An Enhanced Common Information Sharing Environment for Border Command, Control and Coordination Systems



# **ANDROMEDA Project Overview**

Official Presentation of the ANDROMEDA HORIZON 2020 project



### **Presentation Contents**



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### Motivation 1/3



- ➤ Border surveillance is a complex mission given the length of European borders and the variety of terrain configuration.
- ➤ Historically, the Mediterranean region has always been witnessing challenges like migration flows, cross-border crime, persistent natural hazards (forest fires, floods and earthquakes, etc.), which required cross-border and multi-discipline collaboration in order to optimise response actions.
- Still, there are several threats that prevail in the Maritime and Land borders: piracy, trafficking of drugs, illicit goods, arms proliferation, illegal fishing, environmental crimes and maritime accidents/disasters.

### Motivation <sup>2/3</sup>



- Several efforts have been made in the past and current years to increase the efficiency of surveillance activities via the collection and exchange of land and maritime surveillance information between control authorities even across national borders.
- > The most important efforts were initially EUROSUR and later on CISE.
- ➤ EUROSUR, the European Border Surveillance System, has the objective of improving the situational awareness and increase reaction capability at external borders the Union's especially its southern maritime and eastern land borders.

### Motivation 3/3



- In 2010, the European Commission put forward a six-step Roadmap towards the Maritime Common Information Sharing Environment (CISE).
- The aim is to create a political, organizational and legal environment to enable information sharing across the seven relevant sectors/user communities (transport, environmental protection, fisheries control, border control, general law enforcement, customs and defense) based on existing and also on future surveillance systems/networks with a view to achieve a fully operational CISE by 2021.
- A scrutiny of the current maritime surveillance systems and cooperation arrangements in the EU maritime domain, revealed that **there are few technical limitations to achieve a higher degree of information sharing**. The legal conditions for information sharing at the EU level are fragmentised and based on a primarily sectoral (vertical) approach.

# **Andromeda Project Ambition**







### **Project Ambition**



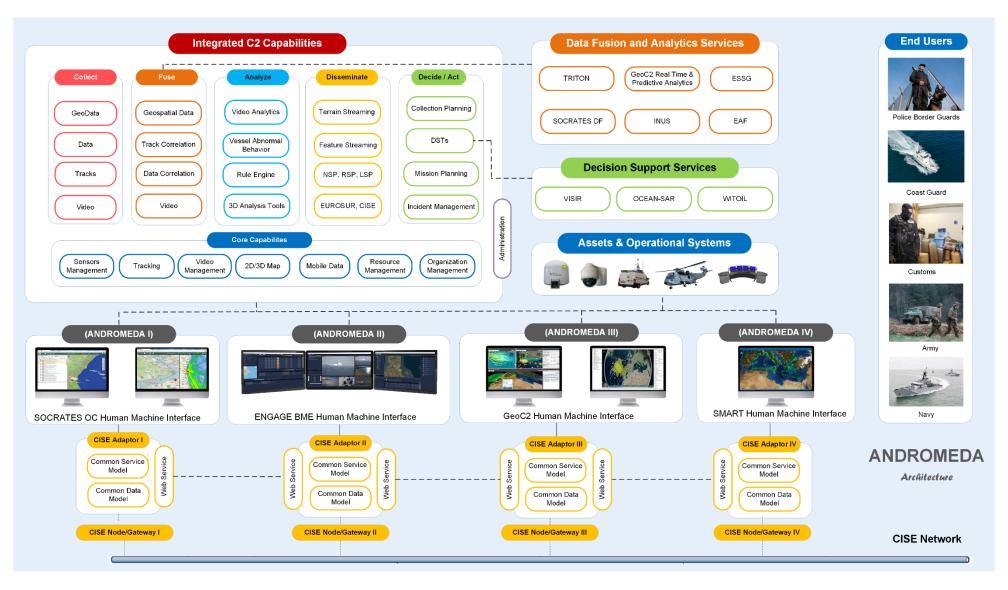
- ➤ ANDROMEDA aims to unlock the full capabilities of the CISE Model by enhancing the Maritime CISE Model and by extending its scope to the Land Surveillance Information Exchange.
- The project will address the "fragmentation" and close "gaps" in information sharing by providing a secure, effective common situational awareness and information exchange system integrated with CISE.

