ACCESS Programme – Business Application and Space Solutions (BASS) Opportunities

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ISD 16-17/09/2026

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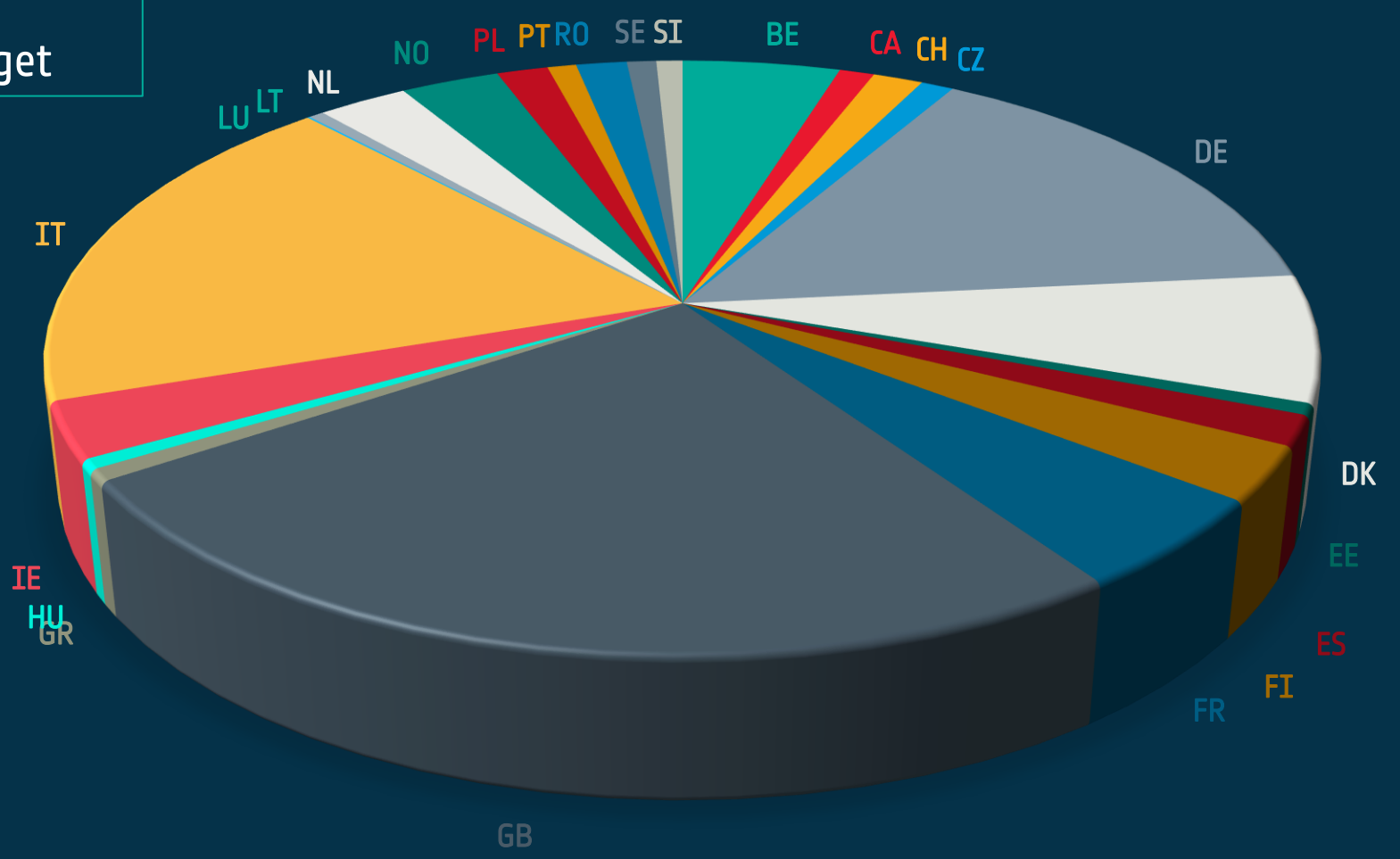
ACCESS- BASS (Business Applications and Space Solutions)

ESA BASS provides support to companies for development and pilot of services enabling market adoption and impact

