The Emergency Alert System (EAS) and All-Hazard Warnings

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Summary

The Emergency Alert System (EAS) is built on a structure conceived in the 1950's when over-the-air broadcasting was the best-available technology for widely disseminating emergency alerts. It is one of several federally managed warning systems. The Federal Emergency Management Agency (FEMA) jointly administers EAS with the Federal Communications Commission (FCC), in cooperation with the National Weather Service (NWS), an organization within the National Oceanic and Atmospheric Administration (NOAA). The NOAA/NWS weather radio system has been upgraded to an all-hazard warning capability. Measures to improve the NOAA network and the new Digital Emergency Alert System (DEAS) are ongoing. The Department of Homeland Security (DHS), working with the Association of Public Television Stations, is implementing a program that will disseminate national alert messages over digital broadcast airwaves, using satellite and public TV broadcast towers. This program, referred to as the Integrated Public Alert and Warning System (IPAWS), is part of the Department's response to an Executive Order requiring the Secretary of Homeland Security to meet specific requirements for an alert system as part of U.S. policy.

Legislation was passed at the end of the 109th Congress (the Warning, Alert, and Response Network Act, or WARN Act, as signed into law as Title VI of P.L. 109-347) to assure funding to public television stations to install digital equipment to handle national alerts. The law also required the establishment of a committee to provide the FCC with recommendations regarding the transmittal of emergency alerts by commercial mobile service providers to their subscribers. Committee recommendations provided the structure for a Commercial Mobile Alert System (CMAS). In addition to presidential alerts, which clearly are a federal responsibility, the service would transmit emergency alerts generated by state, local, and other non-federal authorities.

The Congressionally mandated improvements to DEAS were still incomplete at the beginning of 2009. The FCC fulfilled its obligations to establish the framework for CMAS but the federal administrative structure needed to support it has to be put in place. The federal agency responsible for completing work on both of these projects is FEMA's National Continuity Program Directorate.

The 111th Congress may choose to pursue oversight of these programs, continuing the efforts of the 110th Congress, and to consider new measure to improve the nation's capability to provide alerts and information before, during, and after an emergency.

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The two mainstays of the U.S. capacity to issue warnings are the Emergency Alert System (EAS), which relies primarily on broadcasting media, and the NOAA Weather Radio All-Hazards Network. The National Weather Service (NWS) of the National Oceanic and Atmospheric Administration (NOAA)[1] sends alerts through NOAA Weather Radio (NWR), now expanded to include warnings for all hazards. Several initiatives are underway within the federal government to improve, expand, and integrate existing warning systems. The most important of these—in terms of using, testing and developing leading-edge technology—is the Integrated Public Alert and Warning System (IPAWS), a public-private partnership in which the Department of Homeland Security (DHS) has a leadership role. Many communities, meanwhile, are installing local alert systems that send voice, text messages, and e-mail. Many agree that the long-term goal for emergency alerts is to converge federal warning systems into an integrated network that can interface with localized warning systems and also call centers, such as those used for 911 and 211 calls.[2]

In response to a requirement in the Warning, Alert, and Response Network Act, or WARN Act, as signed into law (Title VI of P.L. 109-347), the Federal Communications Commission (FCC) worked with commercial mobile service providers to create a Commercial Mobile Alert System (CMAS) that would be able to relay alerts through cell phones. In addition to presidential alerts, which clearly are a federal responsibility, the service would transmit emergency alerts generated by state, local, and other non-federal authorities. The National Continuity Programs Directorate, within the Federal Emergency Management Administration (FEMA), has accepted the responsibility of acting as a gateway and aggregator of alerts for dissemination through CMAS.[3] The National Continuity Programs Directorate is currently responsible for implementing IPAWS.

