

ESA Earth Observation Programmes and European EO industry

The 3rd EO Commercialisation Forum
12 May 2026

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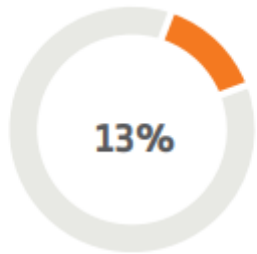
Dynamic Earth Observation Economy

THE SPACE ECONOMY IN 2024

PUBLIC INVESTMENT IN EO



Global public space investment spanning civil and defence Earth observation programmes

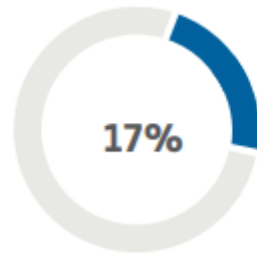


Share of **global government space budgets** allocated to Earth observation programmes

PRIVATE INVESTMENT IN EO



Global value of deals involving Earth observation ventures



Share of **global private investment** captured by Earth Observation ventures

THE EUROPEAN EARTH OBSERVATION INDUSTRY IN 2024

UPSTREAM



Share of EO upstream revenues from European institutional customers



Sales to European commercial customers up **35%** compared to 2023

DOWNSTREAM



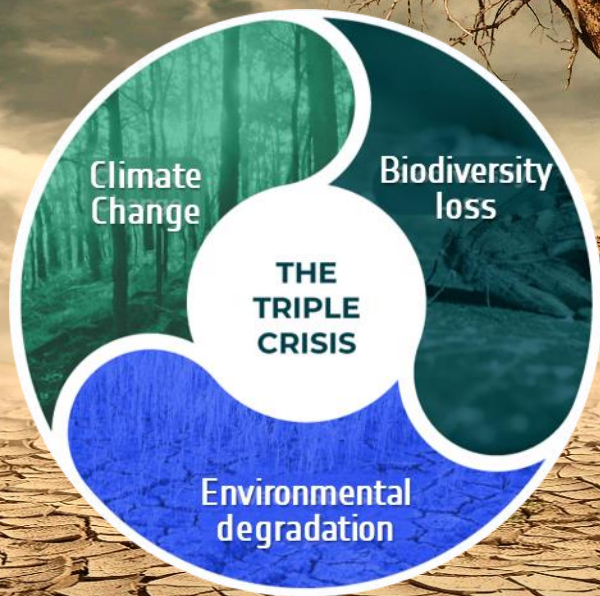
This revenue was generated from over **800** companies, and more than **16 000** employees



European Earth observation data providers account for more than a **1/3** of the global data processing market

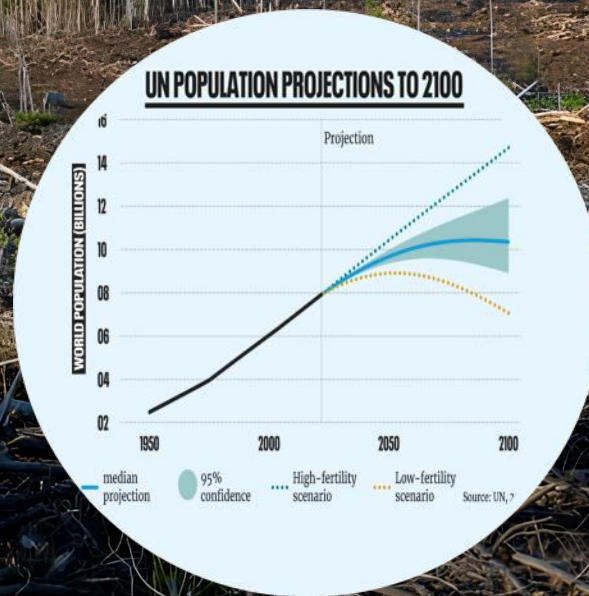
Climate and Defence as Key Drivers for EO Demand

Climate Change, Biodiversity loss, Environmental degradation



“6.37 million hectares of forest lost globally in 2023”

Population, socio-economic and environmental pressures



“9 Billion people to feed by 2035”

Geopolitical tensions and rising security concerns



“We cannot defend Europe without Space.”



