

Maritime Decarbonisation

Call for Proposals (Non-Competitive)

Webinar, 22 May 2024

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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

- Introduction
- European Space Agency
- Business Applications & Space Solutions (BASS) Programme
- Maritime Decarbonisation Call for Proposals
- How to Apply
- Q&A

We are ESA

EUROPE'S GATEWAY TO SPACE

WHAT

Estd. in 1975, 22 Member States, > 5000 employees

WHY

Exploration and use of space for exclusively peaceful purposes

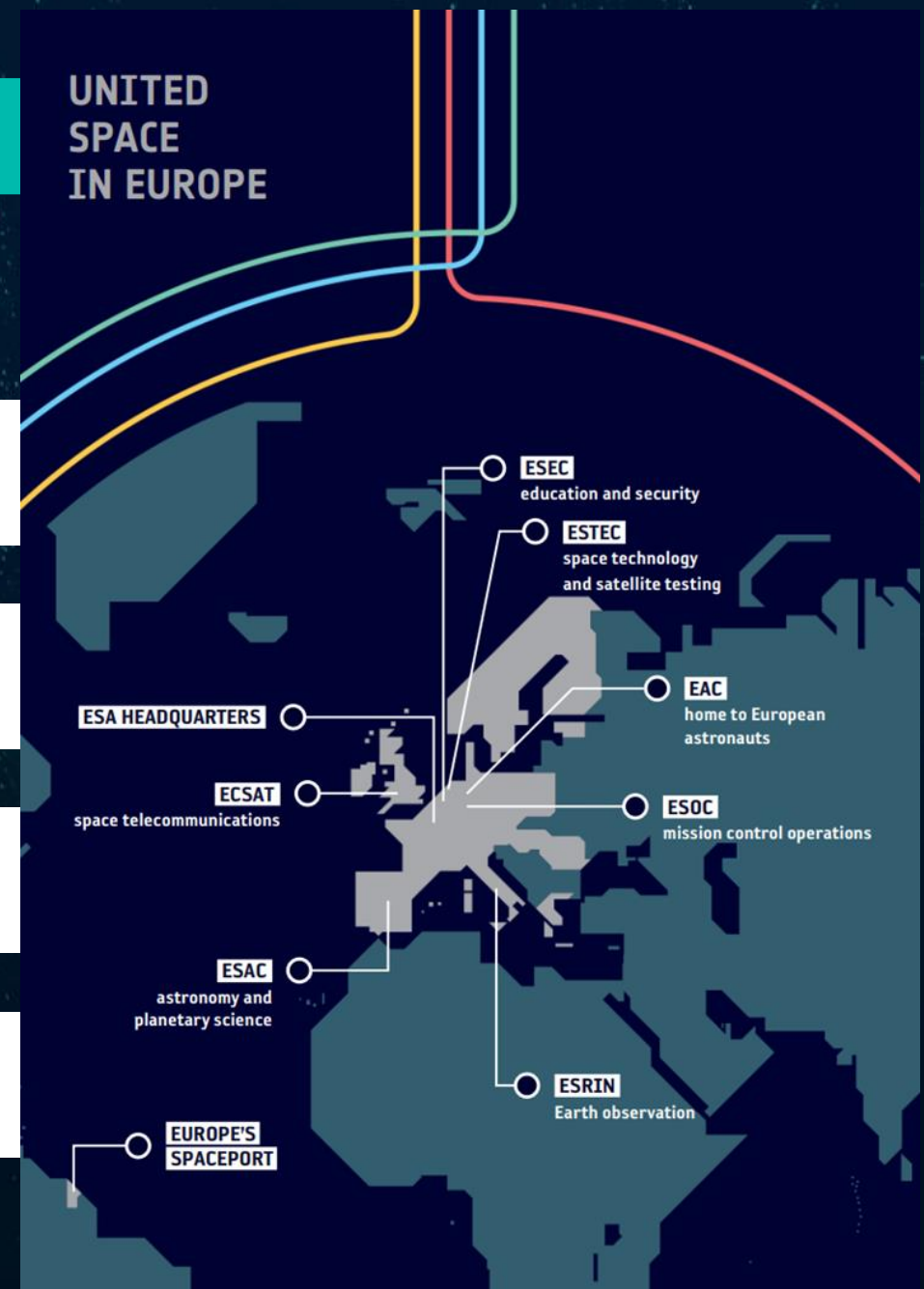
WHERE

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

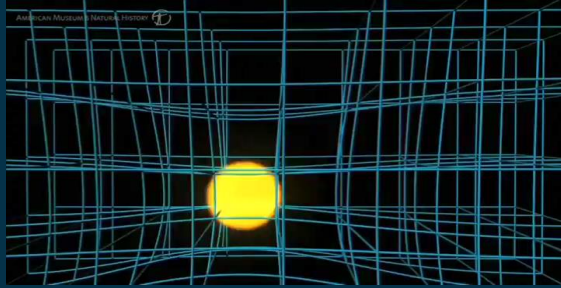
HOW MUCH

~ €7 billion = ~ €12 per European per year

UNITED SPACE IN EUROPE



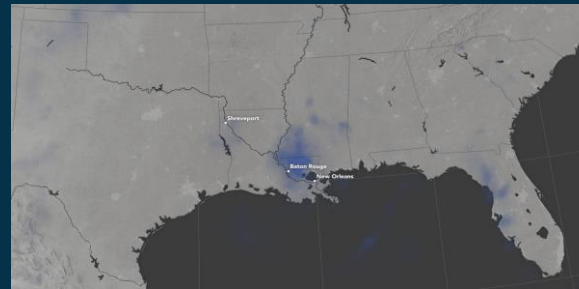
Science and Exploration



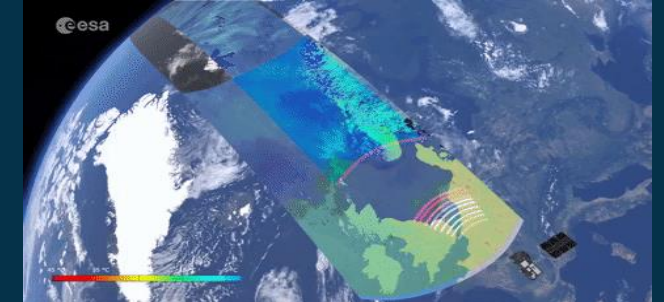