As will be discussed in this report, the Emergency Alert System relies on many partners. The role of the federal government has been to lead by reason of its prime responsibility to assure presidential alerts for national disasters. Alerts and warnings at the state and local level are disseminated through a number of information channels; the broadcasting of these alerts by television and radio stations is voluntary. The National Response Framework (NRF) emphasizes the separate roles of state and local agencies and other non-federal entities in disseminating alerts.[4] There do not appear to be any efforts at the federal level to coordinate NRF planning for alerts and post-disaster information with State Emergency Communications Committees (SECCs). The differentiation between responsibilities to be assumed by federal agencies and those of state/tribal/local authorities has in many cases led to problems with coordination, and uneven effectiveness, of EAS utilization from state to state. There have been expectations among state emergency managers, state broadcaster associations, and others who participate in EAS program planning that the implementation of IPAWS would provide the backbone for a robust emergency alert capability at all levels. The IPAWS programs, however, has fallen behind schedule. What appears to be retrenchment due to cutbacks in funding has led to a near-exclusive focus on presidential alerts, while programs at the state and local level—and to assist individuals

[1] The National Oceanic and Atmospheric Administration (NOAA) is an agency of the Department of Commerce.

[2] 911 calls go to Public Safety Answering Points (PSAPs). 211 calls typically go to municipal call centers. The role of call centers in providing warnings and information in emergencies is discussed in CRS Report RL34755, *An Emergency Communications: The Future of 911*, by Linda K. Moore.

[3] "Nationwide Emergency Mobile Telephone Alert System Soon to Be Realized," Press Release, U.S. House of Representatives, Committee on Homeland Security, May 30, 2008.

[4] "Federal planning for external affairs functions recognizes State, tribal, and local responsibilities for providing information to their citizens." National Response Framework, National Response Plan, Emergency Support Function #15 - External Affairs Annex at http://www.fema.gov/pdf/emergency/nrf/nrf-esf-15.pdf.

with disabilities—have languished.[5] Some of these delays have been ascribed to the need for extensive inter-agency coordination, not only with NOAA and the FCC, but also with Science and Technology Directorate of the Department of Homeland Security (DHS) to assure interoperability with first responders.[6]

EAS Administration

EAS currently sends emergency messages with the cooperation of broadcast radio and television and most cable television stations. It originated as CONELRAD (Control of Electromagnetic Radiation) in 1951, as part of America's response to the threat of nuclear attack. In 1963, the system was opened to state and local participation. Through most of its existence, the alert system was known as the Emergency Broadcast System. The name was changed when the technology was upgraded and automated during the 1990s.

Congress has placed responsibility for civil defense measures, which include operation of the present-day EAS at the national level, with the Director of the Federal Emergency Management Agency (FEMA)[7] now part of DHS. The FCC has been designated by FEMA to manage broadcaster involvement in EAS; it currently provides technical standards and support for EAS, rules for its operation, and enforcement within the broadcasting and cable industries. Non-federal EAS operational plans are developed primarily at the state and local level. The emergency response officials who, typically, initiate an EAS message for a state or local emergency also work with FEMA. The FCC requires states that have developed an EAS plan to file the plans with the FCC. Not all states have FCC-compliant EAS plans that have been approved and reviewed by the FCC. FEMA advisors often help to integrate EAS usage into regional or state emergency response plans. The decentralized process of EAS coordination and implementation contributes to uneven planning; for example, procedures for initiating a message and activating EAS differ from state to state.

Umbrella organizations that participate in EAS planning and administration include the Media Security and Reliability Council (an FCC Advisory Committee), the Primary Entry Point[8] Advisory Committee, and associations such as the National Association of Broadcasters, the National Alliance of State Broadcasters Associations, and individual state broadcasting associations. States and localities organize Emergency Communications Committees whose members often include representatives from broadcasting companies or local TV and radio stations. These committees agree on the chain-of-command and other procedures for activating an

[5] Comments by, among others, Ann Arnold (Chair, Texas SECC and Executive Director, Texas Association of Broadcasters), Suzanne D. Goucher (Chair, Maine SECC and President, Maine Association of Broadcasters), Art Botterell (Manager, Community Warning System, Contra Costa County Sheriff's Office, CA) and Clay Freinwald (Chair, Society of Broadcast Engineers' EAS Committee, Chair Washington SECC, and Radio Frequency Systems Engineer, Entercom) at "Promoting an Effective Emergency Alert System on the Road to a Next Generation EAS," FCC EAS Summit, May 19, 2008, Washington, DC.

