

Road & Traffic Safety

European Space Agency

Webinar, 15 July 2026

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→ THE EUROPEAN SPACE AGENCY

Welcome to the webinar



Before we start...

- Please keep your **microphones muted** at all times and switch off the webcam function
- You can use the **conversation function** anytime to submit your questions. They will be addressed during the Q&A at the end of the webinar



Maria Zaretskaya

Business Development and Partnerships Officer

**European Space Agency Business Applications
& Space Solutions**



Nikos Adamidis

Head of Policy and Impacts

National Highways Road Safety Division

Agenda



1. European Space Agency
2. Business Applications Space Solutions (BASS) Programme
3. Road & Traffic Safety Call
 1. National Highways Introduction & Use case
 2. Overall Call Use Cases and Scope
4. How to Apply
5. Q&A

EUROPE'S GATEWAY TO SPACE

WHAT

23 Member States, 5000 employees

WHY

Exploration and use of space for exclusively peaceful purposes

WHERE

HQ in Paris, 7 sites across Europe and a spaceport in French Guiana

HOW MUCH

€8.26 billion for 2026



space transportation



science



human spaceflight



earth observation



telecommunications
and applications



navigation



exploration



operations



technology



Business Applications: space-enabled services



Using **any space asset(s)** and integrating them with terrestrial assets for the **benefit of life on Earth**



What ESA Space Solutions offer



Our aim is 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



+ THE EUROPEAN SPACE AGENCY

Desired outcomes

SOCIO-ECONOMIC

Social, green value and economic sustainability



SPACE USE

Utilisation of space in new markets and user communities



INDUSTRY COMPETITIVENESS

European Industry competitiveness on global space and non-space markets



Road & Traffic Safety

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Road and Traffic Safety Call for Proposals



Background

Road and traffic safety is a critical concern globally, with industry 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.

Overview

Opening: July 15th – 27th November 2026

Activities:

- Pilot Projects
- Proof of Concept Studies

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.

Nikos Adamidis

Head of Policy & Impacts
National Highways

15 July 2026



Our road network

We manage and improve over 4,500 miles of motorways and major roads in England known as the strategic road network.



over
20,000
bridges and other structures



over
150,000
signs



30,000ha
soft estate area

over
100,000
street lights



over **3,500**
electronic messaging signs



4,500
miles of motorways and major A-roads



People rely on our roads

To connect people and to drive the economy

97

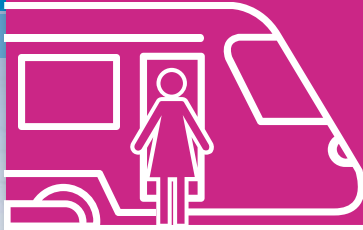
billion miles
travelled on the
SRN every year



Carrying

3x

more people than
the UK rail network



We have reduced the
number of casualties on
our roads by

↓ **38%**

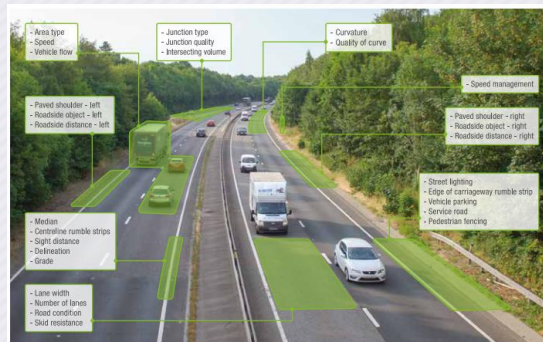
against an agreed
2005 – 09 baseline



international Road Assessment Programme (iRAP) Overview

INPUTS

Road characteristics
Layout, junctions, barriers, roadside hazards



Traffic data
Speed and flow

iRAP risk assessment

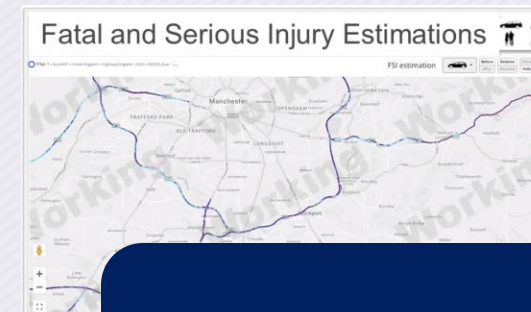
OUTPUTS

Star Ratings

1★ Higher risk
2★
3★
4★
5★ Lower risk



Safer Road Investment Plans
Prioritised safety improvements with estimated benefits and costs