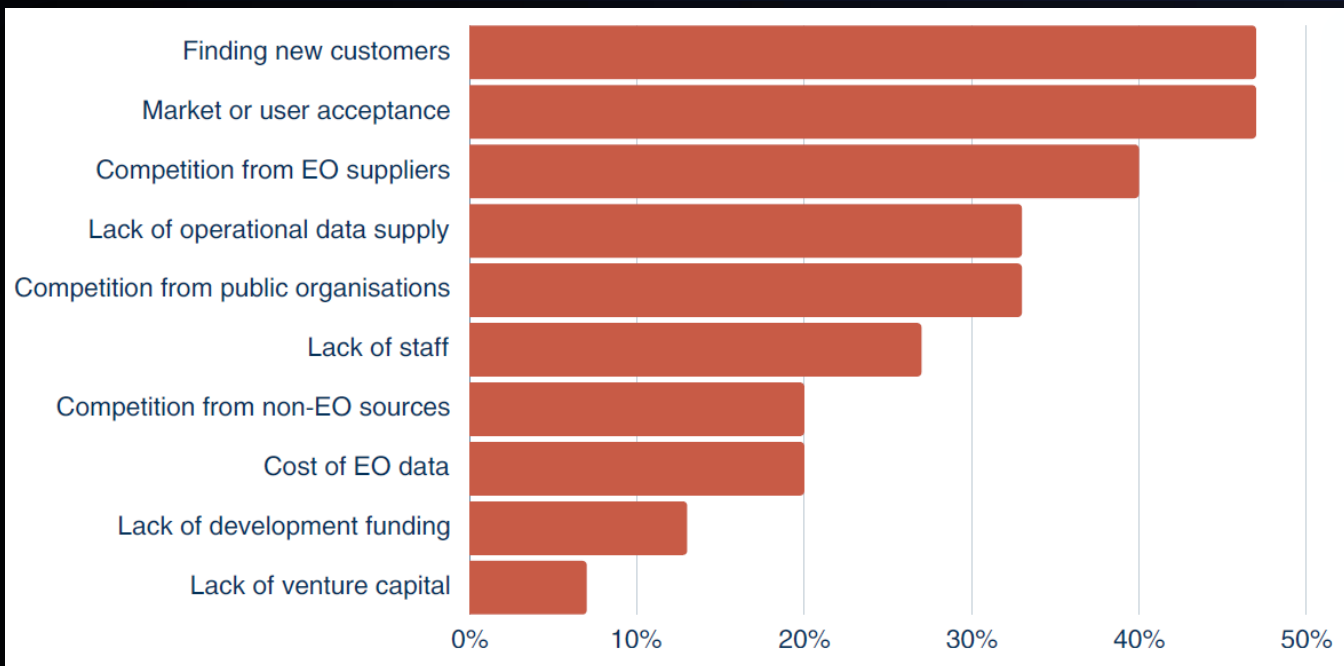
European EO Strengths vs. Bottlenecks

Europe develops World Class Assets

- Copernicus as a global open-data reference
- Strong Industrial and Technological Base
- Accelerating Downstream Ecosystem
- Proven Mission Delivery