Enabling and Support



Safety and Security

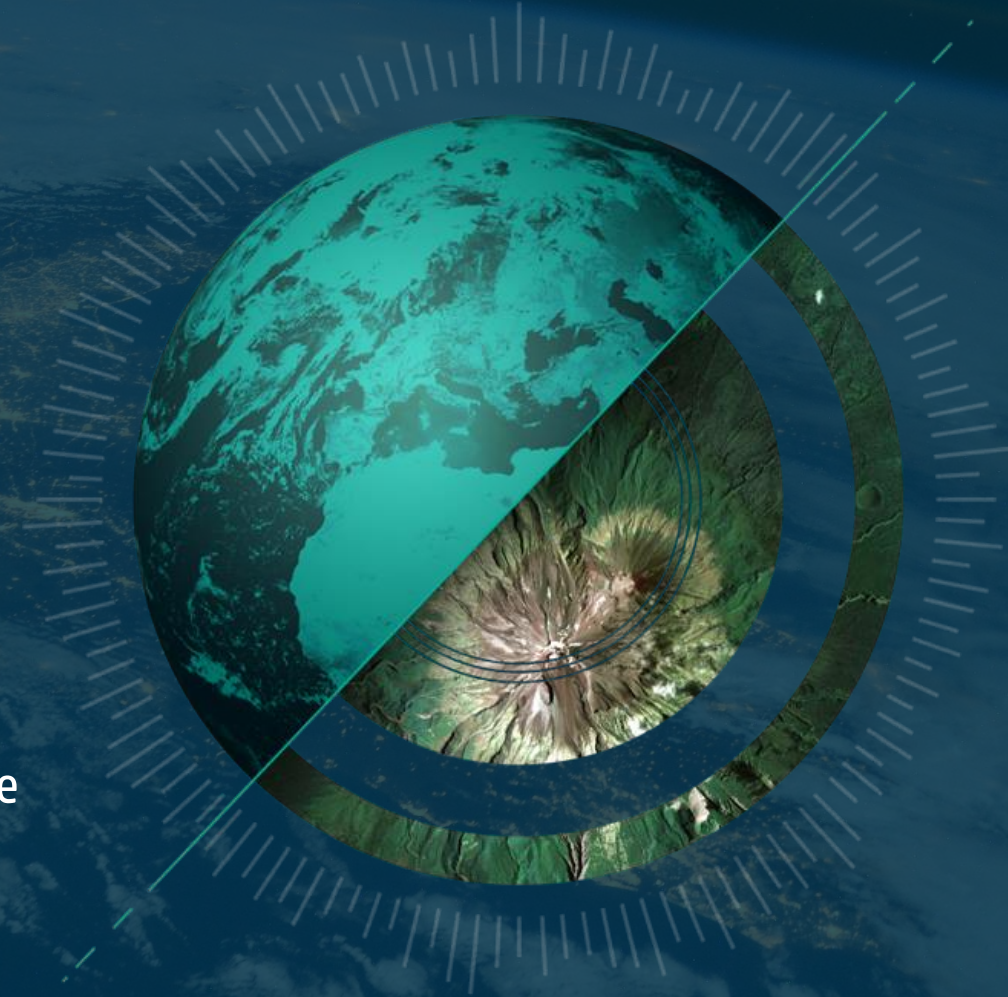


Applications



The largest space innovation network in the world

- The go-to place for great business involving space to improve everyday life.
- Supporting European companies including start-ups and SMEs to develop businesses using space technology and data.
- Offering funding, business and technical support to help to generate successful business and create jobs.



Business Applications: space-enabled services

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

Space Assets...

- Earth Observation
- Satellite Navigation
- Satellite Communication
- Spaceflight Technologies
- Space Weather

...potentially coupled with...

- Big Data analytics
- VR/AR
- AI/ML
- Mega-constellations
- Drones
- Digital Twins
- IoT
- Cybersecurity
- Blockchain
- 5G (<https://artes.esa.int/esa-5g6g-hub>)

...to serve Users & Markets

- Maritime
- Agriculture
- Environment
- Healthcare
- Finance
- Transport
- Education
- Media
- Energy
- Aviation

What can you do with Space Technology?

Satellite Positioning



- Global Positioning
 - Navigation
 - Velocity
- Precision Timing
- Activity Tracking
- Route Optimisation
 - Surveying
- Machine Control

Satellite Communication



- Reliable and Secure Communication
- Remote Connectivity
- Backup to Terrestrial Infrastructure
- Broadcast to Widespread Users

Earth Observation



- Land, Sea, Air Monitoring
- Infrastructure Monitoring
 - Resource Mapping
- Environment Sensing
 - Change Detection
- Weather and Pollution Forecasting

Human Spaceflight Technologies (Spin-Outs)



- Augmented Reality
- Health Sensors
 - Procedures
- Big Data Processing
- Artificial Intelligence

What are we looking for?

