



Revolutionising Public Warning

Extending Galileo EWSS alerts to fixed devices

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This brief summarises the main activities and results of the AWARE project (2024-2026). It presents the AWARE module and the integration of Galileo Emergency Warning Satellite Service (Galileo EWSS) with fixed devices: sirens, digital panels, indoor warning systems. This document highlights how the AWARE project can support civil protection authorities and public warning stakeholders in alerting the population quickly, accurately and reliably when disaster strikes.

The AWARE project consortium



Why Resilient Public Warning Matters

Europe is increasingly exposed to natural and man-made disasters, from industrial accidents to extreme weather events. The intensity and frequency of these disasters put millions of lives at risk, and they pose a significant danger to properties and infrastructure. In such situations, timely and reliable public warning is essential to protect lives.

Galileo EWSS alerts provide a powerful public warning capability even when ground telecommunication networks are disrupted or unavailable. But a key challenge remains: these alerts are smartphone-based. What happens if one loses access to their phone? What if they cannot receive the message? In situations of panic and commotion, how can authorities keep the population informed?

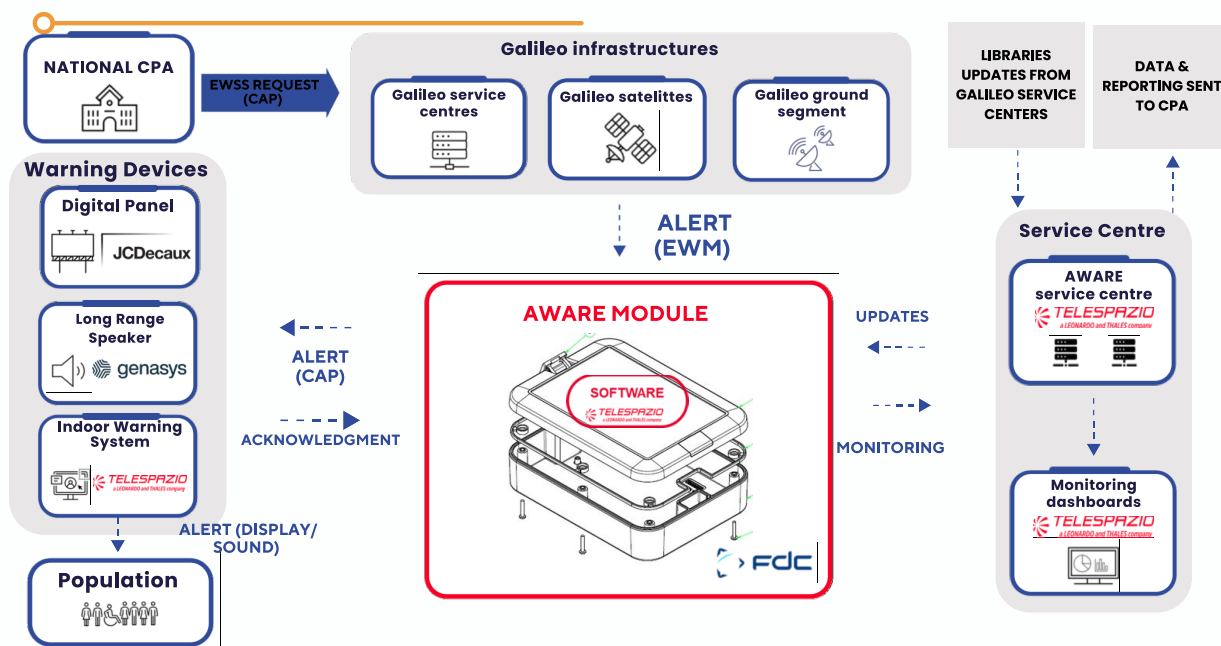
AWARE addresses this challenge by enabling the seamless reception and transmission of satellite-based alerts to fixed devices, ensuring that critical information is delivered clearly, quickly, and reliably to as many people as possible, indoors and outdoors, when every second counts.

The AWARE module

The AWARE module can receive and transmit alert messages using Galileo's Emergency Warning Satellite Service. It can be fitted on digital panels, long-range outdoor speakers, and indoor warning systems, providing warning with text, audio, and video messages.

In case of a looming threat, the AWARE module sends all citizens in an affected area - indoors and outdoors - a timely and accurate warning through those fixed devices, minimising exposure to danger.

How does the AWARE solution work?



Galileo EWSS on fixed devices

LRAD

- Long-Range Acoustic Devices by Genasys broadcast audible voice messages with exceptional clarity.
- Resilient systems that can continue to operate when electrical power and cellular infrastructure are damaged or fail.
- Able to broadcast hyper-local or wide area outdoor alerts and information in multiple languages.



Digital Panel

- JCDecaux's digital out-of-home furniture provide contextual, real-time display of information from city authorities and brands.
- Experienced with emergency warning messages and alerts, displayed in several countries.
- Digital panels with the AWARE module expand the scope of Galileo EWSS, bringing satellite alerts directly to the streets.



Indoor Warning Systems

- Critical infrastructure buildings and facilities are already equipped with warning systems that can alert people in case of an emergency.
- Accessible systems that combine audio and visual elements for optimal dissemination of emergency information.

Key Activities

- 1 **Technology Development:** Design and development of the AWARE module and system architecture using the expertise of **Telespazio France** and **FDC**.
- 1 **Integration & Testing:** Collaboration with **Genasys** and **JCDecaux** for the seamless integration of the module on their technologies.
- 1 **Stakeholder Engagement:** Communication activities and active engagement with target audiences and key industry stakeholders were coordinated by **EENA**.
- 1 **Demonstrations** to validate the operational capacity of the AWARE module. The **Administration for Civil Protection and Disaster Relief of Slovenia** acted as the end-users of the demonstration. **CNES** contributed as the Galileo Service Centre for EWSS.

Demonstrations

Three demonstrations based on real-life scenarios showcased Galileo EWSS-based alerts on fixed devices.

Demonstration in Slovenia LRAD integration for satellite-based audio alerts



Demonstration in France

Digital panels bring Galileo alerts to the streets



Demonstration in Latvia

Galileo warnings brought indoors



Results & Impact

- **Real-time Galileo EWSS alert delivery**, enabling emergency messages to reach affected populations within seconds
- **Multi-channel dissemination** through fixed devices, extending alerts beyond smartphone-based messages.



- **Reliable operation during critical situations**, including when terrestrial telecommunication networks are disrupted or unavailable.
- **Validated operational readiness**, demonstrating the system's **flexibility, scalability, and applicability** in real-life environments.
- **Improved public safety**, with clear and accessible warning messages delivered across **indoor and outdoor environments**.
- **Strong European relevance**, supporting the **integration of Galileo EWSS** and the development of **more resilient and effective public warning systems** across Europe.

Legacy and Next Steps

With Galileo EWSS expected to become operational later this year, AWARE partners are advancing the commercialisation and real-world deployment of the solution. The system is now ready for market uptake, with partners exploring new opportunities across different sectors and use cases.

As the first project to integrate Galileo EWSS into fixed devices, AWARE lays the foundation for wider adoption of satellite-based public warning systems in Europe. By extending alerts through existing infrastructure, the project supports more resilient, inclusive, and effective crisis communication—ensuring critical information reaches people when it matters most.

Interested in organising a dedicated demonstration of the AWARE module?

Contact the project at aware@telespazio.com

Find more information about the project on our website:

<https://euproject-aware.eu/>