

AWARE

ENABLING EWS GALILEO MARKET UPTAKE IN WIDESPREAD PWS

D5.01 INITIAL AWARE DEMONSTRATION PLAN



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WP5 – AWARE Demonstration

D5.01 – INITIAL AWARE DEMONSTRATION PLAN

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LIST OF ABBREVIATIONS

AD:	Applicable Document	IVQ:	Integration Verification Qualification
API:	Application Programming Interface	IVV:	Integration Verification Validation
AR:	Acceptance Review	IWS:	Indoor Warning System
CAP:	Common Alerting Protocol	KOM:	Kick-Off Meeting
CDR:	Critical Design Review	LRAD:	Long Range Acoustic Device
CNES:	Centre National d'Etudes Spatiales	MEO:	Medium Earth Orbit
COTS:	Commercial Off The Shelf	NMEA:	National Maritime Electronics Association
CPA:	Civil Protection Authority	OPS:	Operation
CREG:	Centre for Research on the Epidemiology of Disasters	(Galileo) OS:	(Galileo) Open Service
CST:	Centre Spatial Toulousain	OS:	Operating System
DD:	Due Diligence Document	OSNMA:	Open Service Navigation Message Authentication
DP:	Digital Panel	PDR:	Preliminary Design Review
EC:	European Commission	PoC:	Point of Contact
EENA:	European Emergency Number Association	PWD:	Public Warning Device
ESA:	European Space Agency	PWS:	Public Warning System
ETSI:	European Telecommunications Standards Institute	Q&A:	Question & Answer
EU:	European Union	QR:	Qualification Review
EUSPA:	European Union Agency for the Space Programme	QZSS:	Quasi-Zenith Satellite System
EWM:	EWSS Message	RD:	Reference Document
EWSS:	Emergency Warning Satellite Service	REGINA:	REseau GNSS pour l'IGS et la NAvigation
GMS:	Galileo Mission Segment	RLM:	Return Link Message
GNSS:	Global Navigation Satellite System	RLS:	Return Link Service
GSF:	Galileo Security Facility	RLSP:	Return Link Service Provider
GSMC:	Galileo Security Monitoring Centre	SDD:	Service Definition Document
HMI:	Human Machine Interface	SiS:	Signal-in-Space
HQ:	HeadQuarters	STELLAR:	demonSTRations of the upcoming galileo emergency wARning seRvice
HW:	Hardware	SW:	Software
ICD:	Interface Control Document	TASF:	Thales Alenia Space France
IGS:	International GNSS Service	TPZF:	Telespazio France
IoT:	Internet of Things	UC:	Use Case
IT:	Information Technology	USP:	Unique Selling Proposition
ITT:	Invitation To Tender	UX:	User eXperience
ITU:	International Telecommunication Union	VRIO:	Value, Rarity, Imitability, Organization
		WD:	Public Warning Device
		WP:	Work Package

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1 OVERVIEW OF THE DOCUMENT

1.1 SCOPE OF THE DOCUMENT

This document is the Initial Demonstration Plan for the AWARE project which is an initial step towards the Final AWARE Demonstration Plan (D5.02).

The Initial Demonstration Plan is delivered for the Mid-Term Review, and the Final Demonstration Plan will be delivered for Demonstration Readiness Review.

1.2 STRUCTURE OF THE DOCUMENT

The present document is structured as follows:

- Section 1 provides an overview of the document;
- Section 2 details the demonstration plan objectives and specifications;
- Section 3 describes the methodology used to establish the demonstration plan;
- Section 4 provides the forward plan to establish the final demonstration plan.

1.3 APPLICABLE DOCUMENTS

AD	Document title	Reference
AD1	Consortium Agreement	AWARE-D1.01-CA v1.0
AD2	Grant Agreement	AWARE-D1.02-GA v1.0
AD3	Grant Agreement Amendment A	AWARE-D1.02a-GAAa v1.0
AD4	Grant Agreement Amendment B	AWARE-D1.02b-GAAb v1.0
AD5	Grant Agreement Amendment C	AWARE-D1.02c-GAAc v1.0

Table 1 – Applicable documents

1.4 REFERENCE DOCUMENTS

RD	Document title	Reference
RD1	AWARE Initial Business Plan	AWARE-IBP

Table 2 – Reference documents

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2 OBJECTIVES, TARGETS AND SPECIFICATIONS

The AWARE project has been built to meet the following high-level objectives:

- Development of innovative EGNSS-based solutions contributing to a resilient and more stable Europe that protects citizens.
- Development of innovative EGNSS-based solutions addressing safety concerns, to support the implementation of EU policy priorities relating to the safety of citizens, improved disaster risk management, better security, and resilience of infrastructure and vital societal functions, cybersecurity, and crisis management.
- Development of innovative EGNSS-based solutions complementing the products delivered by the Emergency Management and Security Services of Copernicus.
- Awareness-raising on the benefits of using EGNSS and Copernicus for emergency disaster risk management.