The **proposed solution** is a distributed set of systems and services interconnected according to the CISE principles, that aim to foster:

- > faster detection of new events,
- > better informed decision making and
- > achievement of a joint understanding & undertaking of a situation across borders

### **ANDROMEDA Systems Overview**







### Consortium





(1) MINISTRY OF MARITIME AFFAIRS AND INSULAR POLICY (EL) (2) GMV AEROSPACE AND DEFENCE SA (ES) (3) SATWAYS LTD (EL) (4) INSTITUTE OF COMMUNICATION AND COMPUTER SYSTEMS (EL) (5) EXUS SOFTWARE LTD (UK) (6) INOVAWORKS II, COMMAND AND CONTROL, SA (PT) (7) FONDAZIONE CENTRO FURO-MEDITERRANEOSUI CAMBIAMENTI CLIMATICI (IT) (8) LAUREA-AMMATTIKORKEAKOULU OY (FI) (9) CODIN -SOCIETA PER AZIONI (IT) (10) STEMO OOD (BG) (11) CENTER FOR SECURITY STUDIES (EL) (12) **FNGINFFRING - INGFGNFRIA INFORMATICA SPA** (IT) (13) HELLENIC POLICE (EL) (14) MINISTERO DELLA DIFESA (IT) (15) MINISTERIO DA DEFESA NACIONAL (PT) (16) MINISTRY OF PUBLIC SECURITY (IL) (17) EXECUTIVE AGENCY MARITIME ADMINISTRATION (BG) (18) MINISTRY OF NATIONAL DEFENCE (EL) (19) MINISTARSTVO SAOBRACAJA I POMORSTVA (MSD)

19 Partners from 9 countries will work in ANDROMEDA from September 2019 to February 2021

# **Andromeda Operational Trials**







### Andromeda Operational Trials<sup>1/2</sup>





## Trial 1: Iberian Maritime Border Trial

#### **Scenarios:**

Maritime Traffic Control and Illegal Activities Smuggling and Drugs

#### **End Users:**

PORTUGESE NAVY, ITALIAN NAVY

### Trial 2: Greece – Bulgaria Land Border -

**Maritime** 

#### **Scenarios:**

Illegal Immigration, SAR, Smuggling

#### **End Users:**

HELLENIC COAST
GUARD, HELLENIC
POLICE, HELLENIC
MINISTRY OF DEFENSE,
BULGARIAN MARITIME
ADMINISTRATION



### Andromeda Operational Trials<sup>2/2</sup>





# Trial 3: Ionian- Adriatic Trial

#### **Scenarios:**

Human Trafficking, Smuggling and SAR

#### **End Users:**

HELLENIC COAST
GUARD, HELLENIC
MINISTRY OF DEFENSE,
ITALIAN NAVY, MARITIME
SAFETY DEPARTMENT
OF MONTENEGRO



### **Expected Impact**



- The enhanced CISE Model will streamline the integration with current and future operational systems and is perfectly aligned with the overall European policy that **facilitates the interagency interoperability and cooperation** and allows each Member State to decide how, when and whether additional data sources are of relevance to its operations.
- National and European authorities, law enforcement agencies, intelligence agencies, security providers, are all examples of end users that will benefit from the ANDROMEDA research. ANDROMEDA also impacts positively on academia, industry, technology providers and companies, through matching requirements and capability gaps of users and promoting exploitation and collaboration.
- > Strengthening European society's resilience will help safeguard life and European values.

### **ANDROMEDA Web Presence**





www.andromeda-project.eu



@andromeda\_h2020



@andromeda-horizon2020-project



# Thank you for your attention

Any questions?

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