

SPACE

# (FR) EU Radionavigation Solution (EURAS)

(Established in November 2018)

For Public Release

## PROJECT DESCRIPTION

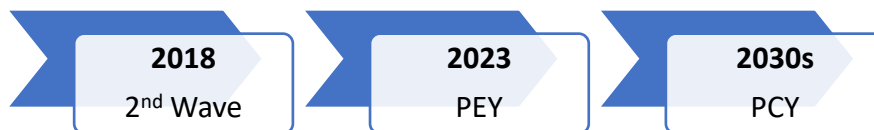
The project aims to promote the development of EU military PNT (Positioning, Navigation and Timing) capabilities and future cooperation. It will contribute to the need for EU MS' forces to carry out tracking of own operating forces but also to ensure a shared, reliable and continuous positioning system for different assets such as ships, aircraft and other equipment involved in the operational theatre.

## OBJECTIVES/PRODUCTS

The objectives are to develop: EU military PNT NAVWAR doctrine including Galileo capabilities, in particular Public Regulated Service (PRS); harmonized requirements for the development of innovative server-based PRS applications; standardised requirements for Galileo-based Blue Force Tracking (BFT) interoperability; standardised PRS stand-alone Receiver interfaces. The vulnerabilities of the navigation functions, including jamming, spoofing and cyber-attacks and their mitigation solutions will be analysed, described and shared in common documents. The GEODE project (EDIP 2020) supports the design of PRS receivers and the standardisation of data formats and interfaces to enable data fusion. The industrial consortium is made up of more than 30 entities from 14 Member States. The NAVGUARD project (EDF 2021) focuses on GNSS signal monitoring, interference detection and information management. The project will carry out studies and demonstrations of ground and space-based sensors, and of a C2 system.

## INDICATORS

Project Execution Year (PEY) and Project Completion Year (PCY):



## DELIVERABLES ACHIEVED

2022:

- GEODE: Common Operational Requirements & Technical Requirements

2024:

- Galileo PRS FMoU consolidated version
- GEODE IA frozen version

2025 (Anticipated deliverables):

- Galileo PRS FMoU signed
- GEODE IA signed
- NAVGuard IA discussions
- FMoU amendment 1 discussions
- EU military PNT NAVWAR CONOPS/Doctrine draft
- ToR finalization



FR, AT, BE, DE, ES, IT, NL, PL, SE



CZ, HU, IE, LU



IDEATION  
INCUBATION  
**EXECUTION**  
CLOSING



**Contribution to the more binding commitments**

Yes



**Capability Perspective**

**EU CDP priority**

Land Based  
Precision  
Engagement

**CARD references**

Defence in Space



**Operational Viewpoint**

**HICG**

Joint Intelligence Surveillance & Reconnaissance (JISR)



**EDA support**

No

## CRITERIA FOR SUCCESS

- Development of Galileo PRS based PNT military mission “drivers” / scenario and responses (e.g. interoperability with GPS based PNT solutions, Tactical Data Links, etc.)
- Elaboration of a European military PNT & NAVWAR doctrine including standards taking advantage of Galileo PRS capabilities to support the development of military PNT equipment and to achieve interoperability in accordance with identified operational requirements.