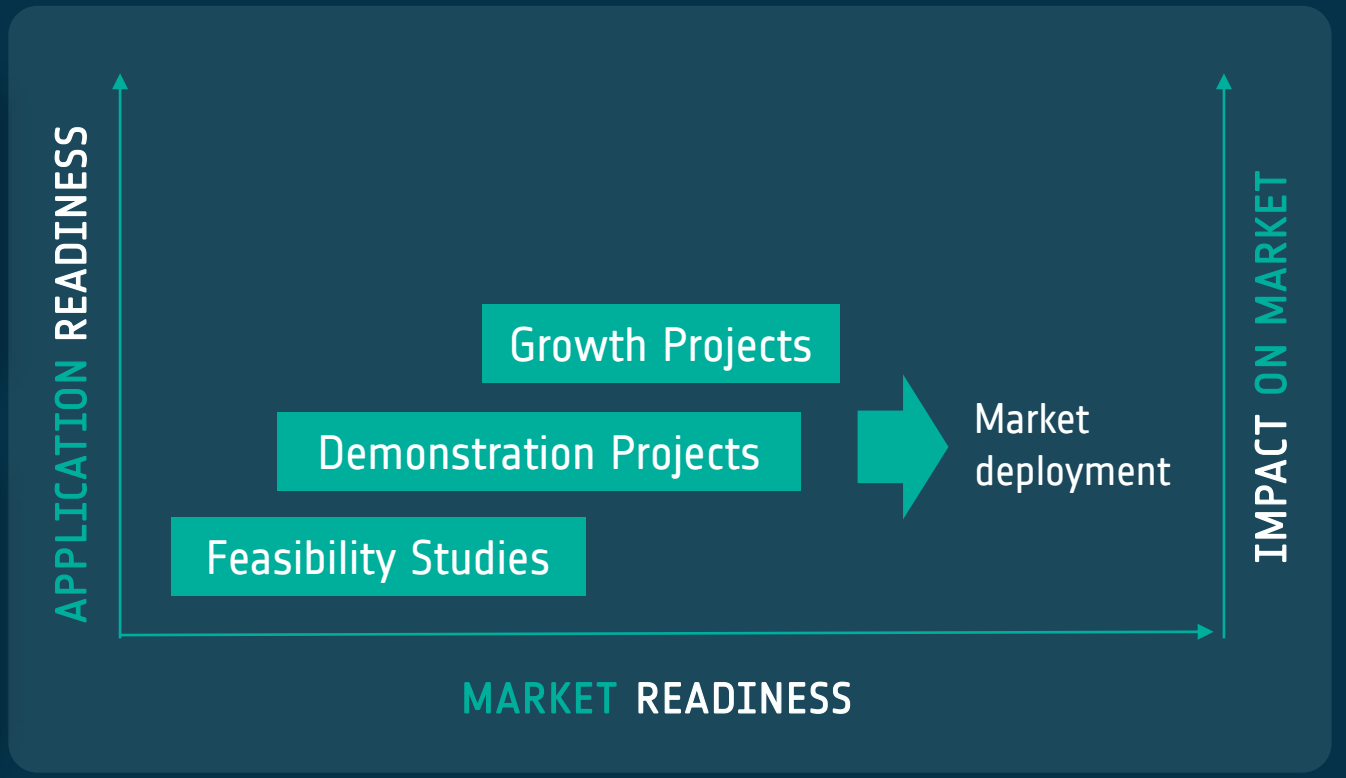
BASS Member States Participation

24 Member States
193 MEUR total budget



BASS OFFER

BASS supports companies in the ideation, development , demonstration and growth of commercial sustainable services and products exploiting space technologies



Funding and opportunity creation work together

1. Business Applications

Provides funding, business and technical support by placing industrial contracts and cooperative agreements with companies.

Demonstration Projects

- Pilot projects
- Growth projects

>750

Implemented

Feasibility Studies

- Kick-Start studies
- Proof of concept studies
- Enabling studies

>1000

Implemented

2. The Ambassadors

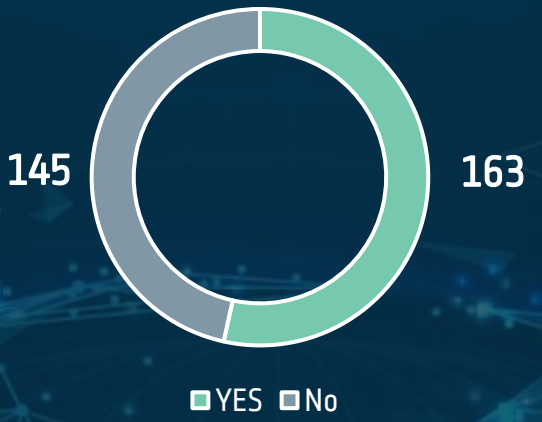
Fosters new business and venturing opportunities in space-related business applications and services through high-quality business consultancy.

