

Safeguarding Communities by Ensuring Last Mile Communication

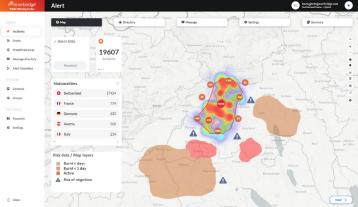
THE DISSEMINATION CAPACITIES OF EVERBRIDGE PUBLIC WARNING: AVAILABLE, ACCESSIBLE, AND EFFECTIVE

Rachele Gianfranchi, Director Government Affairs Summer 2022



Early warning systems exist to protect territories and their communities in the event of severe disruptions such as those created by extreme weather or a multiplicity of other disasters. Unfortunately, too often vital notifications are simply not sent, sent too late, or received too late to respond effectively. Limited capacity to orchestrate responders' operations, such as rescue interventions, with appropriate protection and security measures, poses a risk and undermines societal resilience. This is the risk which Everbridge reduces by keeping people safe and businesses running.¹





There are features to consider in assessing the contribution of a multi-hazard early warning system (MHEWS) to climate risk resilience. These features are closely related to the alert dissemination capacity offered by a multi-purpose, multi-channel public warning system, integrating the hydromet value chain initiated by meteorological forecasting.

- Availability: Existence of early warnings/multi-hazard early warnings at the national, state, district, or municipal authorities' level, inclusive of the last mile communication to the population, authenticated by a trustworthy source.
- Accessibility: The largest number of people who can be reached by a message, enabled by a multiplicity of communication channels of which the mobile phone is the most largely diffused, as well as radio, television, sirens, webpages, social media platforms, and digital billboards.
- **Efficacy:** The capacity of the population to understand the instructions conveyed by the alert message in case of an extreme event. The simplicity and security of the process for the authorities in charge of triggering the alert.

To be most effective, multi-hazard, multi-channel, next-generation early warning systems need to be conceived and implemented on a gradual scale with end-to-end public safety in mind.

At Everbridge, the scalability of its systems allows operators to configure the best solution for their effective needs in a gradual way, learning as they go which technology functionalities are the most suited or more desirable. This reality check with user experience translates to product development roadmaps and top-level engineering capacities dedicated to expanding, adapting, or innovating the range of existing technology products.



From Everbridge's experience in 5 continents and 23 countries, the following areas require reinforcement to drive the most resilience:

- Commonly adopted procedures and CAP protocol for alerting and emergency management plans; alerting technology like public warnings tested to disseminate the message to the majority of the population;
- Adoption of multi-hazard early warning systems in 50% of WMO countries which do not yet have one;
- Situational awareness to effectively guide people exposed to risk and responders deployed on rescue operations;
- Command and control capacities to communicate effectively to a variety of responder agencies and track operations;
- Need for collaboration protocols between jurisdictions, borders, and local governments.

Technology exists today to help public authorities when it matters most. An effective alerting process is an essential component in emergency and disaster management (Bopp et.al., 2021)². For instance, when early warning alerts are not disseminated rapidly and widely, and emergencies are not managed effectively, the consequences can be devastating for those impacted. Everbridge sees this reflected in the growth of its public warning sales in the aftermath of an emergency and in the growing demand for situational insights such as:

- Receiving risk input data to assess impact
- Real-time density of mobile network coverage and devices (phone number and location)
- Reviewing the breakdown of device users by nationality to identify residents and tourists
- Viewing crowd movements (evacuation, staying in place)
- Getting eyes on the ground (CCTV camera)
- Plugging into any existing cell broadcast or location-based SMS setup
- Sending targeted messages in multiple languages/dialects

Everbridge's multi-channel, multi-hazard, multi-purpose, multi-tenant public safety technology allows governments to organize nation-wide operations by giving each agency involved independent access to a common operating portal. This enables operations to be organized and streamlined within one single platform. This is how, beyond simply endowing the agency with the acquisition of new technology, Everbridge can indirectly trigger profound operational improvements in collaboration among jurisdictions, borders, and local governments.

To perform their function of ensuring public safety and continuing to provide vital national services, governments increasingly need a holistic approach to best protect their communities.



²Bopp et al. How to improve alert systems: the technical, human, environmental and structural aspects. https://knowledge.aidr.org.au/media/8369/ajem_20_2021-01.pdf

Everbridge uses a four-step approach as a helpful blueprint for authorities deciding on which public safety technologies they need to best protect their communities and people. They are structured around four critical components to ensure end-to-end public safety when a critical event occurs:

- **1. Be prepared** Create response and communication plans. Receive early warning alarms and monitor crowd movements.
- **2.** Respond faster Mobilize a coordinated response team quickly and collaborate throughout an incident's lifecycle.
- **3. Inform immediately** Reach out and communicate with residents and visitors in a jurisdiction in real time.
- **4. Expedite recovery** Mitigate impact and continue active communication with the impacted people.

To deliver on this blueprint, Everbridge public safety technology solutions revolve around constantly upgraded software products:

Multi-Hazard: Contributes to advance Government Agenda 2030 in the context of the Sendai Framework for Disaster Risk reduction and the Sustainable Development Goal 13, specifically targets 13.1 and 13.2.

Multi-Channel: Complies with the internationally recognized standards of emergency communication bodies such as the ISO, ATIS, ETSI, and 3GPP. As well as being US-FedRAMP certified and CAP compliant, it offers maximum interoperability with all communication channels.

Tested and Implemented: Everbridge public safety technology solutions are deployed in 10 EU countries through the recent EU body of telecommunications legislation, matching recognized criteria of effectiveness.

Multi-Purpose: Meets development risk-reduction objectives by supporting the management of shared resources such as civil protection mechanisms, rescue forces, and relief organizations intervening to support public safety needs.

Multi-Tenant: Offers governments a cohesive array of public safety solutions that eliminate inefficiencies due to multiple technologies with limited interoperability adopted at different state levels.



Let's Talk

Want to learn more about Everbridge Critical Event Management? Request a demo at Everbridge.com.

About Everbridge

Everbridge, Inc. (NASDAQ: EVBG) is a global software company that provides enterprise-grade software-as-a-service applications that automate and accelerate organizations' operational response to critical events to Keep People Safe and Organizations Running™. For two decades Everbridge has partnered with customers and grown software and service capabilities to meet their needs. Today, Everbridge provides a single unified platform that allows organizations to manage the full lifecycle of a critical event. Everbridge understands the range of threats faced by organizations and communities and how critical it is to adapt within this volatile global threat landscape. Fostering resilience can also be a competitive advantage. Everbridge specializes in five core resilience solutions to meet these needs: Business Operations, Digital Operations, People Resilience, Public Safety, and Smart Security. Over 6,200 global customers rely on the company's Critical Event Management (CEM) platform to quickly and reliable aggregate and assess thread data, locate people at risk and responders able to assist, automate the execution of pre-defined communications processes.

Click here to learn more about Everbridge and follow us on LinkedIn and Twitter.

