ANNEX 5C

U.S. Emergency Alert System (EAS)

A Brief History

The Emergency Alert System (EAS) leverages the capabilities of participating analogue and digital radio, television, cable, satellite, and wireline providers, working in concert to distribute alert and warning messages to the public. The alert messages can be originated by emergency management authorities at all levels of government to warn the public of imminent emergencies.

The EAS was created in 1994. It is the latest in a series of alert and warning systems that began with the Control of Electromagnetic Radiation (CONELRAD) program, established by President Harry Truman in 1951. The CONELRAD was replaced in 1963 by the Emergency Broadcast System (EBS), which remained in place until 1994. The Federal Communications Commission (FCC) created the EAS in 1994 and began enforcing requirements that mandated that all broadcast stations have EAS equipment installed by 1997. In 2001, cable systems were required to have EAS equipment installed to override all program channels with a national‐level EAS message, also known as an Emergency Action Notification (EAN).

Example of a National Weather Service EAS message



The Primary Entry Point (PEP) concept first surfaced in the mid-1980s. Primary Entry Points are broadcast stations located throughout the country with a direct connection to the Federal Emergency Management Agency (FEMA) and resilient transmission capabilities. These stations provide the initial broadcast of a Presidential EAS message. FEMA is increasing the number of PEP facilities to provide direct coverage to at least 90% of the American public.

Even in today's world of seamless technology and portable communications devices, the Government maintains a system of radio stations to support public alert and warning (A&W). In addition to the PEP System's primary role to broadcast and relay the President's message in a dire emergency, PEP stations are designed with a much higher level of resiliency. These "hardened" radio stations provide the nation with last resort mass communications capabilities under all conditions, as required by the President of the United States.

Broadcast radio receivers are ubiquitous. These radio receivers can receive one or more of the approximately 14,355 full power radio stations broadcasting throughout the country. Over-the‐air radio broadcasts are one-way, omnidirectional transmissions. In the aftermath of a national, catastrophic event, alerting authorities can leverage operational area capabilities to transmit crucial information to the public through as many methods as possible. However, broadcast radio may be the most effective method since it is possible that terrestrial Internet Protocol (IP) networks and other pathways could be inoperable, especially at "last mile" delivery to the public. Prolonged power outages are expected in most catastrophic scenarios, negatively affecting IP networks and other communications. The national EAS program provides the nation with an unparalleled, survivable communications network, available under the direst conditions.

*The above excerpt is from "An Emergency Alert System Best Practices Guide - Version 1.0", by the Federal Emergency Management Agency.*

*Full text at* [*http://www.fema.gov/pdf/emergency/ipaws/eas\_best\_practices\_guide.pdf*](http://www.fema.gov/pdf/emergency/ipaws/eas_best_practices_guide.pdf)