BASS already converts investment into market outcomes

157 M€
Revenues generated during projects

1.9 B€
Projected revenues 3 years after project completion

Sales During BASS Project



180 M€
Industry co-funding

196 M€
Member States investment

308 projects with demonstrated Achievements

1561 jobs created

1649 partnerships established

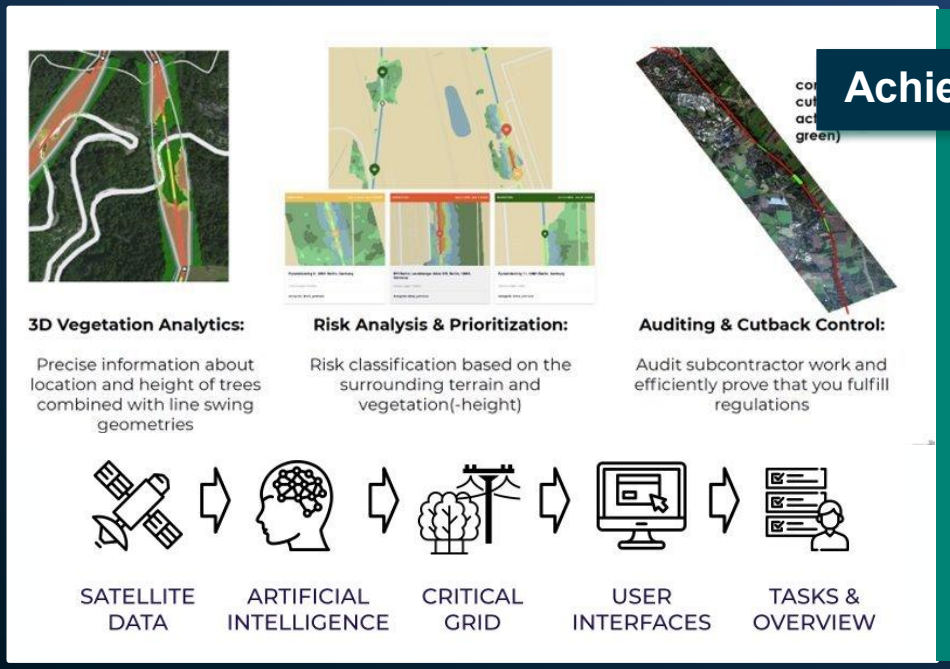
SIM

SatEO and SatNav for infrastructure monitoring, vegetation detection, and predictive maintenance

An industrial infrastructure monitoring service tailored to energy utilities, railways and pipeline companies. The service will include two main products: vegetation analysis to detect any danger posed by trees to overhead electricity lines and railways; and pipeline analysis to identify ground movement and third party influences close to pipelines. Solution aims to reduce operational expenses by ~25%.

Customer Groups:
Energy, Infrastructure

https://business.esa.int/projects/sim



Achievements

- ✓ Private investment leverage: Series A investment Additional investment raised August 2022 to accelerate market
- ✓ Expansion and enter new markets such as insurance
- ✓ Solution already used by:

Prime: LiveEO

Samoloop

Tracing and monitoring of dangerous goods based on satellite navigation and satellite IoT

Satellite Monitoring for Logistics safety Platform

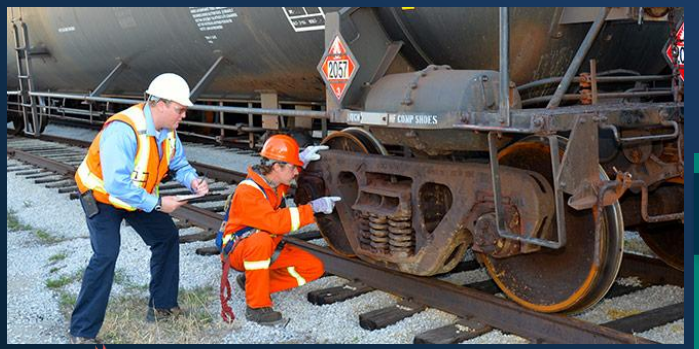
Track and monitor the transport of hazardous goods from source to destination