Estimated KSI risk
across the network

USES

Prioritise investment

Develop & appraise schemes

Track performance

Thank you



Road and Traffic Safety Call for Proposals

Use Case Examples

These are examples only and the call is not limited to these



Overview

Opening: July 15th – 27th November 2026

Activities:

- Pilot Projects
- Proof of Concept Studies

- **Enhancing information exchange and interoperability** - enhancing V2V and V2I communication,
- **Improving International Road Assessment Programme (iRAP) survey completion**
- **Improving road design** to reduce number of accidents and protect non-motorised road users
- **Optimising traffic flow** - building intelligent traffic systems
- **Proactive Vehicle Safety** – e.g. weather nowcasting, and analysis of road surface to inform the driver in advance that car settings should be modified.

Role of Space Data

The Power of Space Technology and Data



Satellite Communications

- ❑ can ensure seamless communication between various systems, enabling near real-time data exchange and coordination.
- ❑ Vehicle-to-Vehicle (V2V) and Vehicle-to-Infrastructure (V2I) communication can leverage Satcom to ensure seamless connectivity in remote areas, therefore playing a significant role in detecting and communicating information about potential hazards.

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Satellite Earth Observation

- ❑ can be used to update maps, monitor environmental hazards, and assess the conditions of roads. SatEO data, such as weather nowcasting, can help vehicle systems to adjust the vehicle's speed and trajectory to current road conditions. SatEO can be used in advanced routing applications to optimise the route based on hazards or weather conditions.

The Power of Space Technology and Data



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Satellite Positioning

- ❑ provides accurate positioning, navigation, and timing, which are essential for guiding and navigating vehicles, especially those with autonomous capabilities.
- ❑ Aggregated GNSS data from connected vehicles, fleets, and mobile devices can be used to monitor traffic flow and to identify congestion patterns. This can improve the overall safety of the road network by reducing traffic jams and congestion during peak hours.

HOW TO APPLY

Road and Traffic Safety Call for Proposals



Proof of Concept (PoC) Studies (9 months)

Proof of Concept Studies: These aim to reduce risks and validate the market opportunity by designing the service concept, engaging users, and developing a Minimum Viable Product (MVP).

The starting point is the identification of a significant potential business opportunity for a space-based application or service, with preliminary customer/user interest, and initial positive considerations on the technical feasibility.

The expected outcome is the confirmation that the proposed solution is both technically feasible and economically viable, with key technical and business assumptions validated through the development of an MVP, and supported by strong customer interest and early commercial traction.

Pilot Projects (1-2 years)

Pilot Projects: These focus on integrating, developing, and testing the service or application with customers in the primary target market. The pilot demonstrates the solution in a real operational setting, confirming the value-propositions of the proposed solution.

The starting point is the confirmation that the proposed space-based application or service is both technically feasible and economically viable with demonstrated customers' interest, established partnerships for commercialisation, and a credible commercialisation strategy backed by a solid financial plan.