The AWARE project has established drivers to guide all project activities. The AWARE Drivers applying to the demonstrations are:

- **AWARE-DRV-Project-01:** All AWARE activities shall aim at developing a commercial solution.
- **AWARE-DRV-Project-02:** All AWARE activities shall aim at validating and improving the EWSS concepts.
- **AWARE-DRV-Bus/Legal-01:** The AWARE solution shall allow all commercial partners to make sustainable profits.
- **AWARE-DRV-Bus/Legal-02:** The AWARE solution shall minimize the legal responsibility taken by notifying alert message to the public.
- **AWARE-DRV-Tech-01:** The AWARE solution shall complement PWS by multiplying alerting channel and extending population coverage.
- **AWARE-DRV-Tech-02:** The AWARE solution shall be independent from telecom network for alerting.
- **AWARE-DRV-Tech-05:** The AWARE solution shall control trustworthiness of alerts before notification to citizens.
- **AWARE-DRV-Comm-01:** AWARE Communication activities shall be fair between partners; *i.e.* AWARE communication activities shall engage and represent all partners.

The AWARE demonstrations are communication events to present the AWARE solutions to stakeholders (recalled in the figure below) with a commercial ambition.

There are three demonstrations in the AWARE project to cover the three AWARE products:

- Digital panels;
- Long Range Acoustic Device;
- Indoor Warning System.

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Since they are key tactical tools to develop the AWARE business, the AWARE final demonstration plan (AWARE-FDP) will take into account the business strategy established in the AWARE final business plan (AWARE-FBP).

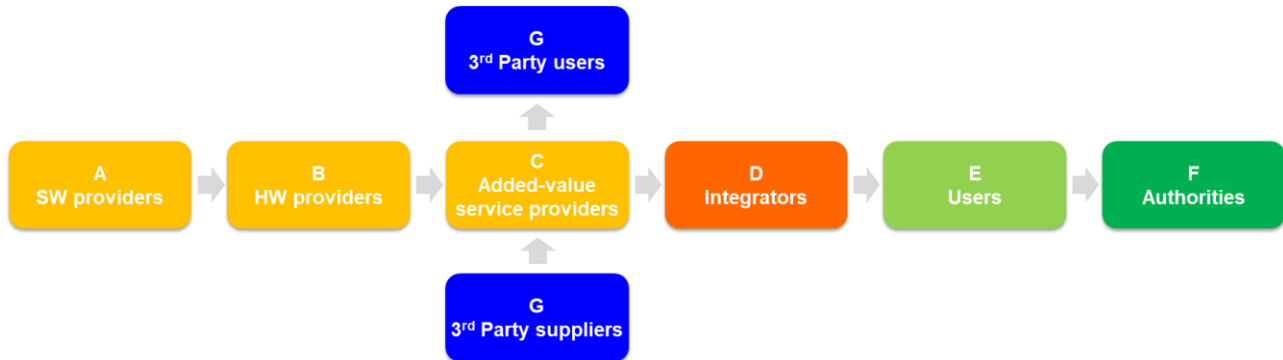


Figure 1 – AWARE Stakeholders (from RD1)

The overarching objective is to make the AWARE solution adopted by the Users (E), in other words to generate a market demand triggering commercial orders for Integrators (D) and in cascade for the AWARE solution providers (C,B,A). **In this perspective, the demonstrations should be designed to be easily replicated.**

Authorities (F) are prescribers therefore primary targets to convince, and they might be invited to send the alerts.

Some key Integrators (D) are AWARE project partners but opening the participation to some other Integrators (in particular for the IWS solution) can help the overall business. They are secondary targets.

The 3rd party data suppliers/users (G) are actors involved in the AWARE added-value service provision (C) for specific services. They are secondary targets.

Since AWARE is a technology-push project which will likely require further investment to go on the market, **Investors** should also be invited to attend.