Services that are



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



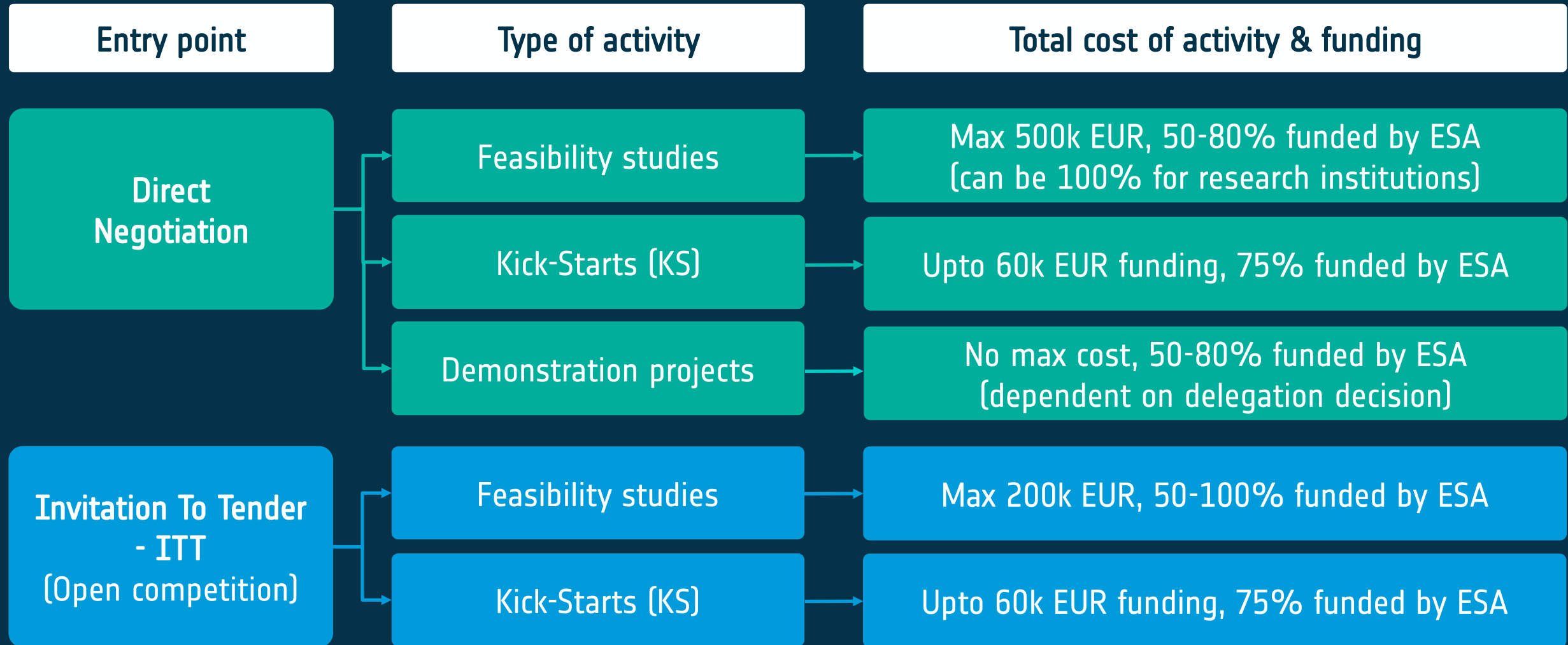
Use of ESA
brand for
credibility

Demo projects: Mature value proposition & business plan and demo your service with customers

Feasibility studies: Explore ideas, create a business plan & connect with potential users

Kick-Starts: Shorter, smaller budget feasibility studies

BASS Funding Schemes



What's in it for us?

