating to users who are elderly and otherwise have special needs, including the recommendation that legacy mobile devices not be required to support CMAS. (*Id.*).

AAPC supports the recommendations of the CMSAAC, and urges that they be adopted by the Commission. In particular, the Commission should not require legacy paging devices to support CMAS. To the extent, if at all, it is technically feasible and cost-effective to retrofit ex-

isting devices to support CMAS, such retrofitting can be expected to happen as a matter of course. No specific regulation by the Commission in this area is appropriate.

Non-English Alerts (NPRM ¶24)

The NPRM also request comment on the technical feasibility of providing alerts in languages other than English, noting the CMSAAC’s suggestion that there may be fundamental technical challenges to implementing parallel alerts in languages other than English. (NPRM at ¶24). AAPC strongly agrees with CMSAAC that having parallel alerts in languages other than English threatens network congestion and latency concerns, and complicates subscriber device designs and capabilities. The decision as to whether alerts should be transmitted in multiple languages is basically a political one, but it is important for the decision-maker to recognize that multiplying the number of parallel alerts to be transmitted comes at the expense of a slower and more costly CMAS.

Notifications (NPRM ¶¶25-29)

The NPRM requests comment on the CMSAAC’s recommendation that CMRS providers should have discretion to determine how to notify existing and new subscribers that they do not, in whole or in part, participate in CMAS; and on the NPRM’s tentative definition of “point of sale” for purposes of subscriber notification as retail, telephone, Internet-based, via third party resellers. (NPRM at ¶27). The NPRM also inquires what constitutes “clear and conspicuous” notice at the point of sale for purposes of the statutory requirement (NPRM at ¶28); whether the CMSAAC is correct that no disclosure by participating carriers is required (NPRM at ¶29); and how notifications of the election not to participate should be given to existing subscribers. (NPRM at ¶30).

Again, AAPC supports the recommendations of CMSAAC. Participating carriers doubtless will do their own advertising and promotion of their election to participate in CMAS, so a requirement that they do so would be unnecessary as well as beyond the scope of the statute. Carriers that elect not to participate should not be subject to rigid notification requirements imposed by the Commission, but should instead have latitude as to the manner and form of their compliance with the statute. It would be incongruous, to say the least, to subject carriers to penalties for failing to participate in a CMAS that is supposed to be “voluntary”.

Elections and Related Filings (NPRM ¶¶31-38)

The NPRM also poses a lengthy series of questions pertaining to the details of a CMRS provider’s notification to the Commission of its initial and subsequent elections to participate in CMAS, and for withdrawing such election, including the mechanics and substance of the notifications. (NPRM at ¶¶31-34). The NPRM also inquires about the procedures necessary to allow a subscriber to terminate service with a carrier that does not participate in CMAS (NPRM at ¶35) and to opt-out of receiving alerts. (NPRM at ¶¶36-37). The NPRM further inquires how the statutory prohibition against “impos[ing] a separate or additional charge for [CMAS] transmission or capability” should be interpreted. (NPRM at ¶38).

Insofar as the mechanical process of filing or withdrawing an election to participate in CMAS is concerned, AAPC envisions a relatively simple electronic filing process rather similar to designating an agent for service of process. That is, the Commission should maintain a simple electronic form to be filled out online by carriers stating whether they are participating in CMAS or not. The Commission should also maintain a register listing the carriers that participate and, separately, the carriers electing not to participate. Elections to participate should be revocable on not less than 30 days notice.

Carriers also should be permitted to manage subscriber “opt-outs” of alerts at the network terminal level and not just at the subscriber device level. Doing so at the network level will help simplify the design of subscriber devices and help reduce the cost of such devices. However, carriers should be able to charge for the subscriber devices themselves; the statutory prohibition against charging for CMAS transmission or capability should be interpreted rather narrowly so as to not discourage broad participation by CMRS providers.

Testing (NPRM ¶41)

Finally, insofar as relevant to AAPC, the NPRM requests comments on the CMSAAC proposed procedures for testing CMAS, including logging CMAS alerts at the Alert Gateway and for testing the system at the Alert Gateway and on an end-to-end basis. (NPRM at ¶41). In this regard, AAPC particularly supports and underscores the CMSAAC recommendation that end-to-end testing should not be seen by subscribers. (Report at p. 79). Mandatory testing at the subscriber device level should be confined to test units and should not extend to devices carried by the public at large.

Respectfully submitted,

s/Vic Jensen

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