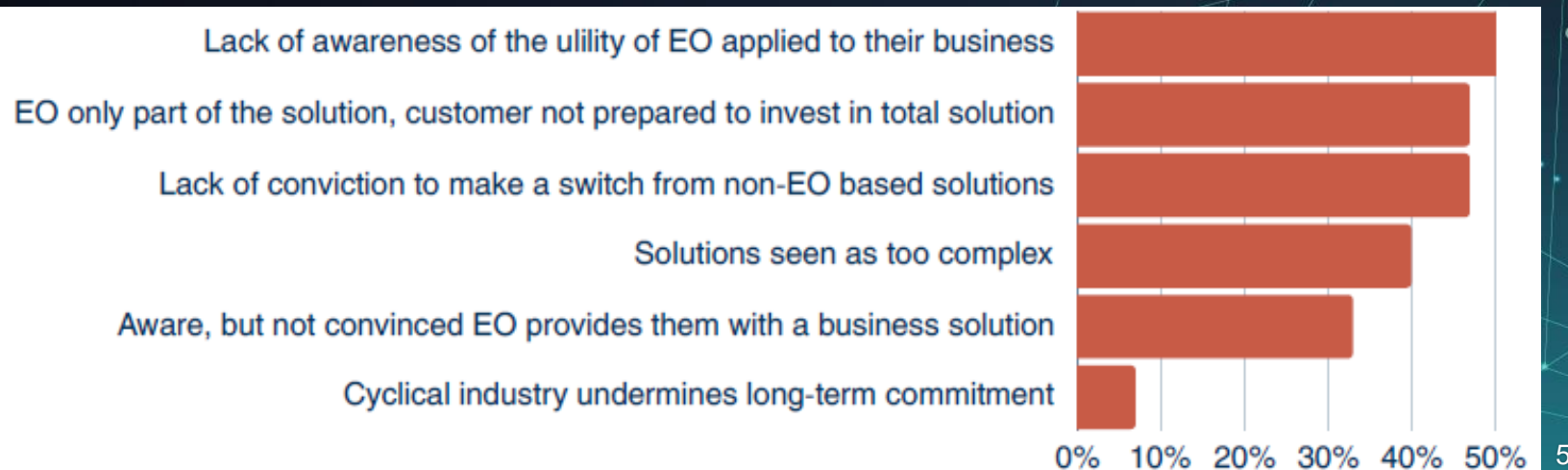
Commercialisation Gap

- Strong innovation, weak scale-up
- Fragmented demand and markets
- Slow and complex procurement
- Limited late-stage financing