SOCIO-ECONOMIC IMPACT

Deliver social value and economic sustainability



USE OF SPACE TECHNOLOGY

Expand the utilization of space in new markets and user communities



INDUSTRY COMPETITIVENESS

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



Cooperations with Non-Space Stakeholders*

Maritime Sustainability Task Force

Aviation

Smart Cities

Energy

ICT

Health

Food and Agriculture

Infrastructure

Circular economy

Cybersecurity

* These are entities who do not receive funding from ESA through the cooperation but have mutual objectives in running initiatives with ESA



Maritime Decarbonisation Funding Call

Umbrella Call

- **Fixed Call for Proposals** aimed at supporting the development of sustainable space-based services and applications that address challenges related to the **decarbonisation of the maritime industry**.
- Additionally, the call seeks to assist the maritime sector in adapting to and complying with new European and international regulatory frameworks.
- **4 sub-themes** opening sequentially from 01 Jun 2024 to 01 Feb 2025
- Funding: up to 50% (80% for SMEs) of development costs
- No IP or equity retention
- Open to **Feasibility Studies** and **Demonstration Projects**



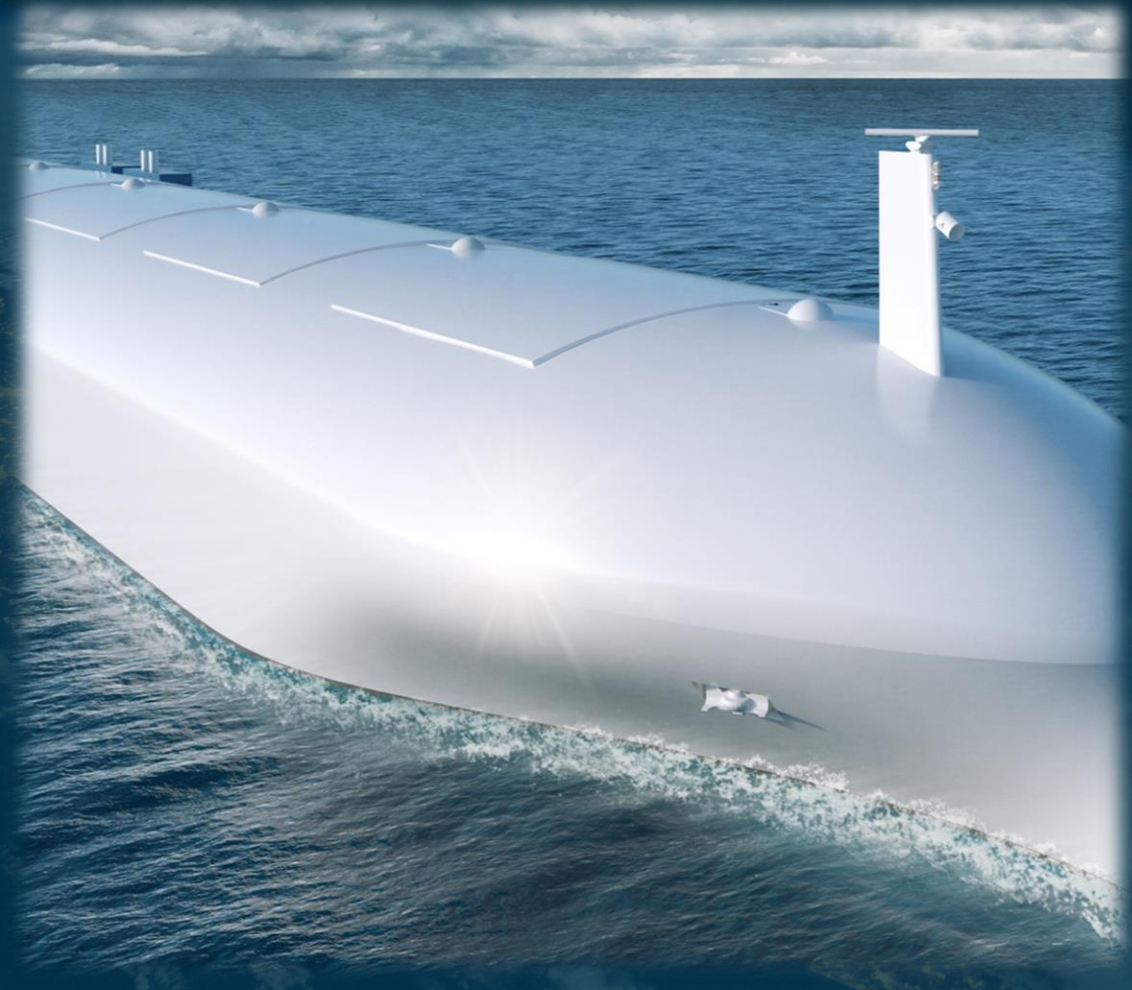
- Includes topics such as
 - just-in-time arrival services
 - green corridors
 - smart routing
 - speed reduction
 - alternative routes
 - Sea conditions monitoring and tracking (SatEO)
 - vessel performance monitoring & remote maintenance
 - ship/ fleet management using near real-time data (SatCom)
 - implementation and monitoring of carbon trading schemes in line with the Emission Trading System (ETS)

