



Genasys™

# National Emergency Warning Systems



Genasys



# National Emergency Warning Systems (NEWS)

## Mobile Telecom Carrier Based Mass Notification Solutions

Genasys National Emergency Warning Systems (NEWS) are deployed directly on mobile carrier networks to send critical alerts and life-saving information across SMS and CBC channels to anyone, anywhere with no opt-in required.

Emergency notifications are managed and delivered through the Genasys cloud-based command console or mobile app. Dynamic maps, traffic information, weather forecasts, and sensors for earthquakes, flooding, landslides, fires, and other IoT capabilities are integrated into the app command console.

The powerful geo-location capabilities of NEWS empower emergency management personnel to send hyper-specific instructions to people in multiple areas and monitor evacuation progress.



### Reach Everyone

100% of mobile devices receive NEWS alerts and warnings, even the cellphones of tourists and visitors. No downloads, no configurations, no registrations or opt-in necessary.



### Geo-Location

Deliver warnings and alerts only to at-risk populations using NEWS geo-location and geo-fencing. This is key to maximizing attention rate, as people tend to ignore notifications that do not immediately affect them.



### Maximize Reliability

With direct access to the mobile carriers, NEWS enables government officials and emergency managers to deliver local, regional, or nationwide alerts, warnings, and notifications quickly and reliably.



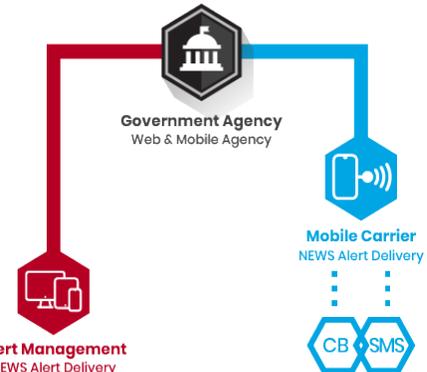
### Cross Channel

NEWS delivers notifications via SMS and CBC as well as other communication channels, including social media, radio, TV, mobile apps, and Genasys public safety mass notification speaker arrays.

### External Data, Sensors & Warnings



### Government Agency Web & Mobile Agency



### Alert Management NEWS Alert Delivery

- Audible 
- Voice Calls 
- CAP   
(TV, Radio, Digital Signage & other)
- IPAWS 
- Social Media   
(WhatsApp, YouTube, Mail, Google, Public Alerts)

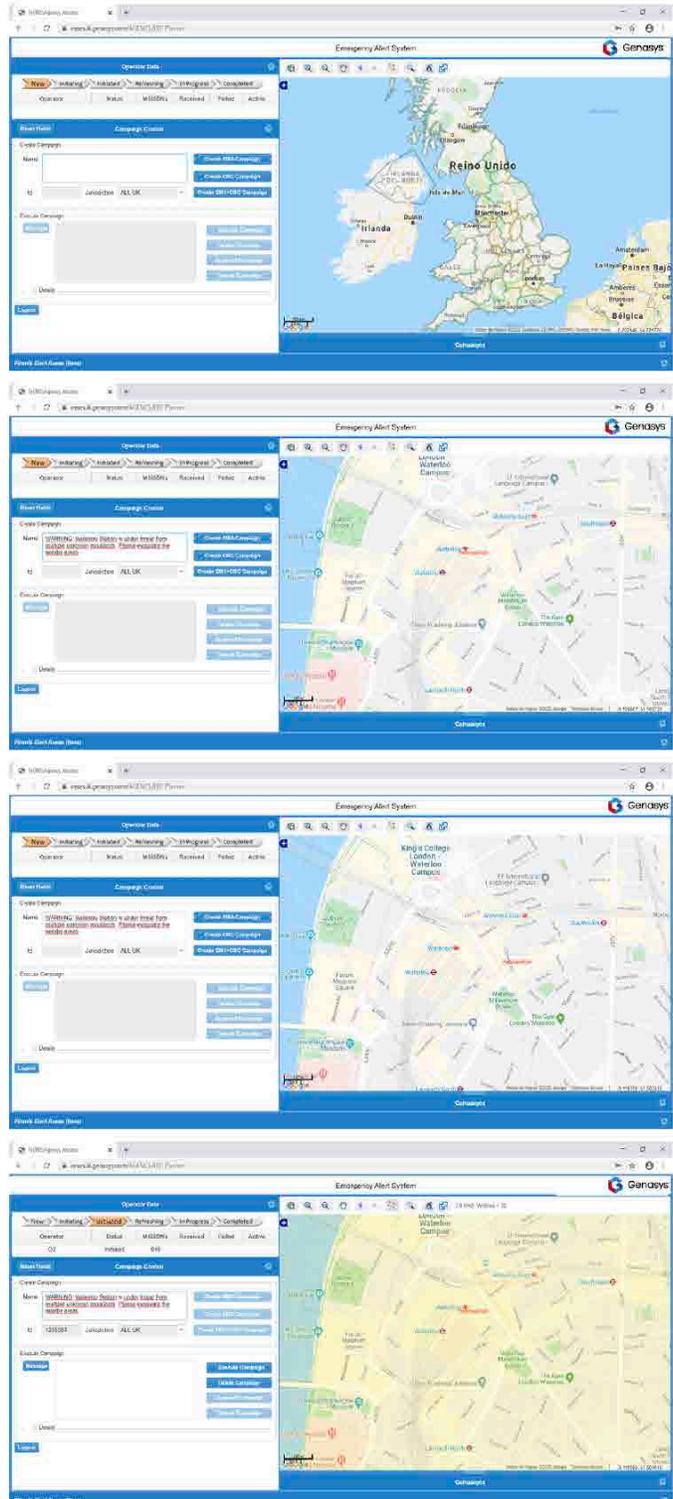
Genasys provides that fastest location based SMS alert service available. While other SMS alert providers take up to 15 minutes to find the mobile phones of people located in at-risk areas, Genasys finds and sends SMS alerts to thousands of phones in near real time.



