

Enabling and boosting European space commercialisation ambitions

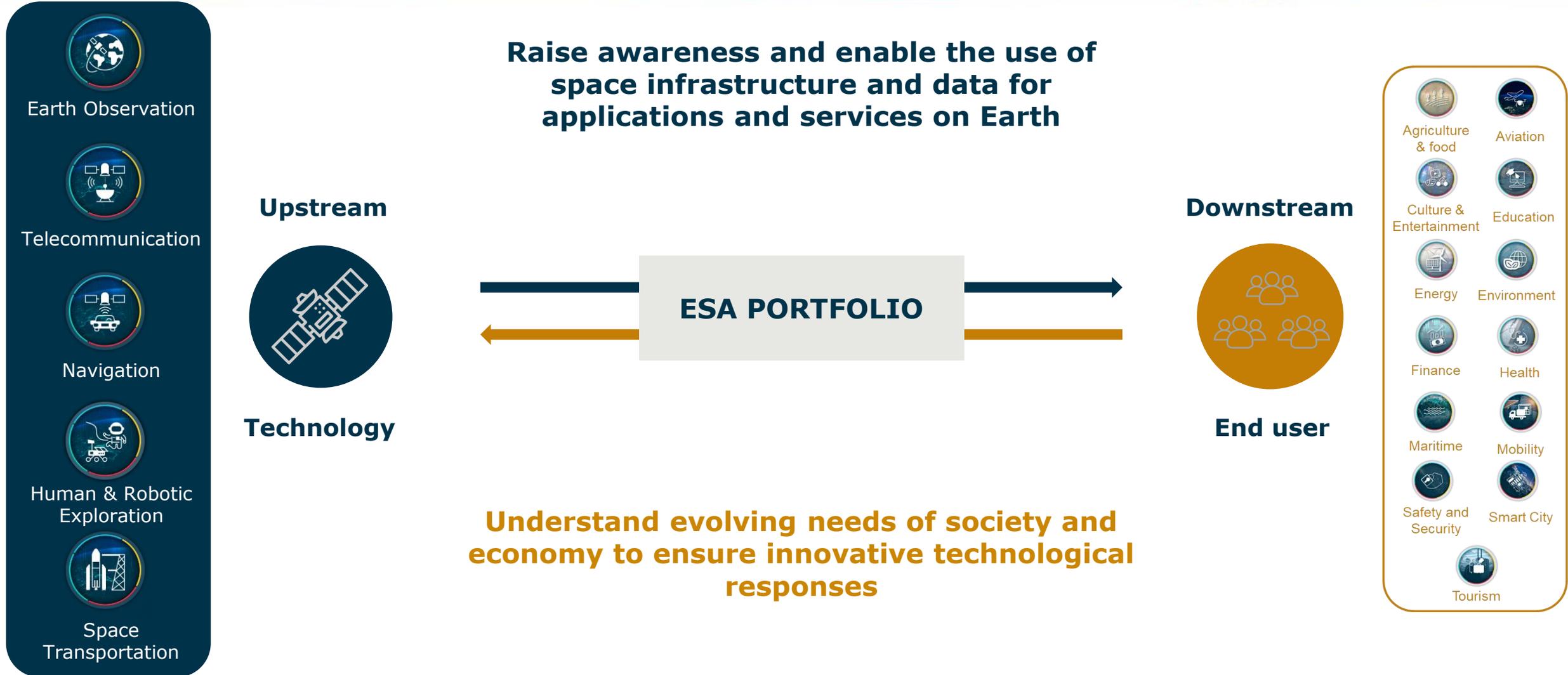
ESA COMMERCIALISATION GATEWAY

SPACE FOR BUSINESS
BUSINESS FOR SPACE

ESA'S role as enabler in the downstream space application market

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Head of ESA Commercialisation Gateway
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DOWNSTREAM AND UPSTREAM SYNERGIES





commercialisation.esa.int

Access to the business development support to ESA programmes, Investors and ESA Commercialisation Network

