

Commercialisation at ESA

Géraldine Naja

Director of Commercialisation, Industry & Competitiveness

ESA Commercialisation Days: Space Forum for Green Energy, 15/04/2024

The European Space Agency activities



EARTH OBSERVATION

SCIENCE NAVIGATION

SPACE TRANSPORTATION

SPACE SAFETY

LEO, MOON and MARS

CONNECTIVITY

GENERAL TECH & COMMERCIALISATION SUPPORT



















New Space, new opportunities



~ 7.5bn €

Global private investment raised in 2023

+ 30%

European private investment deals between 2021 and 2022

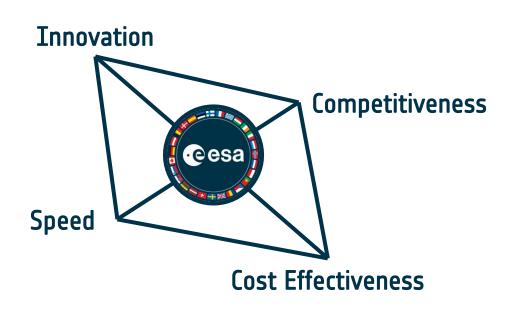
358bn €

Global Commercial
Downstream
revenue 2023

89%

Satellites launched from commercial operators 2023





New Space is a worldwide trend that leads to new challenges and opportunities.

OUR 3 COMMERCIALISATION DRIVERS

CAPITAL





Create sufficient public demand, and ensure easy access to capital from investors



Offer European talent attractive opportunities within Europe



ESA Tailors New Programmes For The Commercial World



CIC - COMMERCIALISATION AND COMPETITIVENESS SUPPORT SERVICES

- BASS
- SCALEUP

EARTH OBSERVATION

- Incubed 2
- Ф-Sat
- FutureE0



S2P

SPACE TRANSPORT

- Boost! 2.0
- FLPP



TELECOMS

- ARTES
- Space for 5G
- Space Systems for Safety and Security
- Optical Communication
- Future Preparation
- Partnership Projects

EXPLORATION

- E3P Period 3
- LEO cargo return service

TECHNOLOGY

GSTP

NAVIGATION

- Navisp Third Phase
- FutureNAV

1.3bn€ at CM22

- ✓ Supporting private endeavours by design
- ✓ Reducing time-to-contract
- ✓ Increasing transparency and communication
- ✓ Implementing high level service requirements
- ✓ Buying data from EO startups

OUR CONVICTION TOWARD A GREEN FUTURE



"Europe must collectively accelerate its ambition to maximise the use of space as an indispensable path to a green, sustainable and safe tomorrow, for the benefit of present and future generations."

- Council, meeting at ministerial level, 2023.

Our main tools

Space for a Green Future Accelerator



Green Transition
Information Factory



Copernicus Climate Change Service



Green Business
Applications &
Space Solutions



ESA Green Agenda



OUR COMMERCIALISATION PROGRAMMES



Among the commercialisation programmes, ESA Business Applications and Space Solutions (BASS) is specifically designed to support European start-ups and SMEs to develop downstream businesses using space.

Space Weather





Maritime

Environment





Healthcare



Earth Observation



Agriculture















Satellite Communication



Education (



Aviation









Satellite Navigation





ESA BASS: THE SUPPORT WE OFFER



TO WORK TOGETHER TO MAKE YOUR IDEA COMMERCIALLY VIABLE, WITH:



Zero-Equity Funding (€50K-€2M+)



Tailored Project Management Support



Access to our **Network and Partners**



Use of ESA Brand for credibility

AND ACHIEVE OUR DESIRED OUTCOMES



Support social, green value and economic sustainability



Promote utilisation of space in new markets and user communities



Strengthen European Industry competitiveness on global space and non-space markets

SSIFIED – For ESA Official Use Only

































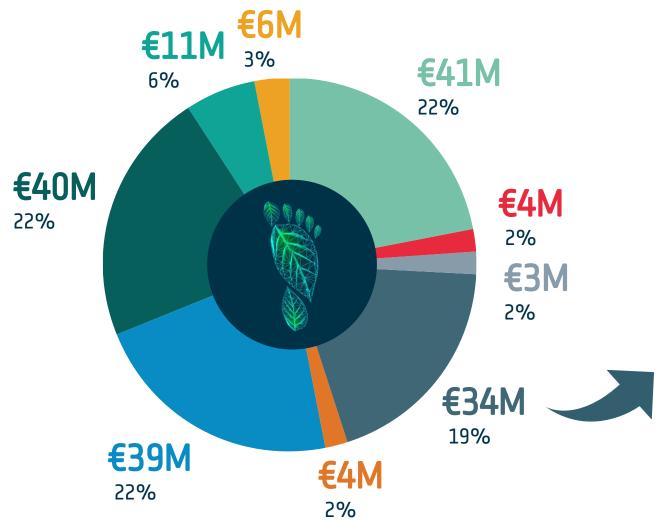






ESA BASS: A STRONG FOCUS ON GREEN





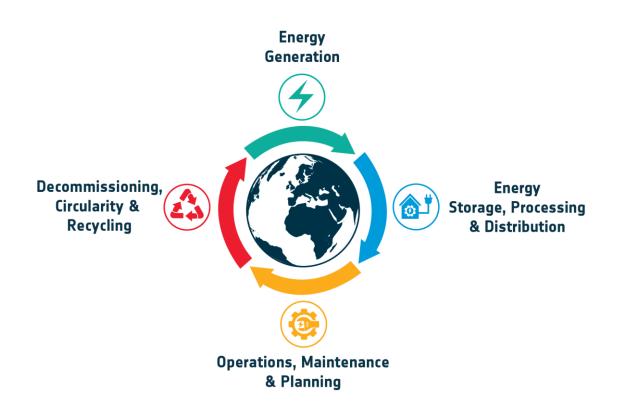
183M EUR Investment in 300 BASS Green Activities since 2010