[6] Comments by Lance Craver, Program Manager, IPAWS at "Promoting an Effective Emergency Alert System on the Road to a Next Generation EAS," FCC EAS Summit, May 19, 2008, Washington, DC.

[7] P.L. 103-337, National Defense Authorization Act for Fiscal Year 1995, Title XXXIV - Civil Defense, Sec. 603 (42 U.S.C. § 5196), amending the Federal Civil Defense Act of 1950 (64 Stat 1245). Provisions are now embodied in the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S C. 5121 and seq.).

[8] The Primary Entry Point (PEP) system consists of a nationwide network of broadcast stations connected with government activation points through designated National Primary Stations (LP1s).

emergency message through radio and television. The constraints of current EAS technology, as specified by the FCC, limit a state or local EAS message to no more than two minutes. Emergency alert agreements with broadcasters, therefore, usually provide for both EAS warning messages and follow-up broadcast programming.

Broadcaster Participation

The participation of broadcast and cable stations in state and local emergency announcements is voluntary. Over 30 radio stations have been designated as National Primary Stations that are required to transmit Presidentially initiated alerts and messages. The National Primary Stations form the backbone of the federal-level Emergency Alert System, and are directly under the governance of FEMA. In times of a national emergency, their broadcasts would be relayed by Primary Entry Point (PEP) stations to radio and television stations that rebroadcast the message to other broadcast and cable stations until all stations have been alerted. This system of relaying EAS messages is generally referred to as the "daisy chain." State and local emergency alerts enter the daisy chain through the PEPs, which can include the national primary stations (also referred to as Presidential PEPs). The FCC requires the states to initiate weekly or monthly tests, it does not require testing at the national level. There are therefore several levels of governance, each of which uses different combinations of radio broadcast stations to initiate and transmit messages. There is a federal level, for national alerts, administered by FEMA, using radio broadcast stations with equipment that conforms to FCC requirements, there are state plans, as described above, and there can be local plans. States, in particular, will use combinations of radio stations with different broadcast transmission coverage to match the configuration of their geographical areas. One constant is that the FCC sets the requirements for equipment for all stations.

The FCC requires broadcast and cable stations to install FCC-certified EAS equipment as a condition of licensing. Radio and television broadcast stations, cable companies and wireless cable companies must participate. Cable companies serving communities of less than 5,000 may be partially exempted from EAS requirements. For the broadcast of non-federal emergency messages, the FCC has ruled that the broadcasters, not a state or local authority, have the final authority to transmit a message.[9] Historically, the level of cooperation from the broadcasting industry has been high. For example, because state and local governments are not required to upgrade to EAS-compatible equipment—and therefore may lack direct access to the technology—broadcasters often volunteer to manage the task of EAS message initiation.

Digital Broadcasting

The FCC has promulgated new rules to include digital media carriage of EAS messages. In a Report and Order released November 10, 2005, EAS requirements have been expanded to include digital communications over direct-broadcast televison and radio, digital cable, and direct-to-home satellite television and radio. Companies using these media are required to install EAS equipment to handle digital formats. As part of the Report and Order, the FCC asked for a new round of comments on ways to improve and expand the current emergency alert system.[10] The final rule became effective February 21, 2006.

[9] FCC, *Report and Order and Further Notice of Proposed Rule Making*, Released December 9, 1994, FO Docket Nos. 91-301 and 91-171, 10 *FCC Record* 1786.

[10] FCC, *Review of the Emergency Alert System, First Report and Order and Further Notice of Proposed Rulemaking,* (continued...)