## Genasys NEWS: Key Features

Genasys NEWS is the complete solution to implement the EECC Article 110 Public Warning System directive. Be prepared for the June 2022 deadline and for future EECC updates with the sophisticated, proven and comprehensive Genasys NEWS solution. Genasys NEWS meets and exceeds EECC Article 110 technical requirements.

- » NEWS Smart Messaging: multichannel notifications, SMS + CB
- » Integration of other communication channels, including voice speaker arrays
- » Multiple implementation schemas
- » Open interface for easy integration with multiple data sources
- » Mobile app for field campaign activation
- » Population density, number of devices per area, movements
- » Inclusion lists / Exclusion lists
- » Automatic subscriber nationality detection
- » Multi-language for geo-located SMS and CBC
- » Geo-fencing: detection of new devices entering emergency areas
- » 'All Clear' message capability
- » Real time accurate control of devices receiving messages
- » Long term storage of campaigns and users interactions
- » Complete reporting functionality





# National Emergency Warning Systems (NEWS)

## PROVEN PERFORMANCE:

### AUSTRALIA

A severe heatwave, drought and wind gusts up to 100 km/h combined to fuel Australia's deadliest bushfires on February 7, 2009. The Black Saturday fires raced across the state of Victoria for several weeks, burning more than 2,000 homes over 450,000 hectares, destroying several communities and leaving thousands homeless. The bushfires injured 414 people and claimed 173 lives.

In the aftermath of the deadly conflagration, there was a national outcry that the government had failed to adequately warn the public of the impending danger. After studying the issue, the Australian government came to the conclusion that reaching most people was far more achievable than reaching everyone with any single solution. The government decided to create a location based public warning system that would reach over 95% of the population affected by bushfires, flooding, severe storms and other critical events.

Beginning in Victoria and then throughout the country, Australian government officials worked with Genasys, the major telecom providers, and other companies to develop a location based SMS public warning system that successfully met the government's duty to warn the public, communities' public safety warning expectations, and authorities' operational and functional system requirements.

Genasys' National Emergency Warning Systems' (NEWS) location based SMS software technology sends geo-specific alerts to all mobile phones in crisis-affected areas. With no opt in or app download required, NEWS delivers emergency alerts to populations at risk to help keep Australia's residents and visitors safe.





## KEEPING EVERYONE SAFE

Since 2013, Genasys has partnered with Nokia to deliver more than **180 million SMS emergency notifications** throughout Australia to help protect and save lives.



**Genasys**

**2013 – Present**



**AVERAGE MESSAGES PER SECOND**

**16000\***



**SUCCESSFUL DELIVERY RATE**

**96%**



**TOTAL MESSAGES DELIVERED**

**180M**

\* Demonstrated in Lab

### The Only Unified Solution for Critical Communications

Delivering multi-channel public safety warnings, notifications, instructions and information to everyone in, or entering into, a crisis-affected area. Genasys solutions are highly effective in communicating lifesaving information over large areas before, during, and after emergency situations.



