



**aN Enhanced pre-frontier intelligence picture
to Safeguard The EurOpean boRders**

GET TO KNOW NESTOR EU H2020 PROJECT!

The H2020 European Project NESTOR aims to demonstrate a fully functional next-generation Border Command, Control and Coordination intelligence (BC3i) system providing pre-frontier situational awareness beyond maritime and land border areas. Based on optical, thermal imaging and RF spectrum analysis technologies, fed by an interoperable long-range network of sensors including stationary installations and mobile UxVs, will fuse in real-time border surveillance data combined with web and social media information and share to Command Centers in AR environment, being interoperable with CISE and EUROSUR.

NESTOR will validate and demonstrate its applied solutions in real operational scenario trials together with national Law Enforcement Agencies, Border authorities and practitioners to certify their efficiency. Through the performance of the pilots in multiple assigned locations and the modifications resulting in the validated final prototype, NESTOR will provide one compact solution deployable in relevant border territories, following the concept of the **European Integrated Border Management**.

Duration



18 Months

(from 01/11/2021 to 30/04/2023)

Starting Date



1 Nov 2021

EU Contribution



5M

Number of Partners



21

1st Press Release

An Enhanced Pre-Frontier Intelligence Picture to
Safeguard the European Borders

NESTOR



1st PRESS RELEASE is out!

"NESTOR supports the concept of the EU Integrated Border Management by integrating state-of-the-art technologies for surveillance into a holistic, deployable system capable of detecting, assessing and efficiently responding to illegal activities."

READ MORE



at www.nestor-project.eu



Received funding from the EU's H2020 research and innovation programme under GA No. 10102185.

 @Nestor_H2020

 @nestor-project

The 1st NESTOR press release was published on February 8, 2022, to announce the project's launch.

Project Synergies

Similar projects funded by the Horizon 2020 program can benefit from communication synergies to boost their reach to a wider audience, communicate their results more effectively, plan and carry out joint communication activities, and generally share experiences and best practices.

NESTOR and BorderUAS

The NESTOR project and the **BorderUAS project** have formed a cross-dissemination partnership.



BorderUAS is a semi-autonomous border surveillance platform combining next-generation unmanned aerial vehicles with ultra-high-resolution multi-sensor surveillance payload.

BorderUAS aims for a holistic UAS surveillance approach integrating aerial and ground components using next-generation sensors and technologies and developing a consistent platform used for daily border operations and beyond.

NESTOR and EFFECTOR

Nestor has also joined forces with the remarkable **EFFECTOR project!**



Developing a positive, mutually beneficial relationship between stakeholders from different countries and sectors guides the evolution of activities and helps both the projects to work together to increase the maturity of previous EU Security Research activities.

EFFECTOR aims to enhance maritime surveillance, improve decisions support, and foster collaboration of maritime stakeholders by implementing an Interoperability Framework and associated Data Fusion and Analytics services for Maritime Surveillance and Border Security that will allow faster detection of new events, better-informed decision making, achievement of a joint understanding and undertaking of a situation across borders, allowing seamless cooperation between operating authorities and on-site intervention forces ensuring that all existing privacy and data protection rules are fully respected.

NESTOR and PROMENADE

PROMENADE project cooperates with NESTOR!



PROMENADE improves solutions for vessel tracking, behaviour analysis and automatic anomaly detection by means of the application of Artificial Intelligence (AI) and Big Data (BD) technologies, and promotes the collaborative exchange of information between maritime surveillance authorities, shortening the time to market and assuring the compliance with legal and ethical regulations.

NESTOR joined the BES Cluster

Projects collaborating in order to:

- support each other;
- identify solutions to upcoming challenges;
- secure effective dissemination and valuable exploitation potentials;
- generate knowledge;
- explore possibilities and opportunities to combine pilot activities;
- work together on future policy suggestions.