EAS Technology

EAS technology uses coders and decoders to send data signals recognized as emergency messages. In manual mode, an EAS alert is sent to a broadcaster, either over an EAS encoder-decoder or by other means, such as a telephone call. Where agreements have been put in place with broadcasters, EAS messages can be created and activated by state or local officials and transmitted automatically to the public without the intervention of broadcasting staff. These automated messages are broadcast to the public using computer-generated voices. All EAS messages carry a unique code which can be matched to codes embedded in transmitting equipment; this authenticates the sender of the EAS message. To facilitate the transmittal of emergency messages, messages are classified by types of events, which also are coded. These event codes speed the recognition and re-transmittal process at broadcast stations. For example, a tornado warning is TOR, evacuation immediate is EVI, a civil emergency message is CEM. When a message is received at the broadcast station, it can be relayed to the public either as a program interruption or, for television, as a "crawl" at the bottom of the TV screen.

Alerting Individuals with Disabilities and Others with Special Needs

The FCC requires that EAS messages be delivered in both audio and visual (captions, message boards, other) formats. Regular broadcasts about emergencies, however, do not have to comply with this requirement. The community of disabled individuals, therefore, is often under-served when emergency information is disseminated outside the EAS network. Although a number of technologies exist to provide accessible formats for people with special needs—such as those with disabilities, the elderly, and those who do not understand English—many of these solutions are not supported by the current EAS system or are so expensive as to be inaccessible to most. Incorporating technologies that expand the reach of EAS, at a reasonable cost, is one of the challenges of delivering an effective warning system that is truly nationwide.[11]

GAO Study

Many aspects of the Emergency Alert System summarized in this report are discussed in detail in a March 2007 report from the Government Accountability Office (GAO).[12] The GAO initiated a study of the functioning of EAS from the perspective of emergency preparedness in government operations. Based on its findings, the GAO has made recommendations to FEMA and the FCC for additional planning and greater involvement with stakeholders. In particular, the GAO found that there were problems in the relay system that had not been identified, in part because there is no requirement for a system test at the national level. It also identified problems such as gaps in disaster planning and insufficient redundancy to ensure uninterrupted broadcasting nationwide. DHS replied positively to the GAO's report and recommendations and said that it would begin

(...continued)

EB Docket No. 04-296, released November 10, 2005.

[11] For a discussion of the issue in the context of the Americans with Disabilities Act, see CRS Report RS22254, *The Americans with Disabilities Act and Emergency Preparedness and Response*, by Nancy Lee Jones.

[12] *Emergency Preparedness: Current Emergency Alert System Has Limitations, and Development of a New Integrated System Will Be Challenging*, GAO-07-411, March 2007.

quarterly tests of the national-level relay.[13] The reply also noted that FEMA, in coordination with the FCC, continues to work on implementing the executive order regarding improvements to the system.

NOAA Weather Radio

Digitized signal technology for EAS is the same as that used for the NOAA Weather Radio (NWR). Widely recognized as the backbone of public warning systems, NWR broadcasts National Weather Service forecasts and all-hazard warnings for natural and man-made events. The compatibility of the signals makes it possible for EAS equipment used by the media to receive and decode NWR messages automatically. Weather radios can be tuned directly to NWR channels. Many can be programmed to receive only specific types of messages—for example, civil emergency—and for specific locations, using Specific Area Message Encoding (SAME). Standardized SAME codes can be used in almost any device with a radio receiver. These can sound an alarm or set off a flashing light. Similar technology is available to provide NWR messages by satellite TV and over the Internet as messages or as e-mail. Therefore, although EAS and NWR are broadcast technologies set up to operate on a one-to-many basis, these broadcasts can be screened and decoded to provide customized alerts.

All-Hazard Warning Technology

Given the advanced state of other communications technologies, especially the Internet and wireless devices, the reliance on delivering EAS warnings by radio and television broadcasting seems out-of-date. Some states and communities are pioneering alert systems that utilize other infrastructures. In particular, many communities participate in programs with e-mail or Internet alerts and some issue mass alerts by telephone.