The expected outcome is a fully operational service supported by key customers, ideally achieving initial sales with identified clients, while demonstrating a clear pathway to

To be **eligible for funding**, your team must be based in one of the **following countries**: BE+CZ+DE+DK+EE+GR+ES+FI+FR+GB+HU+IE+IT+LU+NL+PL+PT+SE+SI +CA+CH+NO



	Proof-of-Concept Studies	Pilot Projects
Activity cost	Up to €600,000 (limited to eligible cost)	Case-by-case assessment (limited to eligible cost)
ESA co-funding		
<i>Baseline</i>	Up to 75% of company's cost	Up to 50% of company's cost
<i>Micro, small and medium businesses¹</i>	Up to 80% ² business' cost	Up to 80% ² business' cost
<i>Universities, research institutes and public sector entities with no commercial interest in product/service</i>	Up to a 100% ² of the entity's costs, with ESA co-funding not exceeding 30% of the total activity cost	Up to a 100% ² of entity's costs, with ESA co-funding not exceeding 30% of the total activity cost
<i>Universities, research institutes and public sector entities with a commercial interest in product/service</i>	Up to 75% ² of they entity's costs	Up to 75% ² of they entity's costs
Industry co-funding	Remaining part of the cost to carry out the activity. Co-funding can be provided through public or private sector, direct or in-direct co-funding	

¹ Enterprises fulfilling the criteria defined in the European Commission Recommendation of 6 May 2003 (2003/361/EC) or as updated.

² Depending on the funding level authorised by the related National Delegation(s).

³ In case of no commercial interest, universities, research institutes and public sector entities shall be involved as subcontractors.

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The **Activity Pitch Questionnaire (APQ)** allows you to present your business idea in a reduced, standardised pitch. It helps ESA to quickly take informed decisions on next steps, pointing you to the most appropriate activity stream in case the APQ is considered acceptable (e.g., additional preparatory work, training, teaming up with some other partners, go ahead targeting a Feasibility Study or a Demonstration Project).

Gated and incremental approach: The submission process is based on the following three stages: the Activity Pitch Questionnaire (this form), the Outline Proposal, and the Full Proposal. In case the APQ is accepted by ESA, the answers to the questions of this APQ will be directly integrated in the Outline Proposal and extended as needed. In a similar way, the elements of the Outline Proposal, if accepted by ESA, can be directly integrated in the Full Proposal.



Prepare your pitch:

- Make sure you use the **LATEST VERSION** of the [APQ template](#).
- Explanations of terminology used here can be found in the document '[Terminology used in ESA Business Applications](#)'.
- Some explanations on how to prepare the APQ are available in the presentation '[ESA Business Applications - Guidelines for APQ Preparation](#)'.
- Choose the appropriate Open or Thematic Call. For further details, visit '[ESA Opportunities for Open Calls](#)'.

Call: Activity:

"Please be aware, it's important to ensure you have selected the right options."

Submit your pitch:

- Contact your National Delegation¹ as specific rules may apply depending on your country.
- Please note that for a given idea, **ONLY ONE APQ submission** is possible (no subsequent submission of revised APQ Form(s) is allowed).
- **The APQ has a validity of one YEAR: in case of no draft of Outline Proposal is submitted within one year from the date of the APQ submission, the APQ will be considered by ESA as withdrawn.**
- Your APQ shall be submitted using the **online web form submitter** accessible at [‘APQ Submit’](#)
Please note that only PDF formats are accepted.

Activity Pitch Process:

Upon submission of your Activity Pitch Questionnaire:

- ESA may provide this Activity Pitch Questionnaire to and discuss it with the National Delegations of the countries of your consortium.
- ESA will assess your pitch.
- ESA will provide written feedback typically within 10 working days from the date of the APQ submission.

¹ Contact details of the National Delegations can be found under:

<https://business.esa.int/national-delegations>

For Greek entities, please note that Greece does not support non-competitive bids, therefore Greek proposals are not admissible under in this call.

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Section AP.1 Background information

AP.1.1 Idea name:

Brand name: Full name:

Thematic market area

Primary 1: Subcategories 1:

Primary 2: Subcategories 2:

Keywords 1: Keywords 2: Keywords 3:

AP.1.2 Basic company information

Name: Website:

Address: Country: Phone:

Contact point name: Email:

AP.1.3 Company background

Year of creation: Revenues (Most recent figure in EUR) / Year:

Number of employees: Industry / sector:

Coming from ESA BIC(*): (*) If Yes, conclusion date of BIC contract: mm/yy

More details: [Max 155 characters \(no spaces\)](#)

AP.1.4 Have you had any previous activities within Business Applications?

