INTRODUCTION

New software referred to as "Mass Notification or Emergency Notification Systems" have become commonplace in the toolboxes of public and private sector alert originators. These systems have the capability of notifying large audiences through multiple channels, affording the local jurisdiction a choice of tools to use within one common platform.

HOW THEY WORK

ENS systems are software products, developed by private vendors, whereby the software resides on the vendor's servers, and is leased by a jurisdiction who then uses the system to notify its constituents. These systems rely upon access to the internet, and have multiple components/tools which can be used individually or together. Jurisdictions typically sign a lease with the vendor, and then notify the public within their jurisdictional boundaries, using the vendor's software via the internet. The systems have the ability to send out messages directly to local landline and cell phone users, using a computer process called "Geo-targeting", whereby the system selects phones in a defined geographical area, targeting the message. The phone numbers are entered into the system via 911 data download (landlines), or user voluntary entry via opt-in/signup. Finally, users can create pre-defined contact groups, such as elected officials, law enforcement, or other internal groups, to send out regular or emergency messages. Notifications are typically initiated from 911/PSAP dispatch centers or Emergency Management Agencies. In addition, specialized groups, such as special needs, can be targeted. Special alerts, such as those transmitted on NOAA Weather Radio, can be automatically generated. Due to the advances in technology, thousands of messages can be sent out in a very short period of time, limited only by the local "copper line" capabilities.

NOTIFICATION CHANNELS

ENS systems, due to advances in technology, have the capability to notify the public via the following channels: 1 – text messages to multiple devices; 2 – voice messages to multiple devices, both landlines and cell phones. Voice messages can use either "text to voice" technology, or actual user voice recorded messages, 3 – emails to multiple locations, 4 – Fax, 5 – TTY, and 6 – pagers.

GEO-TARGETING

One of the major advantages of ENS systems is the ability to "Geo-target" notifications. In other words, notifications can be sent out to contacts within a specific targeted geographic footprint, such as a city, or even parts of a city. If an incident, such as a fire or hazmat spill occurs, the notification can be sent to a radius around that incident, such as a half mile or mile. This geo-targeting capability allows for only those that need to be notified to receive the message. This can be even more effective when coupled with Social Media messaging tied to the ENS message.

ADVANTAGES OF ENS SYSTEMS

- ENS systems provide a common platform with all tools "under one roof". Jurisdictions can select the notification channels that are appropriate to the situation/incident (all or some), depending on the geographical footprint. Having many channels to send a message to a given contact results in a very effective means to reach as many people as possible.
- Users of these systems can be "siloed" into public and private organizations, protecting the privacy of individuals, and preventing accidental messages to the wrong contacts
- Contacts for 911 landline phones can be imported into the system, and these numbers are protected from public disclosure by Washington RCW.
- Robust technology allows quick launching of messages that can go out to thousands of contacts in a very short period of time. This is valuable in the case of fast moving incidents, such as wildland fires, floods, earthquakes or tsunamis.
- System reports show exactly how and when the notifications went out, who received them, and who confirmed them.
- Integrated with smart phone technology, both to send and receive messages.
- Limited English Proficiency for public signup into the systems.
- Are able to interface with social media, such as Facebook and Twitter, such that notifications are automatically forwarded to those outlets.
- May interface with IPAWS and its dissemination technologies.

DISADVANTAGES OF ENS SYSTEMS

- Initial and ongoing costs of leasing the software from the vendor (can be paid for from Homeland Security Grants – "Public Notification and Warning"). In other words, there is a yearly fee for the use of these systems, and a recurring source of funding must be found to support them.
- Training needed for both administrators and users to properly and efficiently use the system, that is, personnel initiating notifications must be trained.
- Updates needed for private groups, that is, there is an ongoing need to maintain current contact information, unless that task is put upon the contacts themselves.

CONCLUSIONS

ENS systems, due to technological advances, have now "come of age", and provide jurisdictions with a common platform, with all notification methods "under one roof". This allows the message originator to pick and choose which notification channels are appropriate for any given situation. In addition to the "public" tools, ENS systems allow for the companion use of "private' (predesignated) groups to receive notifications at the same time as the public message. Although there are currently no laws that require jurisdictions to send notifications to the public, the public has come to expect that they will be informed on a timely basis upon emergency situations that can or will impact their safety. ENS systems provide more tools in the toolbox, with all tools under one roof, and this is a good thing for the common goal of notifying the public.