BORDER UAS



PERCEPTIONS



PERSONA

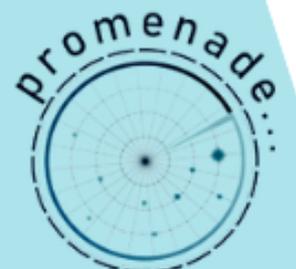
EFFECTOR



ISOLA



METICOS

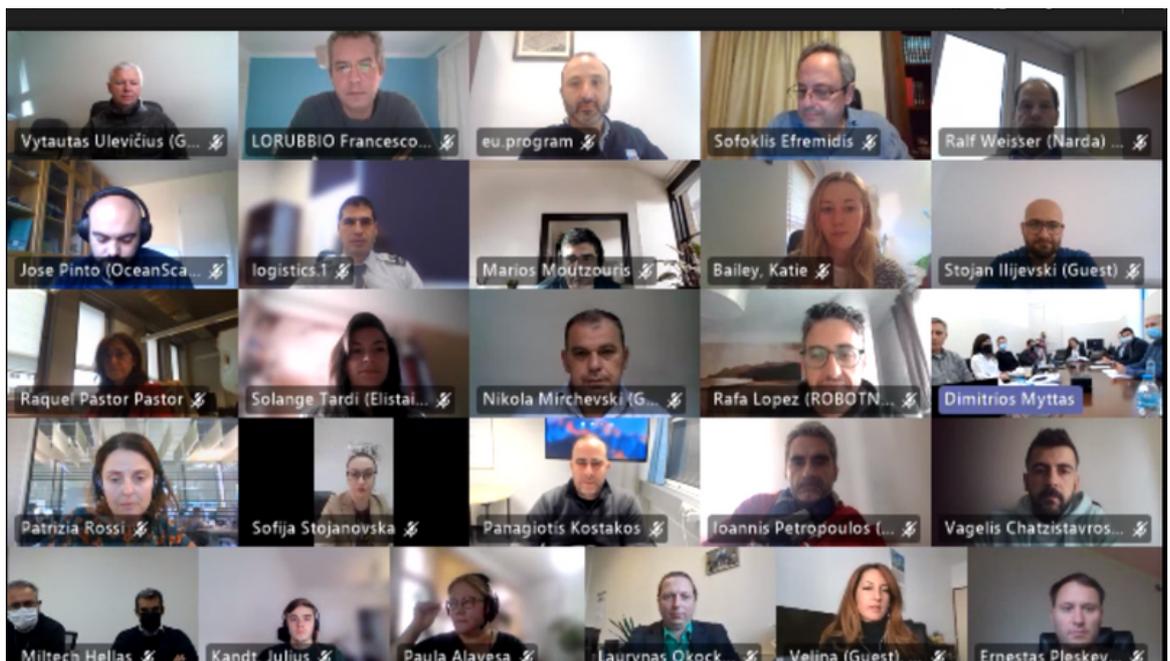


Project Highlights

Internal Meetings

Kick-off Meeting

The **Kick-off Meeting** of the NESTOR project wrapped up successfully with **participants from 14 countries all over Europe** on the 5th of November 2021. The KoM took place as a virtual meeting and welcomed over 50 attendees committed to working together for developing, integrating, deploying, demonstrating and evaluating technologies for border surveillance.



1st Plenary Meeting

The **1st Plenary Meeting** was held virtually on February 2 and 3 2022 with the participation of all project partners.



**Alexandroupolis,
Greece**



**15-16 June
2022**



NESTOR meeting participants



Dissemination material of the project

2nd Plenary Meeting



NESTOR team at Alexandroupolis Airport

The 2-day physical event was held in Alexandroupolis, Greece from the 15th-16th of June.

The project's partners met in person to discuss the project's progress and results. During this two-day meeting, all work packages within the consortium gave a presentation and field visits took place in the Delta of Evros and Orestiada Area.



Opening Greetings and presentation of the NESTOR project by the Project Coordinator, Ms. Chalvatzi.



Field visit at the Delta of Evros.

Leaflet

The leaflet of the project presents a general overview of the project, its impact and contact details for expressions of interest in potential synergies and community outreach.

Contact us

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Stay in touch

<https://nestor-project.eu> @Nestor_H2020 nestor-project

Project Facts

Work programme: Horizon 2020
Duration: 18 months
Start: 01/11/2021
EU Contribution: €5 M
Coordinator: Hellenic Police

Consortium

NESTOR has received funding from the European Union's Horizon 2020 research and innovation programme under GA No. 101021851. Content reflects only the authors' view and European Commission is not responsible for any use that may be made of the information it contains.

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About

NESTOR is an EU-funded project of 21 partners from 13 countries aiming to address a common challenge among EU Member States: the protection and safeguarding of the European marine and land borders. To meet this challenge, NESTOR develops a next generation holistic border surveillance system providing pre-frontier situational awareness reaching maritime and land borders. The solution follows the concept of the European Integrated Border Management.

