

# AlertBox

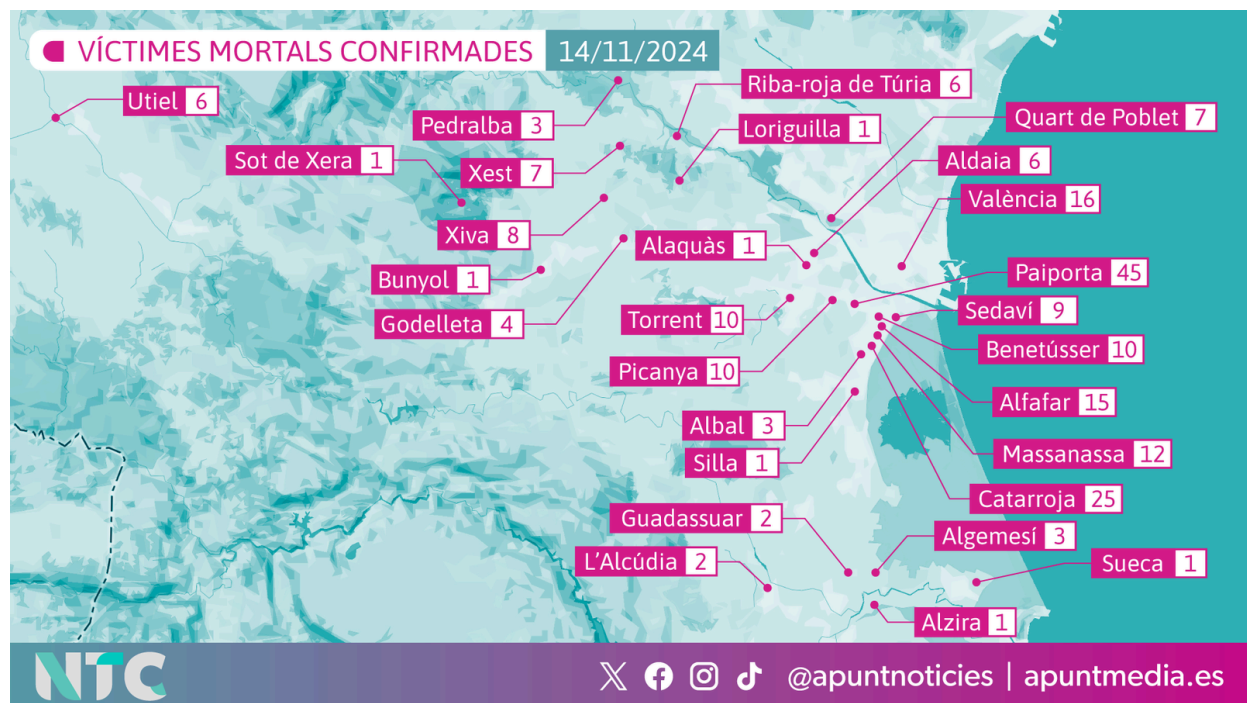
The **HeatAlert Box** is a low-cost, plug-and-play emergency alert system designed specifically for vulnerable populations—especially the elderly—during heatwaves and other crises.

It operates independently of smartphones, Wi-Fi, or cellular networks, relying instead on **LoRa (Long Range radio)** communication, making it highly resilient and suitable for low-connectivity environments like ground floors or rural homes.

## Problem

In the 2024 floods that swept across Spain, over 200 people died—many caught off guard without timely warnings.

Victims were mainly people from urban areas



## No timely alert

Although Spain's meteorological agency had warned of the arrival of a potentially dangerous cold drop, many Valencians were surprised not to receive a safety alert until 8 pm on Tuesday.

[https://www.lemonde.fr/en/environment/article/2024/10/31/flooding-in-spain-valencia-region-authorities-criticized-for-failure-to-warn-of-imminent-disaster\\_6731131\\_114.html](https://www.lemonde.fr/en/environment/article/2024/10/31/flooding-in-spain-valencia-region-authorities-criticized-for-failure-to-warn-of-imminent-disaster_6731131_114.html)

## Technology

### LoRaWAN® Network Features



20+ km

#### Long Range

- » Greater than cellular
- » Deep indoor coverage
- » Star topology
- » Record 105 km in Canada



#### Maximum Battery Life

- » Very low power usage
- » 5-15 year battery life
- » Solar, wind, other



#### Multi Usage

- » Very High capacity
- » Multi-tenant
- » Public / Private network



#### Low Cost

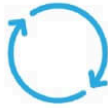
- » Unlicensed ISM spectrum
- » Low cost-infrastructure
- » Low cost end-node
- » Open Software
- » Growing Eco-system

# LoRaWAN® Differentiators and Benefits



## Geolocation

- » Indoor & Outdoor
- » Accurate
- » No Battery Impact



## Bi-Directional (FDD)

- » Acknowledge
- » Scalable Capacity
- » Broadcast



## Global Standard

- » Global Standard
- » Mobility
- » Seamless
- » Roaming



## Secure

- » Unique ID
- » Application
- » Network