Common Alerting Protocol

A standardized format known as Common Alerting Protocol (CAP)[14] has been developed for use in all types of alert messages. CAP has received widespread support from the public safety community and has been accepted as a standard by the international Organization for the Advancement of Structured Information Standards (OASIS). One of its key benefits is that it can be used as a single input to activate multiple warning systems. It is being used as a standard for new, digitized alert networks using multiple technologies. The Emergency Interoperability Consortium (EIC) has a memorandum of understanding with DHS to improve and expand the use of CAP and other XML standards in emergency alerts.[15] In a digital environment, CAP is intended to replace SAME codes currently used in EAS.

[13] Ibid., Appendix III.

[14] CAP information at http://www.incident.com/cookbook/index.php/CAP_Fact_Sheet.

[15] See http://www.eic.org/dhs.htm and http://www.eic.org/docs/SIGNED%20MOA.pdf.

Call Centers

Some of the technological solutions for disseminating alerts and providing information rely on call centers, including 911 emergency call centers (also referred to as Public Safety Answering Points, or PSAPs). *The 9/11 Commission Report*[16] describes the often inadequate response of 911 call centers serving New York City.[17] The report's analysis of the 911 response recommends: "In planning for future disasters, it is important to integrate those taking 911 calls into the emergency response team and to involve them in providing up-to-date information and assistance to the public."[18] Such a solution would require a common infrastructure that would support a number of communications and warning needs. Many recommendations have encouraged the development of greater end-to-end connectivity among all types of emergency services.

Digital Emergency Alert System

Working with the Association of Public Television Stations, DHS has completed two successful pilots to test the implementation of digital technologies and networks, the Digital Emergency Alert System (DEAS). DEAS uses the additional capacity that digital technology provides for broadcasting to send digitized alerts to almost any communications device, including wireless. The rollout of DEAS is part of the Integrated Public Alert and Warning System (IPAWS). Development of IPAWS is under the leadership of FEMA's National Continuity Programs (NCP) Directorate.[19] It will use digital media—including digital TV—to send emergency alert data over telephone, cable, wireless devices, broadcast media and other networks. The program will provide the base for a national federal public safety alert and warning system using digital technology.[20]

Another joint program under the IPAWS umbrella is a pilot with NOAA to test a geo-targeted alert system using "reverse 911." Reverse 911 is a term sometime used to describe any calling system that places calls generated by a public safety call center to a specific audience.

A program component of IPAWS is to improve the robustness of the communications network to Primary Entry Point (PEP) radio stations by switching from dial-up to satellite distribution. The number of PEP broadcast stations is to be expanded to provide satellite communications capability to every state and territory. These steps are meant to assure the survivability of radio broadcast communications in the event of a catastrophic incident. The public radio satellite system is already equipped to send DEAS messages to about 860 public radio stations across the country. FEMA plans to increase the number, over time, from 36 to 63.[21]

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[16] Final Report of the National Commission on Terrorist Attacks Upon the United States, Official Government Edition, 2004 (referred to as *9/11 Commission Report*).

[17] *9/11 Commission Report* pp. 286-287, 295, and 306.

[18] Ibid., p. 318.

[19] See http://www.fema.gov/about/offices/ncp/index.shtm.

[20] Testimony of R. David Paulison, Administrator, FEMA, Department of Homeland Security, Senate Committee on Homeland Security and Government Affairs, April 3, 2008.

[21] Written testimony and comments of Major General Martha Rainville, Assistant Administrator, National Continuity Programs Directorate, FEMA, Department of Homeland Security, at "Advancing Public Alert and Warning Systems to Build a More Resilient Nation," Hearing, House of Representatives, Committee on Homeland Security, Subcommittee on Emergency Communications, Preparedness and Response, May 14, 2008.