Supports paperless transaction among logistics stakeholders

Supports predictive maintenance

Customer Groups: Chemical companies, freight operators

Samoloop Project Link



Achievements

- ✓ Service today used by 23 of the top 50 major chemical companies

https://youtu.be/NV56GVr7n0k

Team: OVINTO Connecting Rail Freight

Used by: EVONIK, INEOS, BASF, lyondellbasell, CyPlus, KEM ONE, sabic, SOLVAY, inovyn, covestro, CRYO LOGISTICS, EXSIF WORLDWIDE, RAIL, PRIMAGAZ

Cooperation with non space - Task Forces & Port Working Group

ENERGY
Launched Sept 22

areg · Decommission · dena · dewa · E.DSO · entsoe · EPRI · Friends of Sustainable Grids · Global Alliance for Sustainable Energy · IESA India Energy Storage Alliance · Net Zero Technology Centre – Technology Driving Transition

SMART & GREEN CITIES
Launched Sept 23

City of Amsterdam · Bari · Bologna · Stadt Essen · eurotowns – Big enough to cope, small enough to care! · Expo City Dubai · Comune di Firenze – Florence · Genova · Glasgow City Council · Liverpool City Council · City of Lodz · ICLEI – Local Governments for Sustainability · Naples · Portsmouth City Council · Ville de Paris · Mairie du 15 Paris · Taranto · Città di Torino – Turin · Venice · West of England Combined Authority · World Urban Parks

MARITIME
Launched Jan 24

DAMEN · DNV · EMSA – European Maritime Safety Agency · Grimaldi Group · IMSA · msc · Mærsk Mc-Kinney Møller Center for Zero Carbon Shipping · Ocean Autonomy Cluster · ONE SEA · Fundación Valenciaport · TMA BlueTech – Promoting BlueTech & Blue Jobs · W

BIOECONOMY
Launched Oct 24

1t.org · CEPF – Confederation of European Forest Owners · copa cogeca – european farmers · european agri-cooperatives · EAPO · eustafor – Managing State Forests Responsibly · GAP INC. · Global Organic Textile Standard · GOTS · FSC Forests For All Forever · ERA-NET Cofund ICT-AGRI-FOOD · International Advisory Council on Global Bioeconomy · IACGB · ISSF International Seafood Sustainability Foundation · PEFC · Rabobank · Water Europe – Technology & Innovation

LOGISTICS & INFRASTRUCTURE
Launched Mar 26

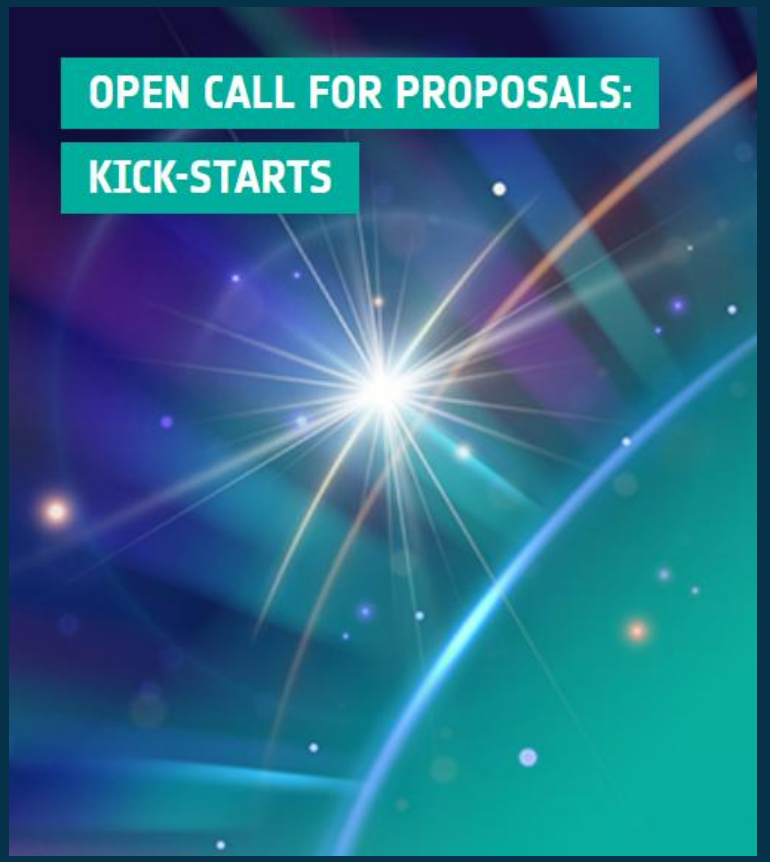
alice – Alliance for Logistics Innovation through Collaboration in Europe · ITS Norway · LIMOWA · Logistics in Wallonia · Fundación Valenciaport · VIL – Empowering Logistics