Main Barriers to Growth Companies Experience

Main barriers to customer uptake companies experience



Source: EARSC Industry Survey 2025

Key Markets and Technologies

Energy



Climate Services



Agriculture



Security and Defence



Digital Twins

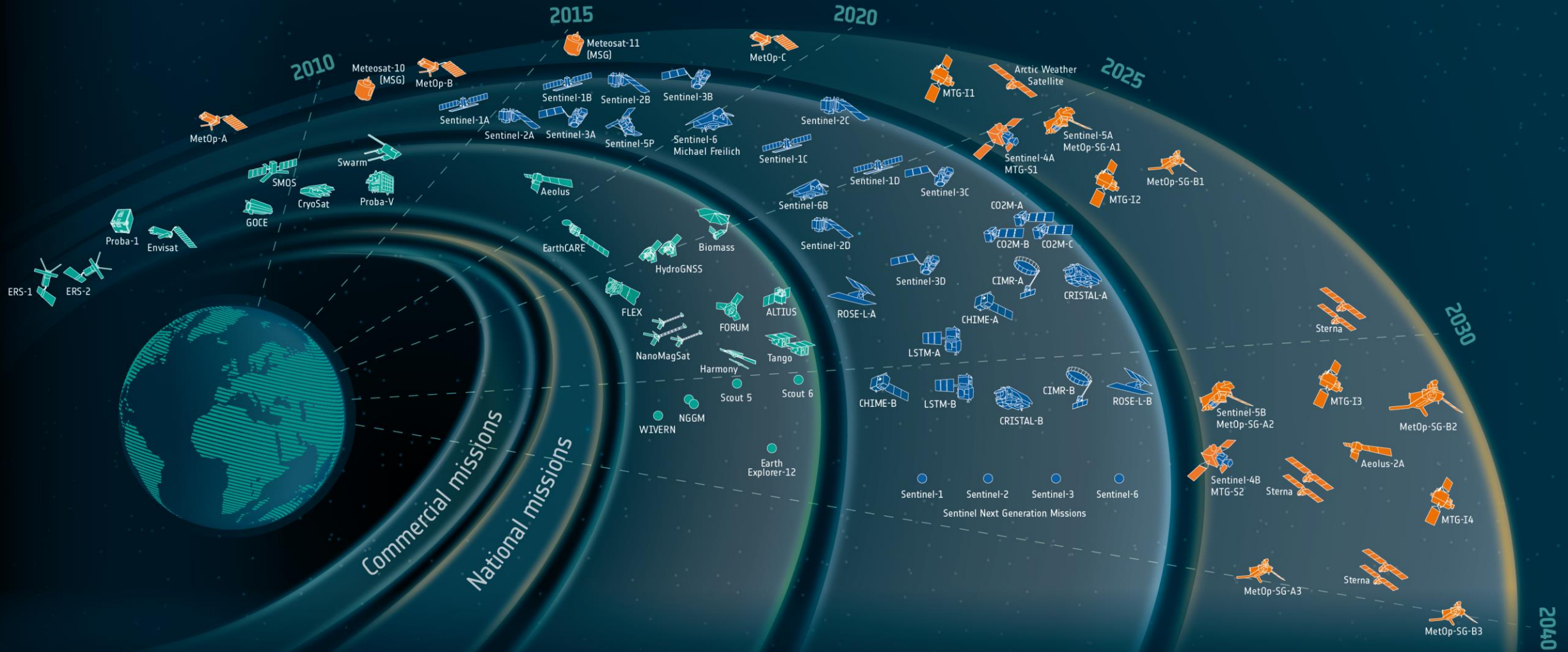


Artificial Intelligence

ESA EO Missions



Satellites: Heritage 08 / Operational 24 / Developing 38 / Preparing 39 / Total 109