[Maritime Decarbonisation – Decarbonisation through Digitalisation and Logistics Optimisation \(esa.int\)](https://esa.int)



Call opening : 04 Jun until 05 Aug 2024

- Includes topics such as
 - initiatives aimed at reducing carbon emissions through increased autonomy
 - resilient and ubiquitous connectivity
 - precision positioning and timing services.



Call opening : 01 Aug until 01 Oct 2024

- Includes topics such as
 - Optimisation of Port Operations
 - Dock Electrification
 - Ports as a gateway to offshore energy
 - Green fuels storage, distribution, and usage.



Call opening : 01 Oct until 01 Dec 2024

Sub-Theme #4: Green Propulsion (well to wake)

- Includes topics related to
 - challenges and opportunities that the maritime industry will encounter in adopting alternative non-fossil fuels, including aspects like supply chain monitoring, provenance audit, and disposal.
- alternative propulsion systems such as Wind-Assisted Propulsion Systems (WAPS)
- after-treatment systems like Onboard Carbon Capture (OCC) systems.



Call opening : 01 Dec until 01 Feb 2025

(OPTIONAL) Use cases for **sub-theme #1** from Maritime Task Force Member

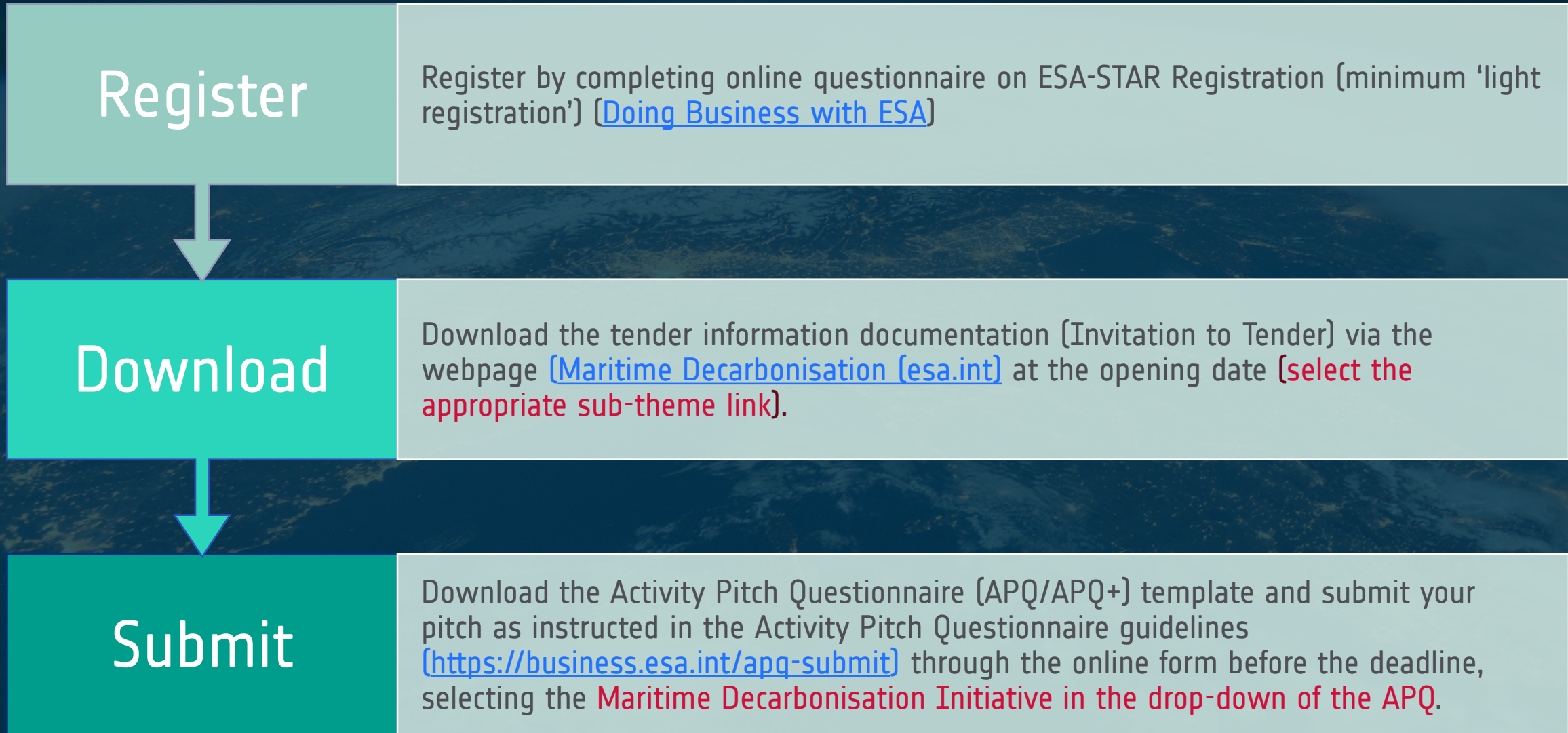


- If pitching an idea based on one of the use-cases ESA will share the pitch (if the bidder permits) with the stakeholder organisation, depending on their interest. **The Bidder shall not contact any of the stakeholders directly.**
- If pitching your own idea, it can be anything within the broad sub-theme (i.e. we list some ideas but you're open to propose your own).
- More use cases relating to each sub-theme will be published when those sub-themes open for applications.