PORTS WORKING GROUP

Antwerp | Belfast | Esbjerg | ESPO (European Sea Port Organisation) | Halifax | Trieste | Tyne | Valencia (Fundacion Valencia Port)

BASS Calls for Proposals

business.esa.int



ESA-STAR REF: 6-60021

ESA-STAR REF: 4-40034

ESA-STAR REF: 4-40035

AND IN ADDITION: Thematic Campaigns and Contests

Enabling Studies – Going Live Shortly

Enabling Studies support early-stage, high risk development of innovative space-based services which address identified user needs but are not yet ready for commercial deployment.

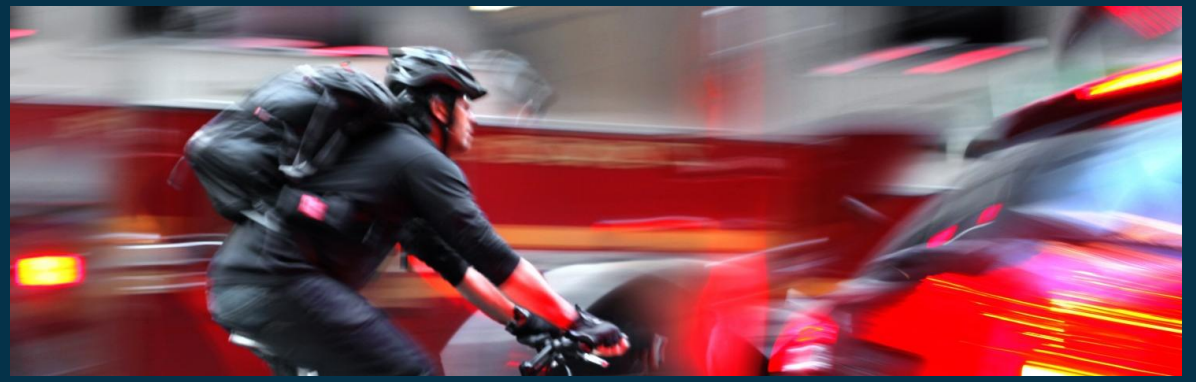
These opportunities typically have a **medium to long time to market (around five years or more)** due to factors such as evolving regulatory frameworks, emerging market demand or low technology maturity.

The expected outcome is the generation of evidence of customer demand and stakeholder engagement for the proposed service, together with a validated assessment of its commercial viability and technical feasibility.

Consortiums are allowed.

	Enabling Study
Activity Cost	max. 600'000 EUR (limited to eligible cost)
ESA Co-Funding	
Baseline	Up to 75% of eligible's cost
Micro, Small and Medium-Enterprises[3]	Up to 80%[4] of eligible's cost
universities, research institutes and public sector entities with no commercial interest in product/service[6]	Up to 100%[4] of eligible's cost with ESA co-funding not exceeding 30% of the total activity cost
universities, research institutes and public sector entities with commercial interest in product/service	Up to 75%[4] of eligible's cost

Road and Traffic Safety



Overview

Partners & Stakeholders: ESA Smart City Task Force, UK National Highways

Opening: **15 July** 2026 – 27 November 2026

The role of space technology

- Satellite Earth Observation (SatEO) - supporting infrastructure monitoring, environmental hazard detection and weather nowcasting.
- Satellite Navigation (SatNav) – enabling accurate vehicle navigation, traffic flow monitoring, and congestion reduction.
- Satellite Communications (SatCom) –enabling secure, resilient connectivity and hazard communication.

Background

Road and traffic safety is a critical concern globally, with the aim of reducing accidents, injuries, and fatalities on the roads. According to WHO road traffic crashes are the leading cause of death for children and young adults aged 5-29 years.

Industry is actively working on improving safety of both vehicles and the surrounding ecosystem. **With the rise of digital, connected and autonomous mobility solutions, there is huge potential for improved safety through reduced human error and improved information sharing.** New services at the intersection of these trends have the potential to drastically improve the safety of roads and bring scalable benefits.

The market is projected to grow substantially, driven by advancements in artificial intelligence, IoT sensors and cloud computing, allowing for greater accuracy, scalability, and cost-effectiveness of road safety systems.