ESA-supported

ESA-assisted

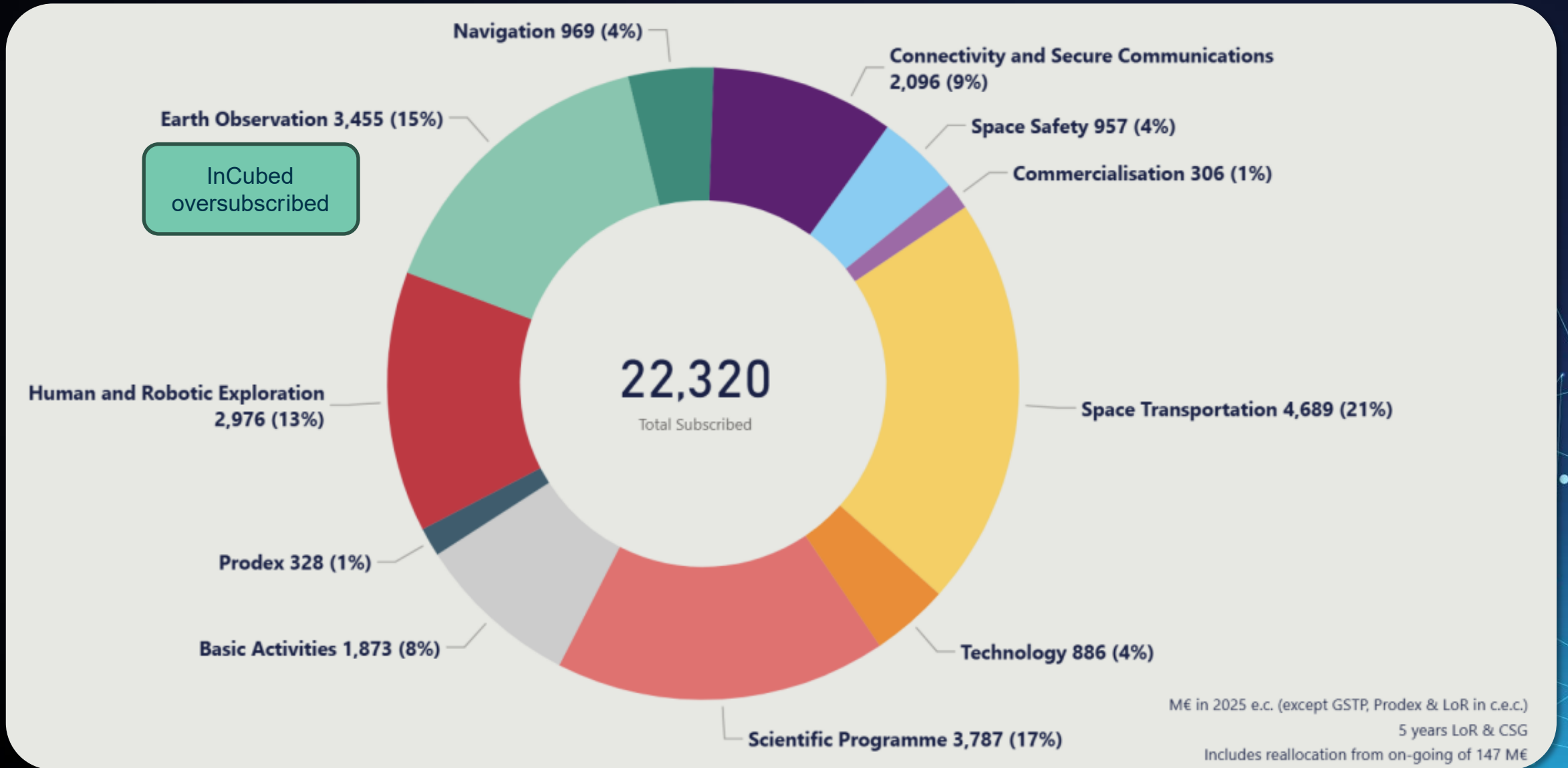
Science

Copernicus

Meteorology



Historic CM25 Contributions to ESA EO Programmes



ESA's Vision for EO Commercialisation



ESA as Enabler/Partner

InCubed

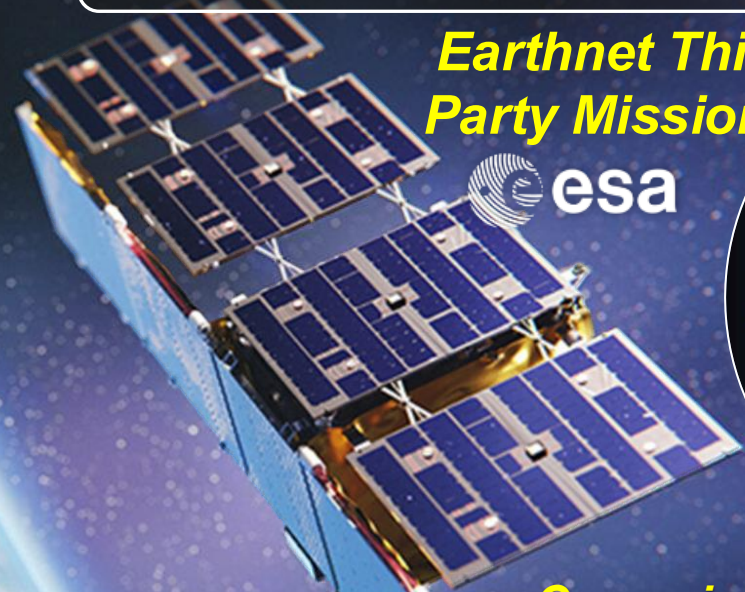
To develop innovative/novel & commercially viable products and services related to EO data

From building satellites to data platforms and all in between

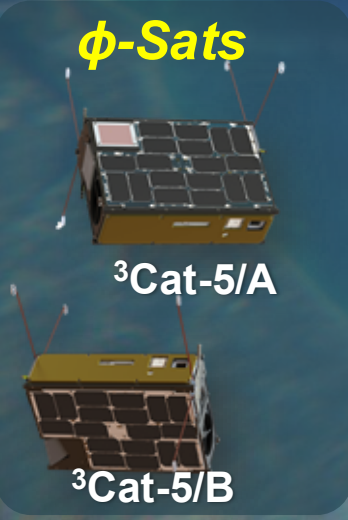
Producing a minimum viable product, robust from a technical, commercial, programmatic and financial point of view



ESA as Anchor Customer



Earthnet Third Party Missions



Copernicus Contributing Missions



Data (and delivering services) for operational public needs using a Dynamic Purchasing System (DPS)

ESA's Third Party Missions: empowering commercial innovation in Earth observation

ESA's Third Party Missions (TPMs) foster entrepreneurship and accelerate scientific breakthroughs, enabling informed, timely decision making across Europe. Explore the map to discover how TPM data are helping European companies develop novel applications:



Illuminating "dark ships"

Ubotica Technologies
Ireland

AI-enabled Earth observation
SkySat

Ubotica showed that its AI model could detect ships using off-nadir satellite data, marking an important step forward for maritime surveillance

Improving maritime surveillance

KSAT
Norway

Maritime monitoring
Unseenlabs

KSAT is using radio frequency data to develop new services for tracking and identifying vessels at sea