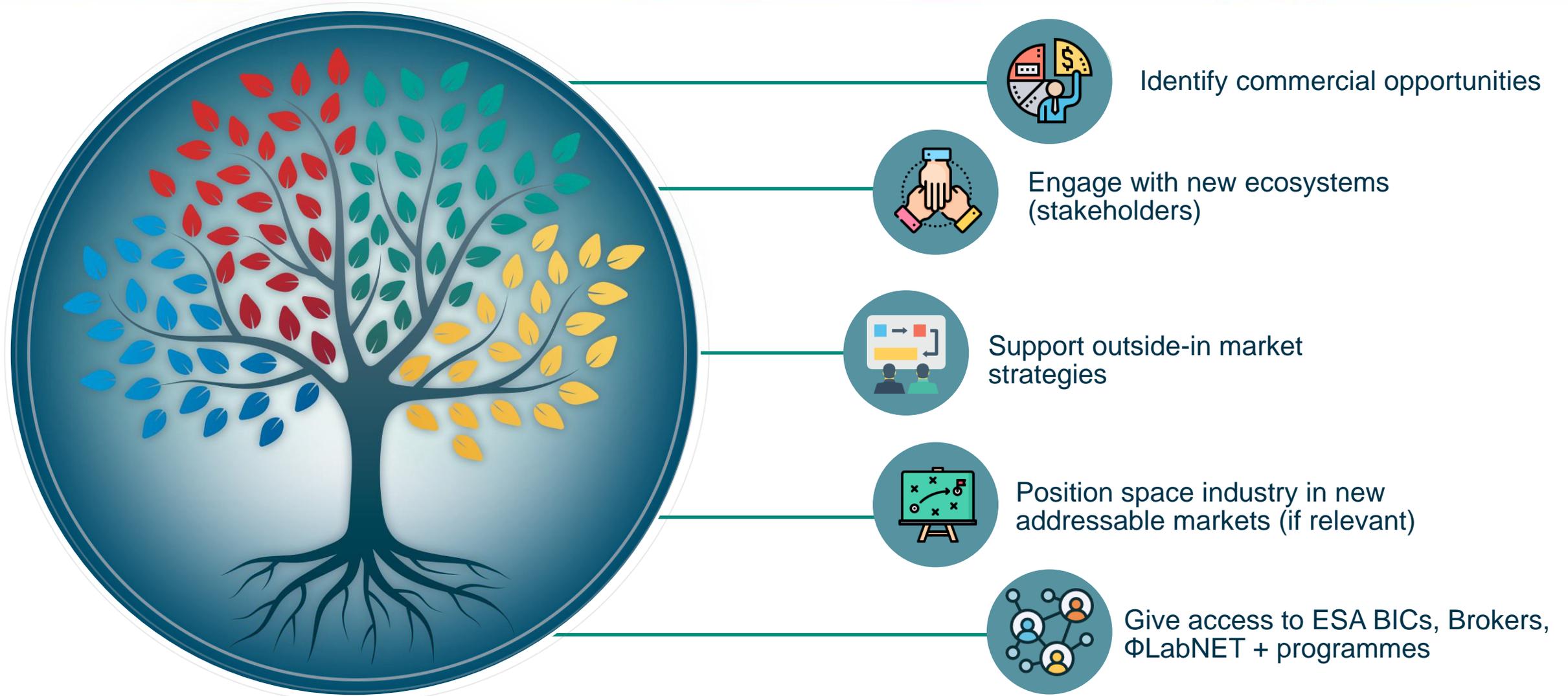
A 'one-stop shop' service for all commercial opportunities, creating links between new and emerging business sectors and the capabilities being developed in ESA programmes

Provide Market Intelligence to ESA networks and ESA programmes

Help newcomers find the path to ESA programmatic opportunities

Provide an easy access to **ESA Commercialisation network** of resources: ESA BICs, Φ _LabNET, Accelerators, Investors, Patents, Transfer of technology, SME initiatives, Business and technical expertise, End-users

DOWNSTREAM MARKET INTELLIGENCE



DOWNSTREAM AREAS COVERED

<https://commercialisation.esa.int/market-trends/>



Green & Digital Finance



Insurance



Additive Manufacturing



IoT



Smart City



Renewable Energy



Videogaming



Agriculture



Aviation



Maritime



Transport



Safety and security



Education



Cultural Heritage



Tourism



Sport & Equipment



Health



Connected Hospitals



CONNECTING SPACE TO NON-SPACE



Logos in the green-bordered box include: BI Norwegian Business School, SAPIENZA UNIVERSITÀ DI ROMA, Institut Polytechnique de Paris, Cyprus University of Technology, Imperial College London, LSE, Università Bocconi, UNIVERSITY OF OXFORD, McGill UNIVERSITY, HEC PARIS, le cnam, Italian Institute for Genomic Medicine, Copenhagen Business School, iit ISTITUTO ITALIANO DI TECNOLOGIA, UNIVERSITÀ CATTOLICA DEL SACRO CUORE, UCL, Dauphine | PSL, EPFL ÉCOLE POLYTECHNIQUE FÉDÉRALE DE LAUSANNE, ESADE Business School, UNIVERSITÄT KOBLENZ-LANDAU, INTERNATIONAL SPACE UNIVERSITY, and ICAC Institut Català d'Arqueologia Clàssica.