If Yes, indicate name of any previous activities and possible commercial outcomes

Max 270 characters (no spaces)

AP.1.5 Are you applying with sub-contractors?

If Yes, who are the other entities?

Name: Website: Industry: Country:

Name: -- Website: -- Industry: -- Country: --

Name: -- Website: -- Industry: -- Country: --

Max 360 characters (no spaces)

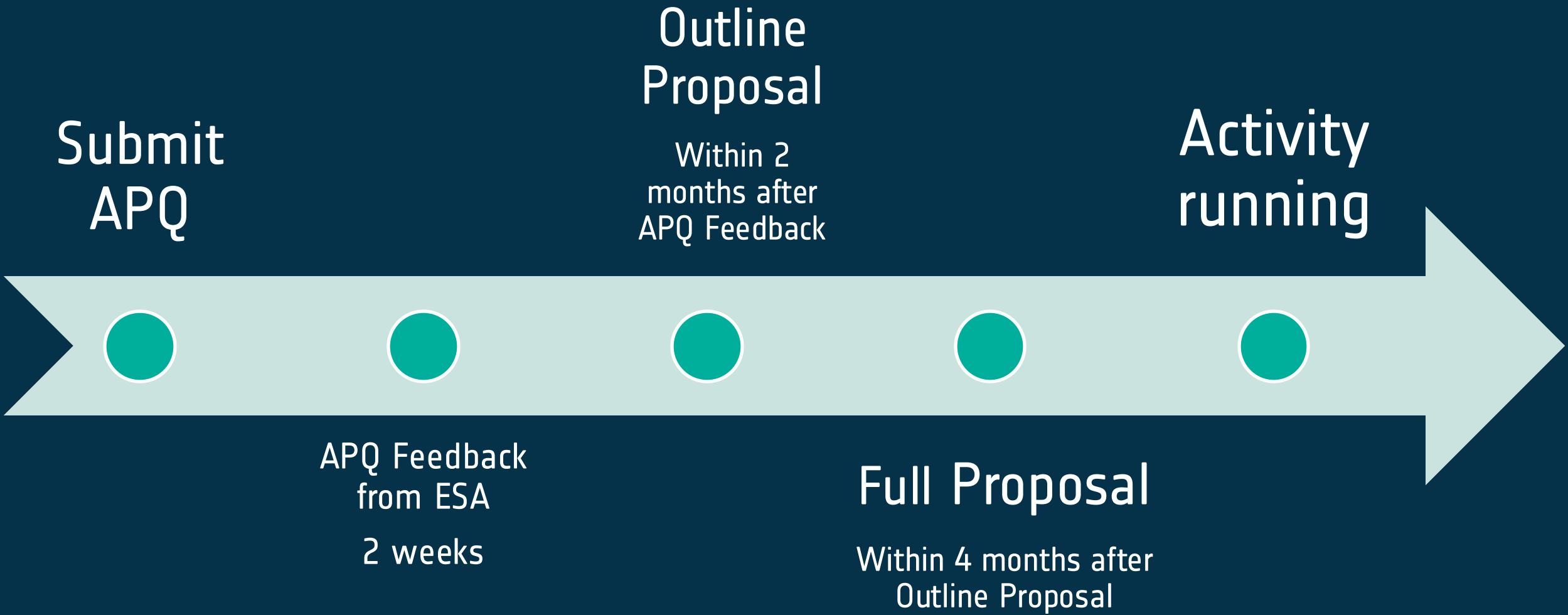
Roles in	

Things you will need to do:

- APQ form is available at: <https://business.esa.int/documents>
- Submit your **APQ pitch** via **ESA's Open Space innovation platform (OSIP)** in the “**Proof of Concept Studies & Pilot Projects**”.
- If successful, you will be asked to submit **an outline proposal** and then (if acceptable) **a final proposal** (and dependent on national delegation support).