The Arctic Region

Objective

Develop space-enabled solutions that address current and emerging challenges in the Arctic. By extension, and virtue of their similarities, solutions may be applied to the Antarctic Region as well.

The following (non-exclusive) focus areas are

- Maritime Security
- Critical Infrastructure Protection
- Ice Charting, Collision Avoidance and Navigation
- Search and Rescue
- Aquaculture and Fishery Resilience
- Environmental Protection

The role of space technology

- **Satellite Earth observation** may support everything from “dark” vessel detection through sea ice mapping and land subsidence monitoring.
- **Satellite communications**
  - Can be used to backhaul sensing devices used for aquaculture and fishery monitoring.
  - Secure and resilient connectivity during outages or emergencies
- **GNSS** is critical to navigation of aerial platforms and geo/timestamping of data collection, with potential applications in search and rescue.

Sub-calls thematics & timing

I – Environmental Protection & Climate Resilience

→ Closed

Topics of relevance:

- Aquaculture and Fishery Resilience
- Environmental Protection

II - Safety, Navigation, and Operations

→ 05 September 2026 – 05 November 2026

Topics of relevance:

- Ice Charting, Collision Avoidance and Navigation
- Search and Rescue

III - Security & Critical Infrastructure Protection

→ APQ opening November 2026 – Closing January 2027

Topics of relevance:

Key capabilities:

- Maritime Security
- Critical Infrastructure Protection

Space-Enabled Solutions for Resilient Grids

Objective

Develop space-enabled solutions that strengthen the resilience, security, and operational continuity of European power grids
Opening: Round 1: Nov 2026 – Jan 2027 | Round 2: Feb – Apr 2027

Why it matters?

- Energy infrastructure faces growing physical, cyber, and climate-related risks
- Extreme weather events (wildfires, floods, storms, heatwaves) increasingly affect grid operations
- Digitalisation and interconnected power systems increase dependency on secure infrastructure
- Disruptions to energy systems can have economic, societal, and national security impacts

The role of space technology

Space assets provide critical capabilities to support grid resilience:

- Satellite Earth Observation (SatEO) – monitoring infrastructure, environmental risks, and damage assessment
- Satellite Navigation (SatNav) – precise positioning and time synchronisation for digital grid operations
- Satellite Communications (SatCom) – secure and resilient connectivity during outages or emergencies

With support from ENTSO-E

ENTSO-E is the European Network of Transmission System Operators for Electricity and represents ~40 TSOs from 36 European countries. Several TSO's involved via ENTSO-E, have provided use cases with the aim to support and guide incoming Proof-of-Concepts and/or Pilot Projects, ensuring relevance for real grid operation

Sub-Themes

Sub-Theme #1 - Situational Awareness for Critical Events

Develop solutions that improve real-time monitoring and decision-making before, during, and after high-impact events.

Key capabilities:

- Early detection and monitoring of wildfires, floods, extreme weather, and infrastructure failures
- Monitoring of transmission corridors, vegetation encroachment, and environmental risks
- Integration of space weather information for grid risk forecasting
- Post-event damage assessment and operational recovery support
- Scalable and interoperable platforms supporting multiple TSOs

→ APQ opening Nov 2026 – Closing Jan 2027

Sub-Theme #2 - Strengthening Operational Resilience for the Grid

Enhance the security and continuity of grid operations through resilient space-enabled capabilities.

Key capabilities:

- Secure and high-accuracy timing for digital substations and protection systems
- Precise positioning for onshore and offshore grid assets
- Detection of interference, spoofing, and signal degradation
- Satellite backup communications when terrestrial networks fail
- Secure connectivity for grid restoration and emergency operations

→ APQ opening Feb 2027 – Closing April 2027

Environmental Crimes

Overview

Partners & Stakeholders: IFAW, TRAFFIC, WWF, INTERPOL

Opening date: 19-10-2026 **Closing date** 25-06-2027

The role of space technology

- Satellite Earth Observation (SatEO) – supporting situational awareness through environmental monitoring and risk assessment.
- Satellite Navigation (SatNav) – enabling tracking and verification of assets and movements to support compliance and enforcement.
- Satellite Communications (SatCom) – enabling reliable, secure data exchange and coordination, particularly in remote or underserved areas.

Background

Environmental crime is a major global challenge, including **wildlife trafficking, illegal fishing, hazardous waste dumping, and environmental fraud**, with significant impacts on ecosystems, public health, and economic stability.

Rising regulatory pressure and public scrutiny are increasing the need for transparency and accountability, exposing organisations to growing financial, legal, and reputational risks linked to non-compliance and greenwashing.