The Users (E) are (see RD1):

- Cities;
- Hazardous site operators (Dam, SEVESO, Nuclear, ...);
- Operators of site gathering crowds (stadium, shopping malls, train stations, subway stations, airports ...);
- Building managers (public, private, office, ...);
- Insurers.

The adoption process can be modelled with 6 successive steps:

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Figure 2 – Adoption process

The AWARE communication activities (WP6) address the steps “Awareness” and “Interest”, the AWARE demonstrations will push further the adoption process with the “Evaluation” and “Trial” steps.

The AWARE demonstrations should include:

- **AWARE_DEMO_A_** For maximizing the positive impact:
 - o **01** Pre-demo communication including invitation to participate;
 - o **02** Large stakeholder participation (as large as possible), with by priority stakeholders from group E, F, D, G;
 - o **03** Investor participation;
 - o **04** Variety of locations relevant to participating stakeholders;
 - o **05** Variety of use cases relevant to participating stakeholders;
 - o **06** Variety of AWARE solution functions (products and services) relevant to participating stakeholders;
 - o **07** Press and Media coverage;
 - o **08** Audio visual material collection;
 - o **09** Post-demo communication.
- **AWARE_DEMO_B_** For minimizing the negative impact:
 - o **01** Risk mitigation plan;
 - o **02** Contingency and back-up plans, in case of failure during the event;
- **AWARE_DEMO_C_** Different scenarios:
 - o **01** Scripted scenarios for the “Evaluation” step
 - o **02** Free-play scenarios for the “Trial” step;
- **AWARE_DEMO_D_** Scheduled slots for:
 - o **01** Users’ feedback collection;
 - o **02** Business interviews with Integrators (D), Users (E) and Investors.

NB: The demonstration use-cases and locations presented in the grant agreement were solid examples that could be modified to better fit the objectives and specification established in this section.

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3 METHODOLOGY

This section describes the methodology to achieve the objectives with the specifications detailed in section 2.

The AWARE demonstration plan is built in three successive steps:

1. The first step consists in identifying the primary targets for each demonstration to form a demonstration working group;
2. The second step consists in iterating with the demonstration working group to co-design the demonstration scenarios and the risk mitigation plans through workshops;
3. The third step consists in implementing the demonstration scenarios in the Final Demonstration Plan.

The demonstration scenarios specify:

- What type of event;
- What place;
- What storyline;
- What covered concepts/functions;
- What alert parameters;
- Why it is relevant.

The demonstration plan specifies:

- Who participate: primary targets, secondary targets, consortium operators...;
- When to do: nominal dates and back-up dates;
- How to do: schedule, means, procedures, participant roles, contingencies.

A risk mitigation plan is also included in the demonstration plan to cover:

- Internal risks: AWARE component failure/unavailability, Operator error/unavailability...;
- External risks: Extreme weather, stakeholder unavailability, concurrent real crisis...;

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4 FORWARD PLAN

This section details the forward plan to complete the work done in the Initial Demonstration Plan (present document) and achieve the Final Demonstration Plan fulfilling all the objectives and implementation all the specifications established in the section 2 following the methodology set in the section 3.

The grant agreement proposed demonstrations:

1. Digital panels in Paris, in JCDecaux premises;
2. LRAD in Slovenia;
3. Indoor Warning Systems in Toulouse, in Telespazio France premises;

The location of the third demonstration might be changed to increase the impact (as specified in section 2).

For each demonstration, a working group will be defined involving primary targets with at least Authorities and Users, in the period Q4 2024.

The consortium will propose an initial scenario to the demonstration working group and iterated along with a risk mitigation plan, in the period Q1-Q2 2025.

Once the scenarios established, the demonstration plans are built by the consortium and submitted to the working group for validation, in the period Q3 2025. In parallel, the consortium will prepare a Contingency plan.

The demonstrations will be performed in Q4 2025.

The AWARE Final Demonstration Plan (AWARE-FDP) will have the following structure:

- Generic demonstration plan (generic to all demonstrations)
- Demonstration plan (for each demonstration)
 - o Scenario
 - o Covered functions and concepts
 - o Location
 - o Date
 - o Schedule
 - o Participants
 - o Means
 - o Inputs
 - o Procedures
- Risk mitigation plan
- Contingency plan
- Objectives and Specification traceability matrix

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END OF DOCUMENT