Proposals and Programs

Advocates of all-hazard warning systems are seeking interoperability among warning systems, standardized terminology, and operating procedures in order to provide emergency alerts and information that reach the right people, in a timely manner, in a way that is meaningful and understood by all. In 1999, FEMA and the Departments of Commerce and Agriculture took the lead in a multi-agency working group to explore ways to create an all-hazard warning network.[22] Their recommendations included using NWR as the backbone for a national all-hazard warning system and the establishment of a permanent group to promote improvements in warning systems. The following year, the National Science and Technology Council at the White House sponsored a report that explored the types of technologies and systems that are used or could be used for emergency alerts.[23] Among its recommendations were: the creation of a public-private partnership that would bring all stakeholders together; one or more working groups to address issues such as terminology, technology, location-specific identifiers and cost-effective warning systems; system standardization; and increasing the number of communications channels for warnings. The report concluded that substantial improvements in early warning systems could be achieved through coordination and better use of existing technologies.

Also in 2000, a public-private, multi-disciplinary group was organized as the Partnership for Public Warning (PPW). In 2002, the group received funding[24] to convene meetings and prepare comments regarding the Homeland Security Advisory System (HSAS). Workshop findings were later expanded into recommendations in "A National Strategy for Integrated Public Warning Policy and Capability." The purpose of the document was to "develop a national vision and goals" for improving all-hazard warning systems at the federal, state and local levels. PPW suggested that DHS take the lead in developing a national public warning capability. The PPW discussed the role of an alert system in public safety and homeland security and concluded that current procedures are "ineffective." PPW's recommendations centered on developing multiple, redundant systems using various technologies with common standards that would be "backward compatible" with EAS (including Amber Alert codes) and National Weather Service technologies.[25] It subsequently scaled back its activities for lack of funding.[26]

Executive Order: Public Alert and Warning System

On June 26, 2006, President George W. Bush issued an executive order stating that U.S. policy is "to have an effective, reliable, integrated, flexible, and comprehensive system to alert and warn the American people.... " To achieve this policy, the President set out a list of functional

[22] National Partnership for Reinventing Government, "Saving Lives with an All-Hazard Warning Network," 1999, at http://www.nws.noaa.gov/om/all-haz/all-haz1.htm.

[23] National Science and Technology Council, Working Group on Natural Disaster Information Systems, Subcommittee on Natural Disaster Reduction, "Effective Disaster Warnings," November 2000 http://www.sdr.gov/NDIS_rev_Oct27.pdf.

[24] Funding came from FEMA, the National Science Foundation, the National Weather Service, the U.S. Geological Survey, and private sources.

[25] Documents at http://www.partnershipforpublicwarning.org/ppw/natlstratsumm.html.

[26] Memorandum to PPW Members, June 30, 2004. The PPW website is maintained by MITRE Corporation.

requirements for the Secretary of Homeland Security to meet that respond to the recommendations of experts in this field. In summary, these requirements cover

- evaluating existing resources;
- adopting common protocols, standards and other procedures to enable interoperability;
- delivering alerts on criteria such as location or risk;
- accommodating disabilities and language needs;
- supporting necessary communications facilities;
- conducting training, testing, and exercises;
- ensuring public education about emergency warnings;
- coordinating and cooperating with the private sector and government at all levels;
- administering the existing Emergency Alert System as a component of the broader system;
- ensuring that the President can alert and warn the American people.

The order also specified the level of support expected from other departments and agencies in meeting the requirements for a better warning system. The Secretary of Homeland Security was ordered to "ensure an orderly and effective transition" from current capabilities to the system described by executive order.[27] The development and implementation of IPAWS is part of the response to the order.

