Public Safety Requirements For Next Generation Emergency Alerting Technology

From America's first generation of "modern" alerting technologies that were widely implemented in the 1950's during the height of the nuclear age, these alerting technologies have evolved slowly over the past 60 years. Vintage siren systems were augmented with over the air broadcast alerts for more than fifty years. As Americans have witnessed tremendous changes in communications technologies, emergency alerting technology has been slow to follow. During the past decade, emergency response entities have gradually implemented evolving technologies such as reverse 9-1-1 and "Code Red" systems, with a more recent migration to technologies that take advantage of America's migration to wireless-based communication systems.

In recent years, Federal entities such as the Federal Emergency Management Agency (FEMA) and the Department of Homeland Security (DHS) have teamed with wireless service providers to develop first generation wireless alerting systems such as the Commercial Mobile Alerting System (CMAS), the Integrated Public Alerting Warning System (IPAWS), and now the Emergency Alerting System (EAS). While these new wireless technologies take advantage of America's migration to unwired communications devices, there is a widespread lack of understanding of these systems and their capabilities, less than total adoption of these technologies, and a number of shortcomings are being recognized in the fundamental capabilities of these emerging systems to reach the public in many situations.

From a historical perspective, local and state public safety entities have had relatively little direct input in the development of emergency alerting technologies-in short, they tend to develop from a "top down" model. While systems such as CMAS, IPAWS, and now EAS are significant improvements over previous alerting technologies, there is a need for planning for future generations of emergency alerting features that can address shortcomings in current systems.

As NPSTC has an excellent history in working with the broad spectrum of first responder associations and organizations that represent the best and brightest talent within the user community, it would appear to be a natural fit for NPSTC to take the lead in the creation of a work group that can focus attention on public safety requirements for next generation emergency alerting technology. It is recommended that this working group be headed by a member of public safety, with an open invitation to any members of the public safety community and commercial providers who have an interest in developing these user requirements. The end product should focus on functional, nonvendor specific requirements.