At the same time, advances in digital technologies and large-scale data are enabling improved monitoring, detection, and compliance capabilities across sectors.

The **market for environmental risk and compliance solutions is expanding rapidly, driven by demand for reliable and scalable tools to support sustainable operations and reduce environmental crime.**

Wildfires

Overview

Partners & Stakeholders: Catalan Fire and Rescue Service, European Forest Institute, UK National Fire Chiefs Council, Lloyds, Entente de Valabre, Pau Costa Foundation

Opening:
Wildfire Preparedness: 01 September 2026 - 01 December 2026

The role of space technology

- SatEO – supports large-scale mapping and tracking of vegetation health, fuel moisture, active fires, and long-term changes across landscapes.
- GNSS – enables accurate tracking of drones, aircraft, ground sensors, and computer risk models.
- SatCom – provides reliable internet links and communication for firefighting aircraft and remote sensors in areas without terrestrial service.

Background

Wildfire risk is a major global challenge due to challenges in early fire detection, active fire monitoring and modelling the spread of fires. These challenges significantly impact ecosystems, public health and economic sustainability

Climate pressure and public attention are increasing the need for prevention and adaptation. As a result, local economies, insurers, and land managers are increasingly exposed to growing financial, legal, and operational risks linked to extreme fire events.

Simultaneously, the rapid advancement in digital technologies and availability of large-scale data are enabling improvement in monitoring, assessing, and managing the risk of wildfire.

The market for wildfire risk and resilience solutions is expanding rapidly, driven by demand for reliable and scalable tools to support sustainable land management and reduce wildfire impacts.

Thematic call tendering process

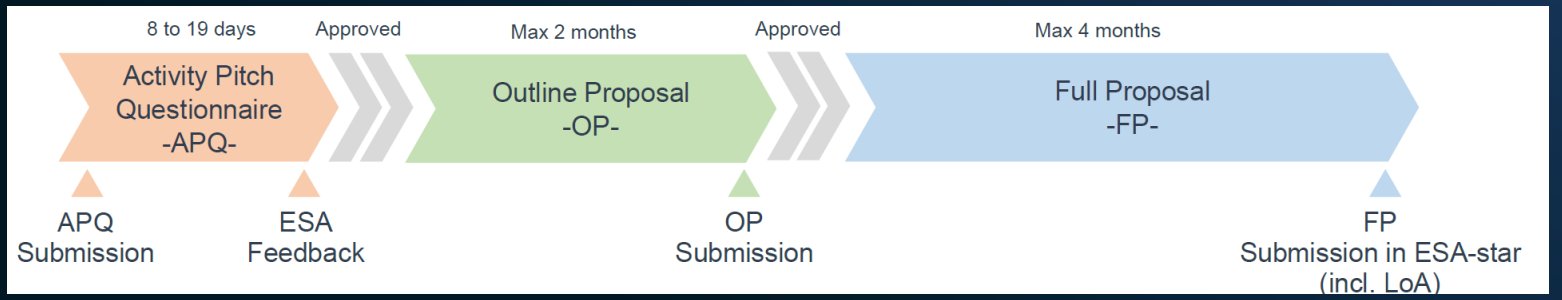
The thematic calls for proposals **Digitalization of the Water Sector, The Arctic Region, Space-Enabled Solutions for Resilient Grids** will be implemented through the **ACCESS BASS Standard Call for Proposals (ESA-STAR REFERENCE 4-40034)**.

The ACCESS BASS Standard Call follows a **structured, sequential process** that guides tenderers through proposal preparation and submission. Each stage **builds on the results and feedback** from the previous stage.

The tendering process consists of **three stages**:

- **Step 1 – Activity Pitch Questionnaire (APQ)**
- **Step 2 – Outline Proposal (OP)**
- **Step 3 – Full Proposal (FP)**

The **timeline for these stages** is illustrated in the following graph.



Space for Sustainable Industry and Digital Business Transformation Contest

Overview

Partners : Galp, The Coca-Cola Company, Procter & Gamble, Tomorrowland

Opening: 17 September 2026 - 30 October 2026

The role of space technology

- **SatEO** – supports the monitoring of environmental conditions, water resources, land use, renewable-energy assets and operational risks, providing inputs for forecasting, change detection and decision-making.
- **GNSS** – enables precise positioning and tracking of vehicles, equipment, temporary infrastructure and supply-chain assets.
- **SatCom** – provides resilient connectivity for remote locations, temporary sites, mobile assets and distributed sensors.
- **Human Spaceflight technologies** - provide transferable capabilities for passive monitoring, closed-loop resource management and resource-efficient production in constrained environments.