The WARN Act

The Warning, Alert, and Response Network Act (WARN Act) as signed into law as Title VI of P.L. 109-347, required the establishment of a Commercial Mobile Service Alert Advisory Committee by the FCC.[28] Following the signing of the act into law, the FCC assembled the committee, as required, with members from state, local and tribal governments, from industry and associations, and representatives of persons with special needs.[29] This committee, within a year of formation, was charged with providing the FCC with recommendations on technical requirements, standards, regulation and other matters needed to support the transmittal of emergency alerts by commercial mobile service providers to their subscribers.[30] The FCC, alone or in consultation with the National Institute of Standards and Technology (NIST) of the Department of Commerce, was given the responsibility of adopting proceedings to be used in the promulgation and enforcement of rules reflecting the conclusions of the committee.[31] The digital

[27] "Executive Order: Public Alert and Warning System," released June 26, 2006, available at http://www.whitehouse.gov/news/releases/2006/06/20060626.html. Executive Order 13407.

[28] P.L. 109-347, Sec. 603 (a).

[29] P.L. 109-347, Sec. 603 (b). Information about committee activities and membership is at http://www.fcc.gov/pshs/advisory/cmsaac/.

[30] P.L. 109-347, Sec. 603 (c).

[31] P.L. 109-347, Sec. 602 (a).

broadcasting capacity of public television stations, described above, is to be used to "enable the distribution of geographically targeted alerts by commercial mobile service providers," based on recommendations from the committee.[32] The WARN Act also included provisions for commercial wireless service providers to opt in or out of the emergency alert service, with requirements for informing consumers.[33]

Commercial Mobile Service Alert Advisory Committee

The committee submitted recommendations on using commercial cell phone technology for emergency alerts within the time frame required by Congress (i.e., by October 12, 2007). In accordance with provisions in the WARN Act, the FCC completed a proceeding reviewing the recommendations made by the Commercial Mobile Service Alert Advisory Committee (CMSAAC) within 180 days of receiving the recommendations.[34]

Commercial Mobile Alert System

The proposal to develop a Commercial Mobile Alert System (CMAS) and other recommendations made by the CMSAAC were opened to public comment by the FCC on December 14, 2007.[35] In the subsequent rule-making,[36] the FCC adopted most of the recommendations made by the CMSAAC. In addition to message formats and other standards, some of the key rules cover

- Type of alerts. Three alert categories, as defined in the Report and Order, are required to be carried by participating carriers: presidential, imminent threat, and AMBER alerts.
- Coverage of alerts. The standard for location coverage is to be county-wide.
- Management of alerts. The CMSAAC recommended that a federal agency act as an aggregator in accepting, verifying, and routing messages.

The FCC continues to refine the rules for providing CMAS. The most recent set of requirements is contained in the *Third Report and Order*, released August 7, 2008 (Docket No. 07-287).

The NCP Directorate will take on the responsibility of acting as a gateway and aggregator of alerts for dissemination through CMAS.[37] In statements to the press, Major General Martha Rainville, Assistant Administrator of the NCP, estimated that it would take 18 months for CMAS to become operational.[38] The WARN Act did not provide a mandatory deadline for the implementation of CMAS.

[32] P.L. 109-347, Sec. 602 (c).

[33] P.L. 109-347, Sec. 602 (b).

[34] P.L. 109-347, Sec. 602 (a).

[35] FCC, *Notice of Proposed Rulemaking*, December 14, 2007, PS Docket No. 07-287.

[36] FCC, *First Report and Order*, April 9, 2008, PS Docket No. 07-287 (FCC 08-99).

[37] "Nationwide Emergency Mobile Telephone Alert System Soon to Be Realized," Press Release, U.S. House of Representatives, Committee on Homeland Security, May 30, 2008.

[38] "FEMA Agrees to Assume Role As Aggregator for Wireless Alerts," by Paul Kirby, TR Daily, May 30, 2008.

In an official letter to the FCC, Ms. Rainville had previously stated FEMA's position that the agency did not have the statutory authority to transmit alerts originated by state and local authorities.[39]

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[39] Letter the FCC, dated February 19, 2008, from General Martha Rainville, Assistant Administrator, Office of National Continuity Programs, FEMA, Docket No. 07-287, at http://fjallfoss.fcc.gov/prod/ecfs/retrieve.cgi?native_or_pdf=pdf&id_document=6519842449.