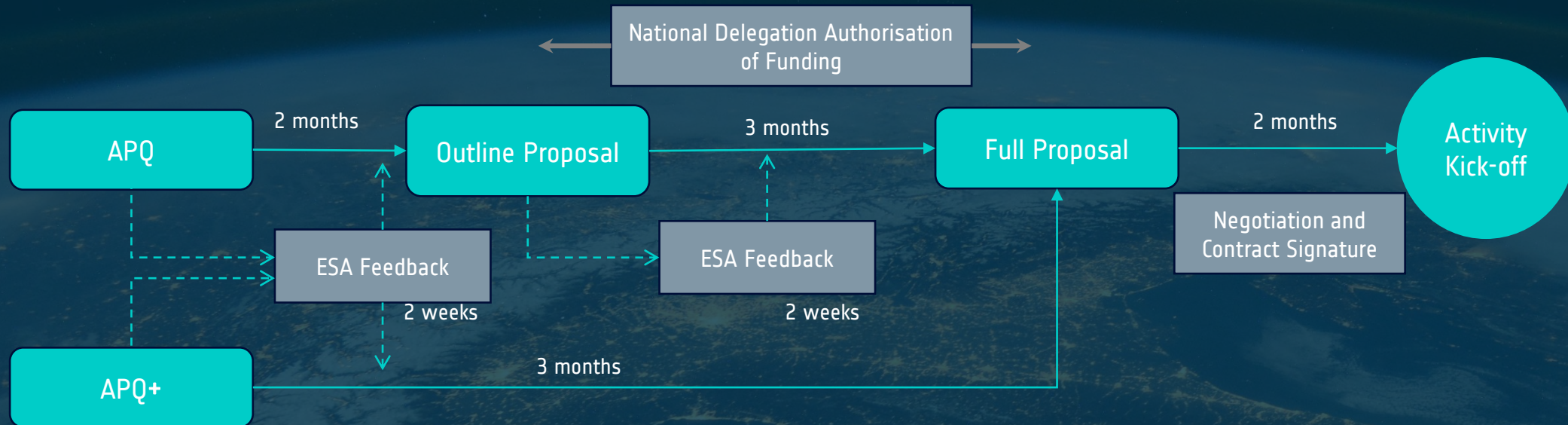


How to apply?

How to apply - process



How to apply – points to note




- Incremental procurement approach: APQ is the starting point – max. 8-page document with a standard template to present WHAT, WHY, HOW
- The APQ+ may substitute the outline proposal as an alternative entry point for **mature propositions only**
- Multiple Pitches with different ideas can be submitted
- Standard templates for proposals and deliverables before and during activity implementation
- Ambassador Platform available to guide companies in the process (<https://business.esa.int/ambassador-platforms>)

How to apply – Activity Pitch Questionnaire (APQ)



1. (WHO) Company Background Information
 2. (WHAT) do you want to offer your customers and what is the added-value?
 3. (WHY) Who are the target beneficiaries addressed by your offer, and what is the expected impact?
 4. (HOW) How do you intend to implement?
- (OPTIONAL) APQ+ Fast-Track Questions

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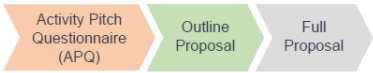


ACTIVITY PITCH QUESTIONNAIRE (APQ)

ESA-TIAA-PO-2017-1054 - V. 3.19

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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Important Note:

- For optimal viewing and accurate completion of the template, please download and install the latest version of [Acrobat Reader](#), which is available for free.
- Click on "i" for more information.

Section AP.1 Background information

i AP.1.1 Idea name:

Brand name: Full name:

i Thematic market area

Primary 1: Subcategories 1:

Primary 2: Subcategories 2:

Keywords 1: Keywords 2: Keywords 3:

i AP.1.2 Basic company information

Name: Website:

Address: Country: Phone:

Contact point name: Email:

i 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/yyyy