Logos in the yellow-bordered box include: gsk GlaxoSmithKline, novo nordisk, MedTech Europe from diagnosis to cure, HUMANITAS, IBM, LOMBARD ODIER, AIR FRANCE, Orsted GeoVille, arabesque, BAYER, mirova, CARACOL, SAIPEM, Allianz Global Investors, Trinasolar, Aquila Capital, ICMA, KAYSER, LIQUIFER SYSTEMS GROUP, LUMO LABS, anisoprint, yourcoach, Trucost ESG Analysis, SCOR, ICEYE, S&P Global, MACQUARIE, ARCH AI, KAMRCS, MAANA ELECTRIC, Ferrari, RepRisk, 427 Four Twenty Seven, Schneider Electric, Bluefield, MINDSK, Air Liquide, TOTAL, NEUROCAST, Ramsay Health Care, People caring for people, and SolarPower Europe.

Logos in the red-bordered box include: European Commission, UNOOSA, World Health Organization, UN environment programme, IRENA International Renewable Energy Agency, IEA International Energy Agency, UNESCO, WORLD ECONOMIC FORUM, unitar United Nations Institute for Training and Research, Environment Agency, ESC European Society of Cardiology, THE WORLD BANK, EUROPEAN CENTRAL BANK EUROSYSTEM, JRC, ICOMOS, INTERNATIONAL MONETARY FUND, European Investment Bank, FRIDAYS FOR FUTURE, ecdc, MEDICINS SANS FRONTIÈRES, ABHI HealthTech for Life, EUROPEAN MEDICINES AGENCY, EUROREC, PRI, CEB COUNCIL OF EUROPE DEVELOPMENT BANK, fondation BOTNAR, ICCROM, eit Health, HIMSS, and InnEnergy Knowledge Innovation Community.

Logos in the blue-bordered box include: Tallinn, PARIS, WEST LONDON FREE SCHOOL, Ministry of Education and Culture, DeNederlandscheBank, MID, Glasgow CITY COUNCIL, DARMSTADT, HEALTH DATA HUB, ROMA CAPITALE, The Discovery Programme, City of Copenhagen, ISPRa Istituto Superiore per la Protezione e la Ricerca Ambientale, dena Deutsche Energie-Agentur, BANCA D'ITALIA EUROSISTEMA, VILLE DE LUXEMBOURG, North Seas Energy Cooperation, Citta di TORINO, Bergamo, and Rijksdienst voor het Cultureel Erfgoed.

Institutions

Academia

Industry

Public



ESA BICs

Foster start-up firms that set-up a new and innovative business using space-oriented technology, or data derived from space assets, for products and services in both space and terrestrial markets

ESA TECHNOLOGY BROKERS

Support technology transfer and appliances between established industry from the space and non-space sector, and within the space sector

ESA Φ -LAB NETWORK

Facilitates research teams to engage in groundbreaking science and technology development that have a potential in high-yield commercialisation