Tracking abandoned boats

AquaGuard Technologies
Sweden

Maritime monitoring
WorldView-3/-4

AquaGuard drew on optical data to develop a platform that tracks recreational boat wrecks and other hazards

Assessing landfill methane emissions

Kanadevia Inova
Germany

Sustainable energy
GHGSat

Kanadevia Inova used GHGSat data to monitor methane emanating from landfill sites, helping develop a robust framework to quantify these emissions

Reducing disruption to powerlines

Baltic Satellite Service
Latvia

Forest monitoring
ICEYE

Baltic Satellite Service drew on radar data to detect trees encroaching on overhead power lines, supporting vegetation management efforts

Supporting crisis management

Guard Time
Estonia

Emergency response
SkySat & Pléiades

GuardTime used optical data, along with other satellite data, to develop a secure map solution to support emergency responses

Detecting illegal construction work

Datel
Estonia

Remote monitoring services
Pléiades Neo

Datel used Pléiades Neo data to develop a system to help municipalities identify buildings not complying with real estate regulations

Monitoring infrastructure stability

Dares Technology
Spain

Infrastructure monitoring
PAZ

Dares Technology used radar data to track millimetre-scale movements of the Bernabéu stadium in Madrid

Mapping the seabed

LS Engenharia Geográfica
Portugal

Cartography
GEOSAT-2

LS Engenharia Geográfica used multispectral data to carry out a detailed bathymetric study of Portugal's Sado Estuary

Boosting sustainable water management

Hydrohunter
Italy

Below-ground hydrology
COSMO-SkyMed & ICEYE

Hydrohunter used radar data and other data sources to identify underground water resources, helping optimise water extraction for agriculture

Tackling urban heat

LLCLOUD Ltd
Bulgaria

Smart cities and urban monitoring
HotSat-1

LLCLOUD is using thermal infrared data to develop a wearable temperature indicator that enables citizens to mitigate urban heat

Discover more about the TPM programme: earth.esa.int/eogateway/missions/third-party-missions



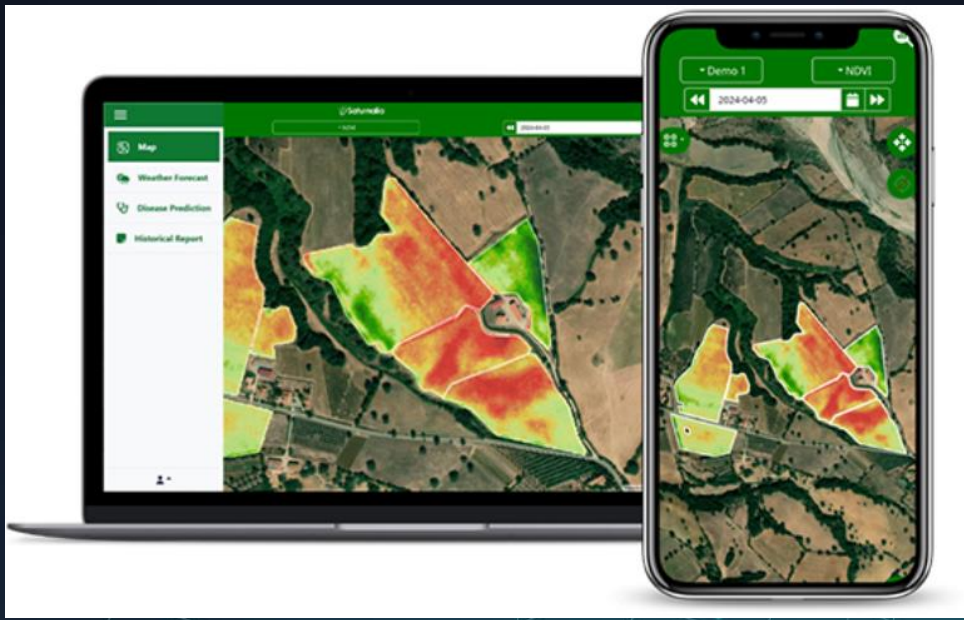
Commercialisation Success – Saturnalia leveraging EO Data



Geospatial intelligence company that harnesses the power of EO data to improve decision-making and risk management in agriculture

- Works with data from **ESA's Third Party Missions (TPM)** programme, which allowed to prove the feasibility of the solution without incurring prohibitive upfront costs
- Gained access to these datasets through an ESA **InCubed project**, which was instrumental in enabling the development of Saturnalia's AI-driven processing pipeline.