<https://ideas.esa.int/>



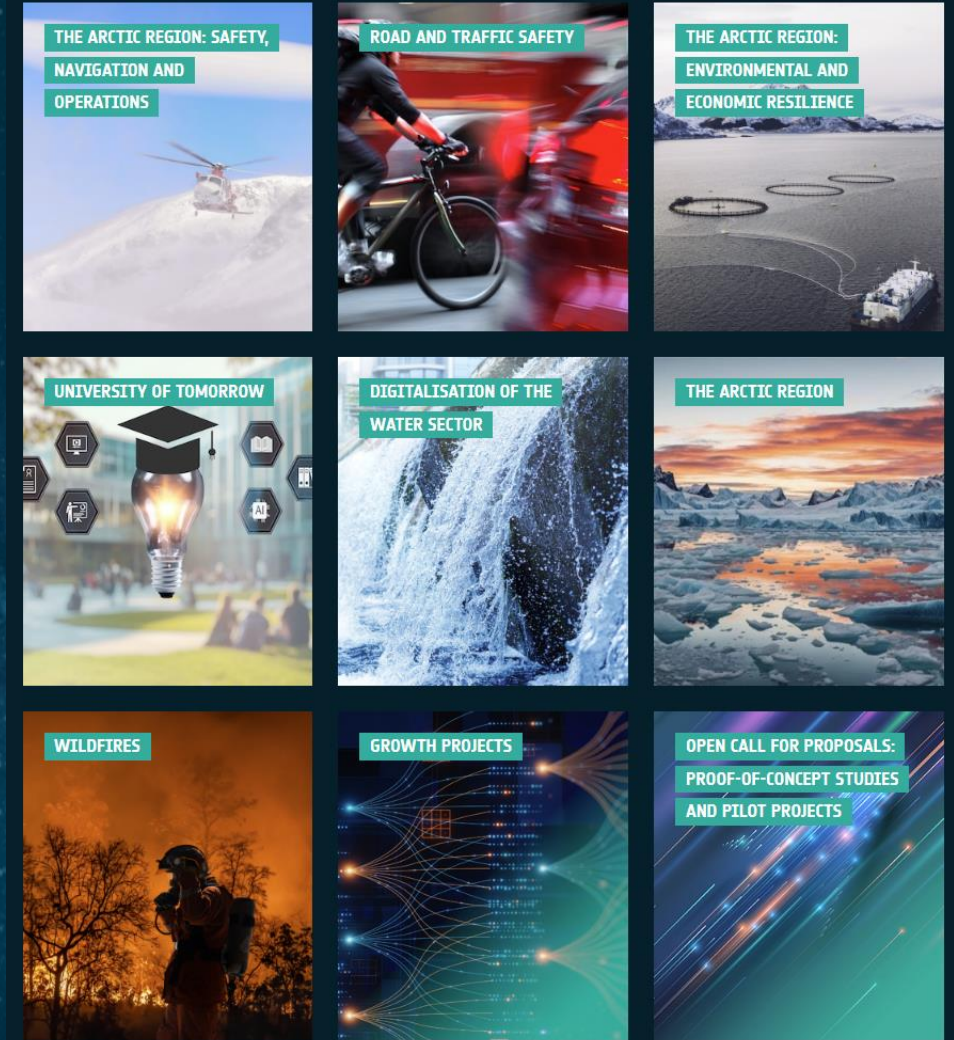
Where to find the Details

- For more information see: business.esa.int
- Scroll down to the “Featured Opportunities” section to see all activities open or under preparation.
- Open the “Road and Traffic Safety” Page



<https://business.esa.int/funding/road-and-traffic-safety>

FEATURED OPPORTUNITIES



A tool at your disposal – The Ambassador Network

Ambassadors are present in 8 countries: UK, Norway, Belgium, Germany, Poland, Czechia, Italy, Portugal