Φ -LAB
NETWORK

ESA-WIDE COVERAGE
IN MULTIPLE
MEMBER STATES

GROUND-BREAKING
RESEARCH, DIVIDING
COMMERCIAL
TECHNOLOGIES

FOR PhDs
AND RESEARCHERS



BUSINESS
INCUBATION

29 CENTRES

>90 LOCATIONS

200 NEW
STARTUPS P/Y

1450
STARTUPS SELECTED



TECHNOLOGY
BROKERS

8

TECHNOLOGY
BROKERS

404

TECHNOLOGY
TRANSFERS

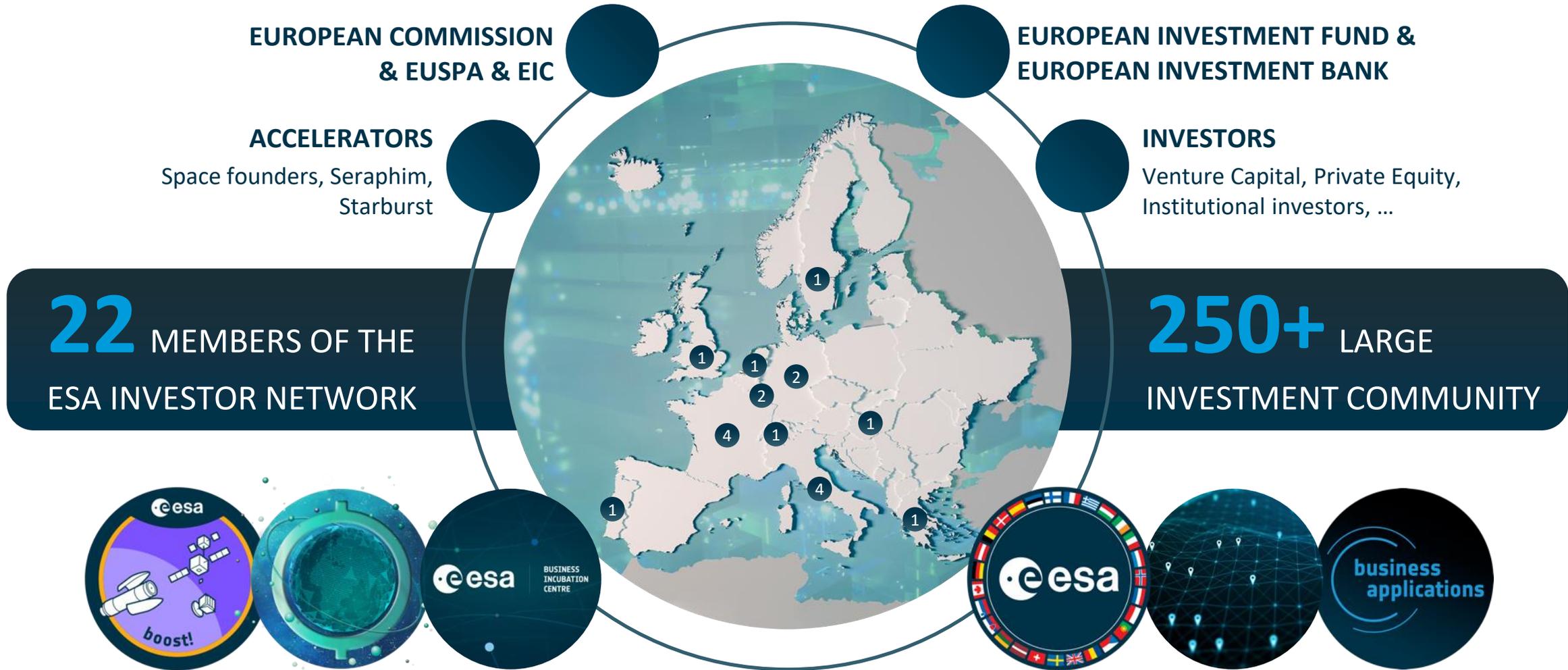


PARTNERSHIPS

FOR ENTREPRENEURS,
CORPORATES, INSTITUTES,
AND BUSINESS SCHOOLS

SUPPORTS START-UPS,
ALUMNI AND
NEWCOMERS

CONNECTING TO
CURRENT & FUTURE
DECISIONMAKERS



TOQUA HELPS CARGO SHIPS SAVE FUEL

Founded: 2020

→ PRODUCT

Ship Kernels are next-generation ship performance models that are required to create, manage and execute a data-driven decarbonization roadmap.

→ SPACE APPLICATION

Toqua brings the **fuel-saving potential of data and artificial intelligence to the shipping industry**. Their algorithms evolve over time and model all possible conditions and scenarios based on sensor and satellite data.

→ ACHIEVEMENTS

Toqua completed the ESA BIC programme in 2022 and **raised €300.000 in private investments and €200.000 from VLAIO**. They are now expanding their services to Singapore and China. On top of that they won the Economist Ocean Changemakers Challenge, and a few other awards.



Terreye



Founded: 2016

TerrEye is specialised in the acquisition, production, and processing of geo-spatial data. The company has become rapidly known in the agricultural and forestry sector for their mapping services to the benefit of land managers.

Today, TerrEye is recognised for their added value in monitoring of private land; the mapping of maintenance and planning of works and the management of forested and agricultural parcels.

The mapping service allows land managers to be in direct contact with the dynamics and the evolution of their natural heritage.