More details:

Max 155 characters (no spaces)

i 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)

i 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:

Roles in Activity:

Max 360 characters (no spaces)



How to apply – Authorisation from National Delegation

1. The **authorisation from National Delegation** will be required for submission of full proposals under direct negotiation (the third step in the application process) thus it is a good idea to initiate a dialogue with your National Delegation early on.
2. Please note that funding participation is open to groups, organisations and businesses which reside in ESA member states that have subscribed to any of the following programmes.
 1. **ARTES 4.0 BASS Generic Programme Line - Component A: Business Applications.** To date, Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Ireland, Italy, Lithuania, Luxembourg, the Netherlands, Norway, Poland, Portugal, Romania, Slovenia, Sweden, Switzerland and the United Kingdom have subscribed.
 2. **ARTES 4.0 5G Strategic Programme Line:** Austria, Belgium, Finland, Germany, Greece, Hungary, Ireland, Italy, Luxemburg, Netherlands, Norway, Portugal, Romania, Spain, Sweden, Switzerland, the United Kingdom and Canada have subscribed.
 3. **ARTES 4.0 4S Strategic Programme Line:** Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxemburg, The Netherlands, Norway, Poland, Portugal, Romania, Spain, Switzerland, the United Kingdom and Canada have subscribed.
3. Contact information of the National Delegations can be found at <https://business.esa.int/national-delegations>

Thank You

For more information,

Visit:

[ESA Space Solutions: https://spacesolutions.esa.int/Maritime-Decarbonisation \(esa.int\)](https://spacesolutions.esa.int/Maritime-Decarbonisation)

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