*“The TPM programme plays a strategic role in Saturnalia's development because it **lowers the barrier to accessing high-quality commercial Earth observation data** for pre-operational development activities, **enabling innovation at scale.**”* Gianni Iannelli, Chief Executive of Saturnalia



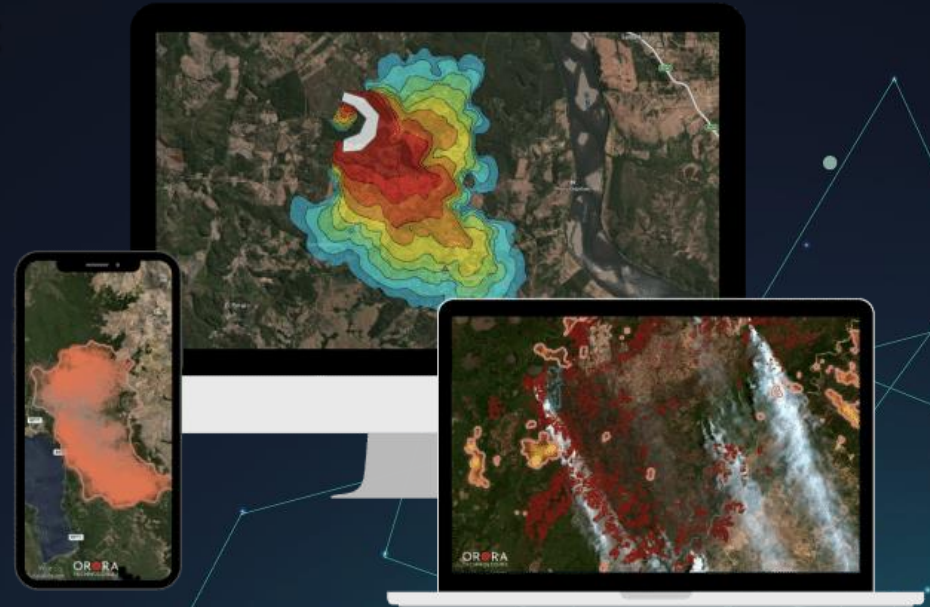
PlanetScope imagery seen via the Saturnalia app

Commercialisation Success – Ororatech's journey



Tackling global wildfire problems and satisfying needs of customers worldwide with a constellation of ca. 14 nanosatellites

- Benefitted from the **ESA BIC Bavaria and ESA Kick-Start** incubation programmes
- Secured co-funding in 2022 from ESA's **InCubed** programme for the development of FOREST-3, the company's first fully internally developed spacecraft, launched in 2025
- Joined **ESA's European Emerging Copernicus Contributing Missions** (CCM) activity in 2023
- Successful closure of its **€25 million** Series B funding round in 2024
- Successful **launch and deployment of the Hellenic Fire System** developed by Ororatech and ESA, four dedicated wildfire monitoring satellites for Greece, marking the world's first national satellite system designed exclusively for wildfire detection and tracking



Commercialisation Success: ICEYE demonstrating its core value proposition through its engagement in ESA EO Programmes



- ICEYE joined **CCM** with a progressive ramp-up in both usage and user diversity
- Expansion from specific applications to broader domains incl. emergency response, maritime security, border surveillance
- Received **FutureEO support** to develop and verify new operating capabilities, facilitating uptake and collaboration with key stakeholders
- Onboarding of operational end-users such as **FRONTEX** + benefitted from ESA support to integrate new products through the Copernicus Security Services Strategic Research and Development Agenda
- Transition from experimentation to operational satellite tasking in real-world conditions



ICEYE radar image of Suvarnabhumi Airport, Bangkok, Thailand, 09/08/2020





THE 3rd EO COMMERCIALISATION FORUM

12-14 May 2026 | Seville, Spain

To connect the ecosystem

To strengthen collaborations and enable partnerships

To leverage ESA opportunities

To discuss market needs



Elevating the future of Europe

www.esa.int