EARTH OBSERVATION

- Incubed 2

OPERATIONS

- S2P
(COSMIC – Competitiveness)

TELECOMS

- Space for 5G
- Space Systems for Safety and Security (4S)
- Optical Communication
- Future Preparation
- Partnership Projects
- Business Applications
- Space Solutions



EXPLORATION

- E3P Period 3
(BSGN and commercial mission support services)

TECHNOLOGY

- GSTP (Develop, Make, Fly)

NAVIGATION

- Navisp (Element 2) Third Phase
- FutureNAV

SPACE TRANSPORTATION

- Boost! 2.0
(Commercial Services; Support to MS; Service Procurement)

GAPS TO TACKLE: ESA AND NEW SPACE

For ESA, there are no “New Space companies”, but a **New Space approach** which can be observed from large well-established companies to small newcomer entities. This approach implies a **business mindset** based on private investments leveraging on speed, customer focus and new risk acceptance culture.

ESA set up the **New Space Advisory Board (NAB)**, a senior advisory body to the Director General of ESA, on all matters concerning Commercialisation. The NAB advises the Agency on the required evolution of its role and approach and on the set-up of measures and policies to further stimulate a commercial European space sector.



Annex

ESA TECHNOLOGY BROKER NETWORK



- Netherlands
- Belgium
- Luxembourg
- Germany
- Portugal
- Austria
- Czech Republic
- Poland



SUPPORTING THE INTEGRATION OF SPACE IN YOUR BUSINESS AND YOUR BUSINESS IN SPACE

TECHNOLOGY SCOUTING

BROKERING INTRODUCTIONS TO POTENTIAL CLIENTS

BUSINESS SUPPORT TO DEVELOP SUCCESSFUL BUSINESS CASES

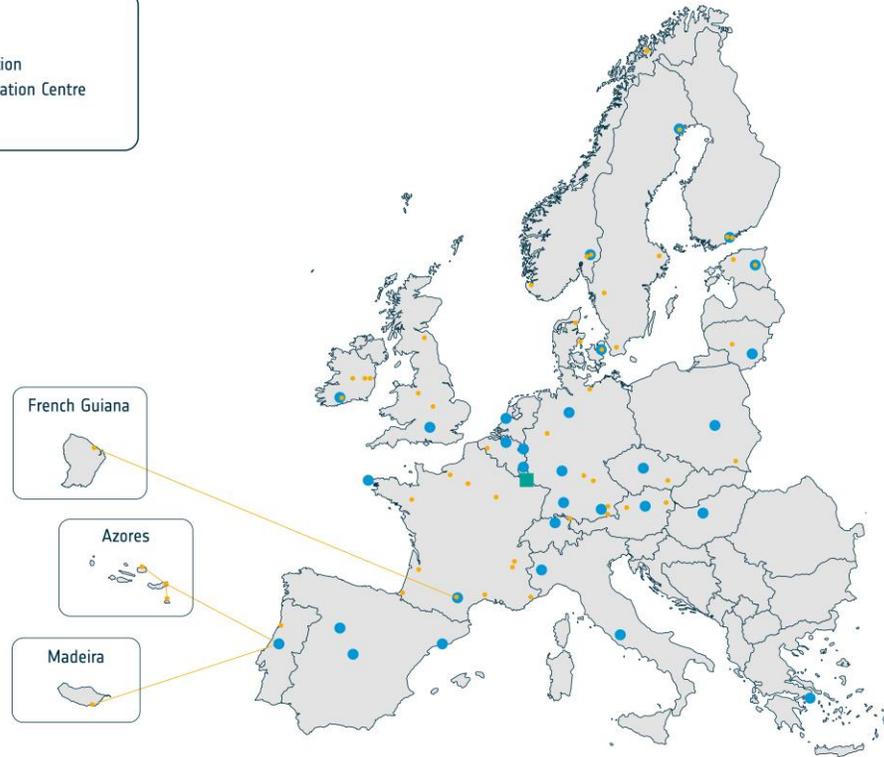
TECHNICAL FEASIBILITY AND MARKET ANALYSIS

FUNDING FOR INNOVATIVE PROJECTS

ESA BUSINESS INCUBATION CENTRES MAP

LEGEND

- Prime ESA BIC location
- ESA Business Incubation Centre
- ESRIC



29
INCUBATION CENTRES

200 START-UPS
SELECTED ANNUALLY

1,450+ START-UPS
SELECTED OVERALL

117.6 M€

TOTAL
SUBSCRIPTIONS

OVERSUBSCRIPTION
OF

+17.6%

INNOVATE ELEMENT
FUNDED WITH

96.6 M€

INVEST ELEMENT
FUNDED WITH

21 M€