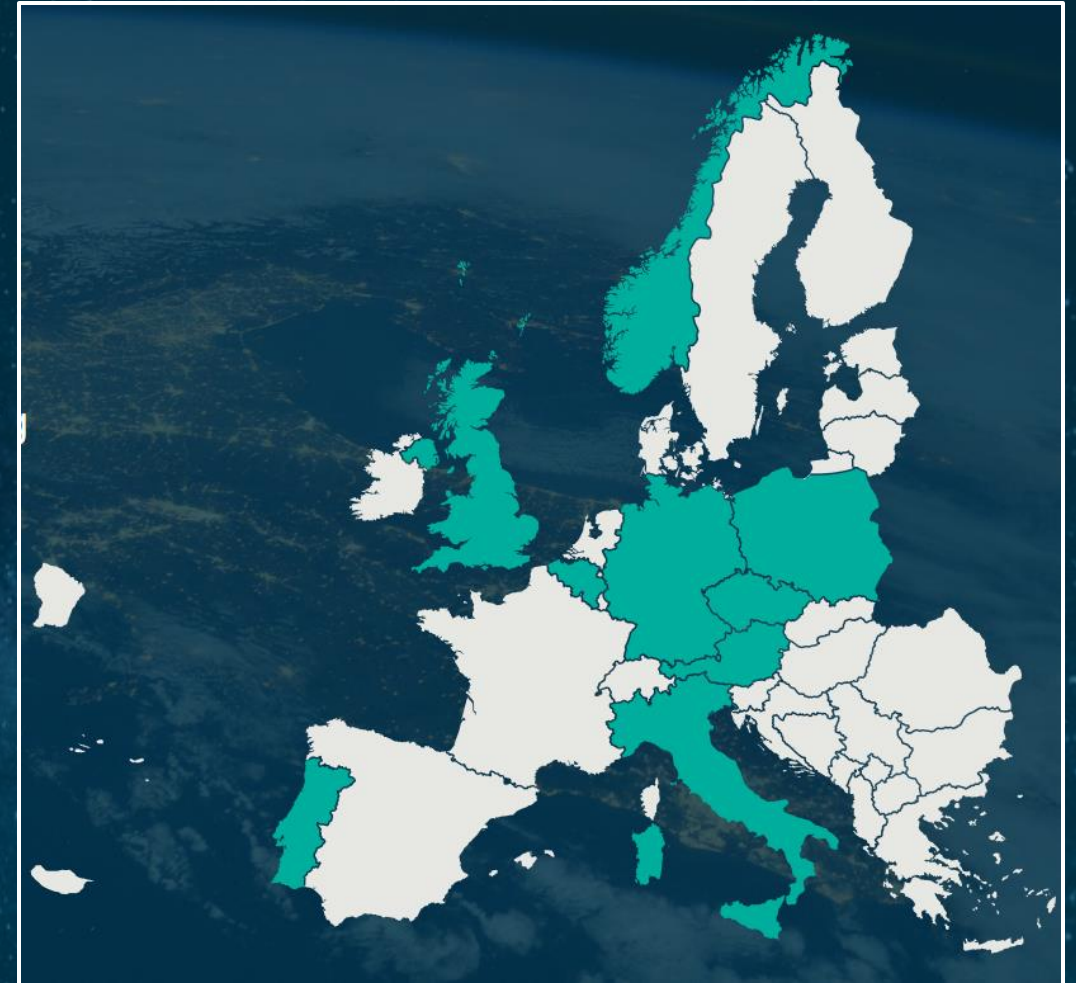
They are your local interface for any questions related to the offering of ESA Space solutions.

They can advise you on:

- Preparation of the Activity Pitch Questionnaire (APQ)
- Give you an overview of ESA Space Solutions funding opportunities.



<https://business.esa.int/ambassador-platforms>



Q&A

For more information visit:

- <https://business.esa.int/>
- <https://business.esa.int/funding/road-and-traffic-safety>
- Maria.Zaretskaya@esa.int