- Green Buildings and Sustainable Cities
- Clean Water
- Protecting Ecosystems
- Sustainable Farm to Fork
- Circular Economy
- Energy Transition
- Sustainable Tourism
- Green Finance
- Sustainable Mobility

SPACE FOR GREEN ENERGY



Space applications have a central role to play in developing the energy sector, tackling the challenges it faces and achieving global sustainability targets.



Some examples:



- SatCom can accelerate modernisation towards smarter grids with real-time management.
- SatEO, SatNav and SatCom can help monitor geo-hazards and extreme weather.
- SatEO can support assessment of the environmental impact of energy installations.

ESA PROVIDE COMMERCIALISATION SERVICES





ESA BUSINESS INCUBATION CENTERS

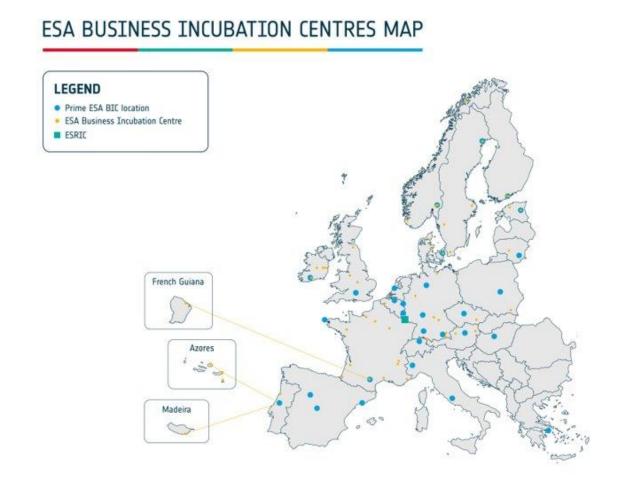


29 ESA BICs in 21 Participating States

- 200+ start-ups selected annually
- 1700 start-ups selected in 20 years
- 14 start-ups supported in Greece

Socioeconomic Impact in 2022*:

- > 177.5 M€ of revenue (~300k€ per start-up)
- > 395 M€ of investment raised (101 M€ public,
 268 M€ private, 25 M€/= other)
- ~ 5000 full-time jobs created and sustained (~25% female)
- > 136 patents granted in 2022 (> 390 total)



Φ-labNET | A NETWORK OF Φ-LABS



Research & Collaboration

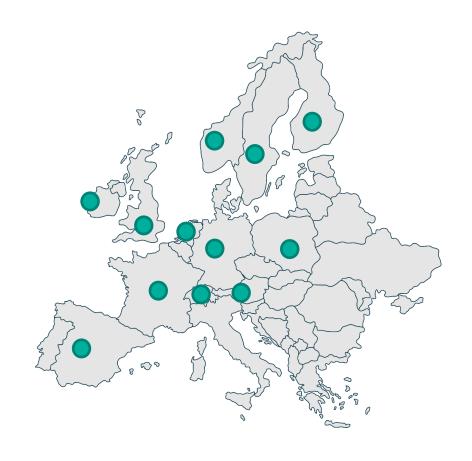
including Corporates and Startups, Universities and Research Centers

Bringing together commercial and technical expertise

Bridging the gap between research and commercial world for strategic market needs towards concrete applications, products and solutions

Financial support to research activities

Timeline: 11+ Φ -labs by the end of 2024, with more to come in 2025 and beyond.



Example of a Technology Transfer

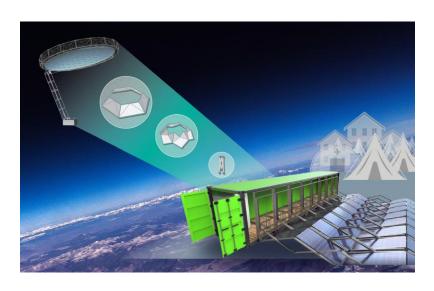


Sogeclair



Adaptive Heat Exchanger in additive manufacturing technology

Polar Developments



Modular deployable structure for portable energy generators

ESA UNCLASSIFIED – For ESA Official Use Only

→ THE EUROPEAN SPACE AGENCY



We deploy resources to help new companies find opportunities to work with ESA:

The comprehensive source of Invitations to Tender and Call for Proposals.

esa-star: publication



The platform for the NewSpace world
ESA Commercialisation Gateway



The idea collector for current and future programmes

<u>Open Space Innovation</u>

Platform



Are you an SME looking for guidance and training? esa.int/sme



THANK YOU FOR YOUR ATTENTION

COMMERCIALISATION.ESA.INT