# National Emergency Warning Systems (NEWS)

## ARE YOU PREPARED?

### Reliable Emergency Communication

When major disasters strike, existing infrastructure is disrupted and compromised, power and communication systems fail, rural areas can be isolated and urban streets can become impassible and dangerous. Reliable communication for maintaining civil order, conducting search and rescue operations, and providing relief distribution is critical to saving lives.



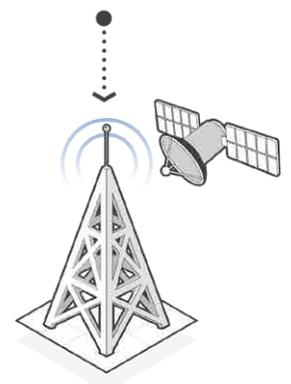
**EXTERNAL ALERT**  
Receives alerts and warnings from multiple sources and activates notifications.



**GOVERNMENT AGENCY**  
Interpret and Broadcast the alerts to the designated Areas, Workforce, Agencies & Residents



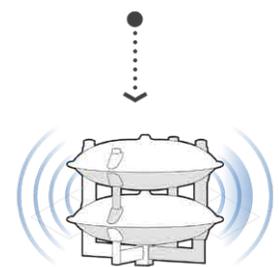
**OPERATOR**  
Receives alerts and warnings on easy-to-use dashboard and activates notifications.



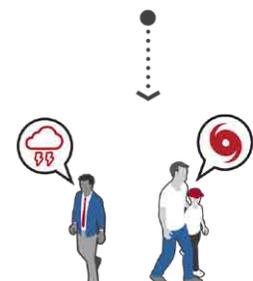
**SIGNAL**  
Notifications sent through TCP/IP, Satellite, WiFi, GPRS/GSM, Fiber, Radio



**MOBILE ALERTS**  
Send geo-targeted SMS, Text, Cell Broadcast, Email, and Social Media



**VOICE NOTIFICATIONS**  
Broadcast audible sirens and clearly understood voice messages over local or large areas





## REACH EVERYONE



### Reach

Deliver urgent and lifesaving communications to everyone who needs them



### SMS & CBC

SMS and CBC channels include everyone in a crisis affected area, including tourists and visitors



### No Opt-In

No opt-in required to receive urgent and lifesaving communications



### Prioritization

Maximum performance and prioritization of emergency traffic to prevent system overloads and delays

## MULTI-CHANNEL RELIABILITY



### Multi-Channels

The more channels used the more likely everyone will receive the critical information they need to stay safe



### Digital Channels

SMS, text, email, in-app messaging, and social media



### Speaker Arrays

Audible channels, including recorded voice calls and Genasys speaker arrays



### Disabilities

Accessible for people with disabilities

## TOTAL CONTROL & SPEED



### Cloud

Manage messages and campaigns from a cloud-based command center or mobile app



### Monitor

Monitor population density and movements in real time



### Track

Track delivered and pending messages



### System Control

National, regional or municipal system control

## OPEN INTEROPERABILITY



### All Carriers

Deploy directly on multiple carrier networks



### CAP

Support for CAP, WMS, SMPP, SNMP, SMTP, and other protocols



### Integration

Integrate across multiple communication channels, emergency agencies, and data sources



### APIs

Integrate with proprietary solutions through open APIs



## ABOUT GENASYS

Genasys Inc. is a global provider of critical communications solutions that help keep people safe. The Company has a long history of delivering innovative technology and superior quality to our customers and partners. Genasys created the acoustic hailing device (AHD) market with the introduction of its proprietary LRAD® systems in 2003 followed by the introduction of the Company's revolutionary voice-based mass notification systems in 2012. In 2019, Genasys launched the mass notification industry's first unified multichannel Critical Communications platform.

Genasys provides a multichannel approach to deliver geo-targeted alerts, notifications, instructions and information before, during, and after public safety threats and critical business events. The Company's unified critical communications platform includes Genasys Emergency Management (GEM) applications, National Emergency Warning Systems (NEWS), LRAD long-range voice broadcast systems, and more.

Genasys products are in service in 72 countries around the world in diverse applications, including public safety, national emergency warning systems, mass notification, defense, law enforcement, critical infrastructure protection, and other applications.