Background

Industries are under increasing pressure to improve sustainability, operational resilience and resource efficiency, while responding to challenges across water management, renewable energy, supply chains, consumer goods and large-scale events.

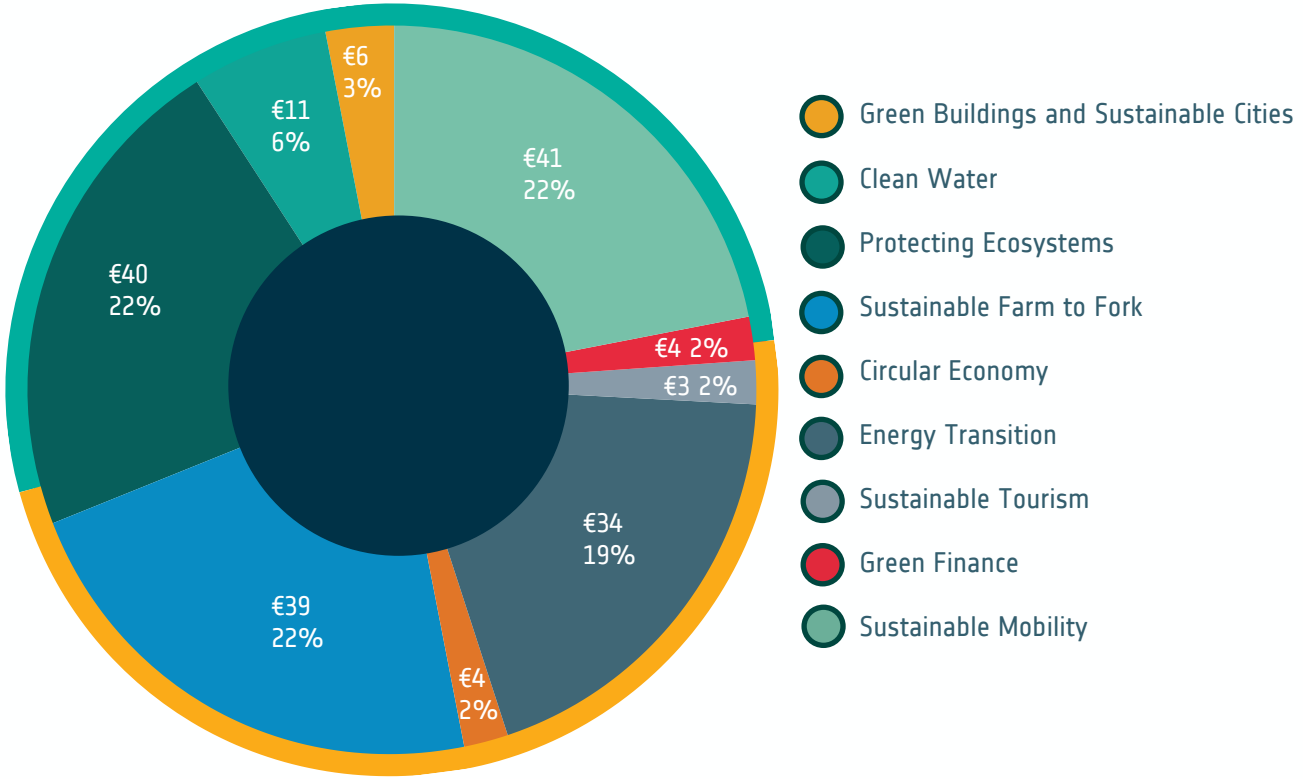
At the same time, advances in space technologies, artificial intelligence and digital platforms are enabling organisations to integrate environmental and operational data and turn it into actionable intelligence.

The initiative connects companies with **Galp, The Coca-Cola Company, Procter & Gamble and Tomorrowland/Love Tomorrow**, which have identified concrete operational challenges where space-enabled services could create measurable value.

Through six-month Proof of Concept studies, the initiative will support the development and validation of technically feasible, commercially viable and scalable services addressing one selected industry challenge.

BASS: A Focus on Sustainable Applications for Society

Environmental Benefits



183 M€ Investment in 300 BASS Green Activities since 2010

Societal Benefits

355 M €
total investment in over 300 demonstration projects

Thank You!

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