Approach

NESTOR integrates state-of-the-art surveillance technologies into a holistic deployable system capable of detecting, assessing and efficiently responding to illegal activities. The NESTOR system will be enriched with accurate detection capabilities to optimally monitor border territory and will offer enhanced situational awareness and increased decision-making capacity to Law Enforcement Agencies by employing advanced data fusion and Artificial Intelligent techniques to multimodal feeds from numerous off-the-shelf devices.

Advanced visual analytics will be developed in a comprehensive framework presenting the acquired sensory readings and the detection outcomes. Mixed reality technologies will offer an effective coverage surveillance system to improve the overall operational image of the surveillance areas and qualitatively expand detection capabilities. The complete NESTOR concept will be assessed in three international trials in both land and maritime operations.

Safeguarding the European borders through a fully functional, next generation border surveillance system

Expected Impact

- Enhance the situational awareness and pre-frontier intelligence at the EU external borders by developing, integrating, testing and validating surveillance technologies at real trial scenarios.
- Create a reliable, enhanced maritime surveillance and border security interoperability framework to be used in a Common Information Sharing Environment for exchanging data and services among border authorities.
- Allow for considerable cost-savings, performance improvement and quick adoption of the solution by building upon existing state-of-the-art technologies.
- Improve the surveillance areas' overall operational image and qualitatively expand detection capabilities for the EU maritime

- safety and security agencies by using mixed reality technologies and offering a wide coverage surveillance system.
- Improve situational awareness, decision making and reaction for both land and maritime border control by utilizing bespoke visual analytics tools and multimodal data fusion.
- Enhance the capabilities to exchange advanced pre-frontier intelligence information at cross-border and cross-sectoral level by implementing the CISE adaptors and EUROSUR compliant interfaces.
- Improve the global maritime security under the implementation of the EU Global Strategy by complying with the EU Maritime Security Strategy Action Plan.

Additional News

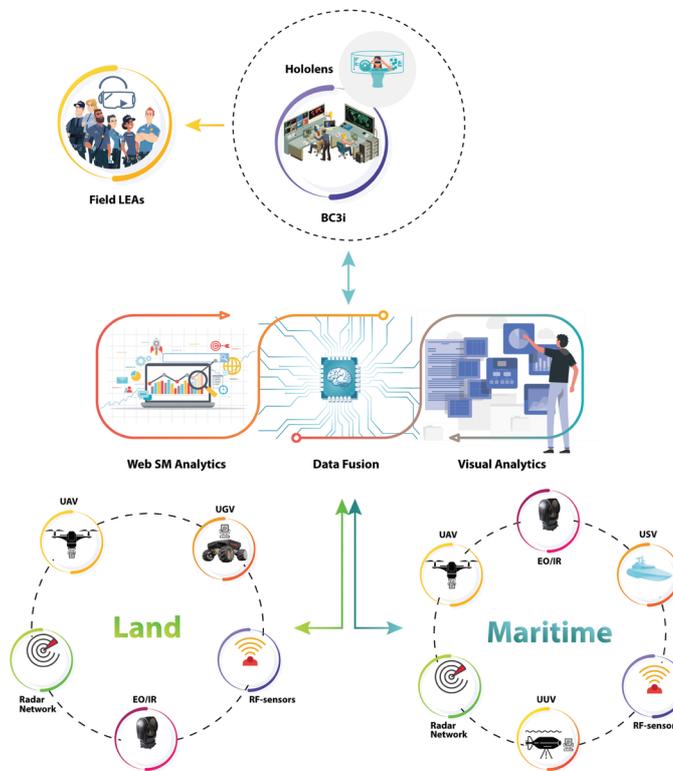
Roll-up Banner

One of the project's indispensable presentation tools at any event is the project's roll-up banner.



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CONSORTIUM

NESTOR



WOITSCHE CONSULTING



iti Information Technologies Institute

satways

Decodit

narda Safety Test Solutions

MILTECH HELLAS SA

GRUPPO Maggioli

ELISTAIR THE E-LISTENING GROUP COMPANY

OceanScan Marine Systems & Technology

Robotnik

UNIVERSITY OF OULU

CENTRIC Centre of Excellence in Terrorism, Resilience, Intelligence and Organised Crime Research

HENSOLDT Detect and Protect

Isdefe

#Follow_us

We provide updates on social media every time the NESTOR team is working on something special.

Help us spread the news by following us on LinkedIn (NESTOR project) and Twitter (@Nestor_H2020)!

Like, Repost, and Comment.



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