

In a nutshell

The COLOSSUS platform provides an integrated system that strengthens the resilience of ports' infrastructure. We combine state-of-the-art unmanned vehicles, across sea, air and land, with next-generation artificial intelligence to offer a flexible solution for maritime infrastructure.



Who is COLOSSUS for?

Governmental Bodies

Coast guards, port authorities, ministries of defence, and other public agencies seeking to enhance port security through next-generation technologies.

Maritime Security Companies

Firms interested in improving surveillance, inspection, and protection of critical maritime infrastructure.

Investors

Those looking for opportunities in cutting-edge technology projects related to autonomous systems and AI for infrastructure resilience.

Universities and Research Centres

Researchers working on UVs, AI, and security, interested in new collaborations, knowledge exchange, and co-development of new capabilities.

Project Partners

The COLOSSUS platform is the result of the combined expertise of six organisations, each bringing niche, high-level competencies.



TecnoVeritas
<https://www.tecnoveritas.net/>



UNINOVA
<https://www.uninova.pt/>



Intelligent Next Generation Systems
<https://ings.gr/>



Q-PLAN International
www.qplan-intl.gr



ABB EUOPC
Operation Center Europe
www.abb.com



Arsenal do Alfeite
<https://www.arsenal-alfeite.pt/>



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**MULTI-PURPOSE UNMANNED VEHICLE
SWARM PATROL INTELLIGENCE PLATFORM
FOR PORT SECURITY AND RESILIENCE**



colossus-project.eu

Intelligent port resilience solutions

ADVANCED SECURITY

With 24/7 perimeter patrolling, COLOSSUS can address challenges such as sabotage, terrorist attacks, drug trafficking, and smuggling.

EFFICIENT AND SAFE OPERATION

Acting as a support mechanism for human operators, COLOSSUS can provide critical real-time awareness and positioning assistance, reducing errors.

PREDICTIVE MAINTENANCE

Through continuous inspections and predictive monitoring, even in hazardous environments, COLOSSUS detects maintenance needs early.



PROJECT IDENTITY

Project Title: Multi-purpose unmanned vehicle swarm patrol intelligence platform for port security and resilience.

Grant Agreement No: GA No 101225980

Start: 1 November 2025

Duration: 24 months

Budget: € 1,499,418.93

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COLOSSUS project



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Key components of the COLOSSUS platform



Unmanned
Oceanic
Patrol Vessels
(UOPV)

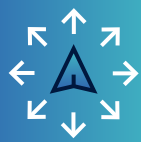


Unmanned
Aerial Vehicles
(UAV)



Unmanned
Ground Vehicles
(UGV)

State-of-the-art hardware engineered to integrate seamlessly with commercially available unmanned vehicles.



AUTONOMOUS NAVIGATION
Intelligent swarm navigation for any drone type



SECURE COMMUNICATION
Data sharing following European security standards



AMPHIBIOUS 3D PERCEPTION
High-clarity 3D views on land and underwater.



WEB PLATFORM
User-friendly interface for real-time monitoring, gathering all data



Main benefits of COLOSSUS

- Reduce port security operational expenditures
- Increase real-time security incident detection accuracy
- Reduce response time for security incidents
- Improve efficiency of port operations
- Decrease incidents during operations
- Reduce maintenance operational expenditures
- Reduce infrastructure-related downtime
- Extend the lifespan of critical infrastructure



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Receive notifications for demo days to attend and see our solution operating under real-life conditions.