# UNDERSTANDING THE ORIGINS OF MASS NOTIFICATION SYSTEMS

BENJAMIN CASEY, PE, CPP, PSP, DBIA

## Governmental, military and commercial construction projects are starting to adopt principles of mass notification systems.

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Mass notification systems are a type of emergency alert system for overall facility safety and defined in building industry codes and guidelines. Mass Notification System ideology and requirements have been slowly making their way into the mainstream of governmental/military and commercial construction projects throughout the U.S. This trend follows the latest Department of Defense (DoD) mass notification criteria, which was originally initiated by the 1996 Khobar Towers bombing. Subsequently, increasingly stringent anti-terrorism protection requirements were added within a multitude of DoD Unified Facilities Criteria documents. Also, the trend mirrors the escalation of intensified Department of Education and Congressional mandates, like those enacted via the 2008 Higher Education Opportunity Act, which included amendments to the Clery Act, updating higher educational institutions' criteria for emergency incident reporting to the student body. These major trends are due in large part to the "War on Terror", and a response to school shootings and other security related incidents that have plagued the United States. Both of which have grasped national attention for the last two decades.

**The Evolution of Mass Notification Systems in Codes and Standards**

The National Fire Protection Association's *NFPA 72 National Fire Alarm Code* first included Mass Notification System recommendations within the 2007 Edition, as an entirely new "Annex E". This annex, as typical of all other NFPA annexes, was provided for informational purposes only. Therefore, even though most Jurisdictions throughout the U.S. adopt NFPA 72 as part of their local building Code, along with specific Jurisdictional amendments after each new Edition is released, only the main body chapters of the NFPA Standard are considered the codified requirements, unless specific jurisdictional amendments dictate otherwise. Still, the inclusion of Mass Notification System Annex recommendations into the *National Fire Alarm Code* had served to solidify the general agreement that Mass Notification Systems should meet the same stringent physical survivability, performance integrity and self-monitoring/supervision requirements as fire alarm systems and could even be fully or partially integrated with fire alarm systems to become coordinated, multi-functional, emergency communications systems. This added annex material set the groundwork for the landmark changes that were to come.

In the 2010 Edition of NFPA 72, a new Chapter 24 *Emergency Communications Systems (ECS)* had been added to the Standard's body requirements, these major scope changes were reflected in a new document title: *NFPA 72 National Fire Alarm and Signaling Code*. Thus demonstrating the recognition that the scope is now well beyond fire alarm and detection. Mass Notification System requirements are now based in the body requirements and continue to evolve in current Editions — it is just a matter of time until jurisdictions near you officially adopt this latest Editions of NFPA 72 if they've not already.

**Including Mass Notification Systems in Your Building**

Mass Notification System requirements have evolved over the last two decades, and our buildings will be reflecting that evolution. For government, military and commercial buildings it is especially important to ensure NFPA 72 requirements are being applied when adopted in your jurisdiction. Refer to NFPA 72 qualification requirements and associated annex recommendations for information on the pertinent areas of expertise of the Mass Notification System performance/risk-based Design Team's licensed design professional. An experienced, licensed, design professional is strongly recommended to correctly implement Mass Notification System Performance-Based Designs, Emergency Response & Strategic Master Planning and Risk Analyses. The services of a professional engineer of fire protection engineering is key to guide this multi-faceted process from conception to design completion and beyond.