





→ KICK START ACTIVITY

BIODIVERSITY

https://business.esa.int/biodiversity

Biodiversity Webinars-27 & 30 August 2019

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WELCOME TO THE WEBINAR! Before we start...

- Due to the number of attendees, 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

Kick-Start Biodiversity



WEBINAR AGENDA

1. Introduction

- Fuel your business
- What FSA offers
- Funding opportunities

2. Space for Biodiversity

- Opportunity
- Background
- Topics of relevance
- Enablers from space

3. Kick-start Activity essentials

- Introduction to Kick-start Activity
- Thematic Calls
- Authorization from National Delegations
- How to apply
- The Proposal Template
- Study Tasks

4. Q&A

FUEL FOR YOUR BUSINESS

esa applications

Can you leverage space technology and data for the benefit of life on Earth?



ESA UNCLASSIFIED - For Official Use

Human Spaceflight

Technologies

WHAT ESA OFFERS



We'll work together to make your idea commercially viable, with:



FUNDING OPPORTUNITIES



Kick-Start (AO-xxxxx)

The AO number for the theme "Biodiversity" will be AO-10011

Customer Demand

Feasibility Study (A0-9305) Demonstration Project (A0-9305)

Operational Service

Customer Driven
Business Opportunity

Validated
Business Case for
Minimum Viable Service

Validated
Minimum Viable Service

OPPORTUNITY



6 months duration

up to €60K ESA funding (75% ESA co-funding)

Develop and assess business case for new commercially viable services

- Customer Engagement incl. needs and value proposition validation
- Technical Feasibility Assessment incl. service and system architecture, space data/technology integration
- Commercial Viability Assessment incl. business model and plan



BIODIVERSITY BACKGROUND

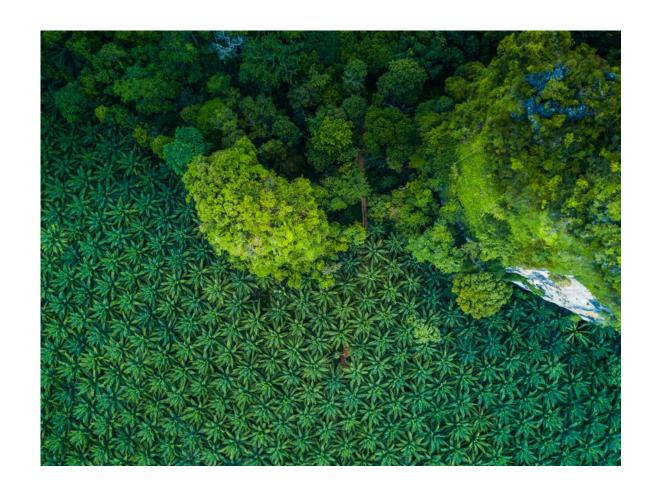


Biodiversity – Biological diversity is the variety of life found in any of, or across, Earth's ecosystems.

It is **fundamental to life on Earth** since it provides oxygen, food, clean water, fertile soil, medicines, shelter, protection from storms and floods, fibres for clothing, a stable climate and even recreation. It is estimated that the services provided by ecosystems are worth trillions of dollars, more than double the world's GDP!

Biodiversity loss in Europe alone costs the continent €450m a year or, 3% of its annual gross domestic product. However, the current state of biodiversity is ominous; overpopulation and overconsumption are driving a biodiversity crisis as people continue to expend resources in an unsustainable fashion.

Space assets and satellite technologies, combined with advanced and innovative ways to use them, can make a crucial difference in the future of the biodiversity on Earth.



TOPICS OF RELEVANCE



Agriculture: as the current largest contributor to biodiversity loss, large scale innovative solutions are crucial to help conserve, sustain and restore agricultural biodiversity.

Fisheries and Aquaculture: large scale 'modern' fishing methods are having devastating effects on ocean ecosystems, so tracking of aquiculture equipment and water quality worldwide is essential.

Biofuel: second generation biofuels, which could make all the difference for tomorrow's biodiversity and climate, need new technologies and methods to work efficiently and practically.

Transport Networks: the relentless global expansion of transport networks makes it increasingly important to prevent the breakup and destruction of natural habitats with innovations such as emissions monitoring, more efficient routing and wildlife corridors and crossing points.







THE POWER OF SPACE





Satellite Navigation

Global Positioning
Navigation
Velocity
Precision Timing
Activity Tracking
Route Optimisation
Personal Security



Satellite Communication

Reliable and Secure Communication Remote Connectivity Backup to Terrestrial Infrastructure



Earth Observation

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



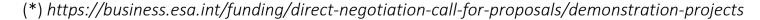
Spaceflight Technologies

Augmented Reality
Health Sensors
Procedures
Big Data Processing
Artificial Intelligence

INTRO TO THE KICK-START THEME



- "Kick-start Activities" is ESA's funding scheme enabling companies to undertake short Feasibility Studies (up to 6 months) that explore new service and application concepts making use of space capabilities.
- "Kick-start Activities" offer an instrument to assess the technical feasibility and commercial viability of an idea with limited initial investment by companies. As such, this scheme is considered particularly attractive for SMEs and Start-ups, granting them an easy entry into ESA Business Applications.
- ESA is committed to a rapid evaluation process, for allowing companies to keep the pace in the market.
- Successful Kick-start Activities can be further developed into commercially-viable businesses with follow-up support from ESA Business Applications in the form of Demonstration Projects (*)





THEMATIC CALLS FOR KICK-START ACTIVITIES



- The Thematic Calls for Kick-start Activities are open to any company or organisation in participating Member States (Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Norway, Poland, Portugal, Romania, Sweden, Switzerland and the United Kingdom).
 - ⇒ Restricted to organisations <u>not having received already 2 contracts within the last two years</u> under this Kick-Start scheme (but such organisations are free to apply directly to AO-9305)
- Kick-start activities aim at exploring the viability of new service/application concepts and consolidating the customer/user landscape including derivation of user requirements.
- Kick-start activities resulting from Thematic Calls are funded at 75% by the Agency for a maximum amount of 60,000 Euro per activity.
- The Thematic Calls for Kick-Start Activities follow a competitive tendering procedure. The evaluation criteria and associated weighting factors are published in the 'Letter of Invitation' of the Call for Proposals.

AUTHORIZATION FROM NATIONAL DELEGATIONS



The availability of funding for this specific Thematic Call against which you submit your Proposal is an admissibility criteria. Proposals not authorized at the closing date of the Thematic Call will not be admitted for evaluation.

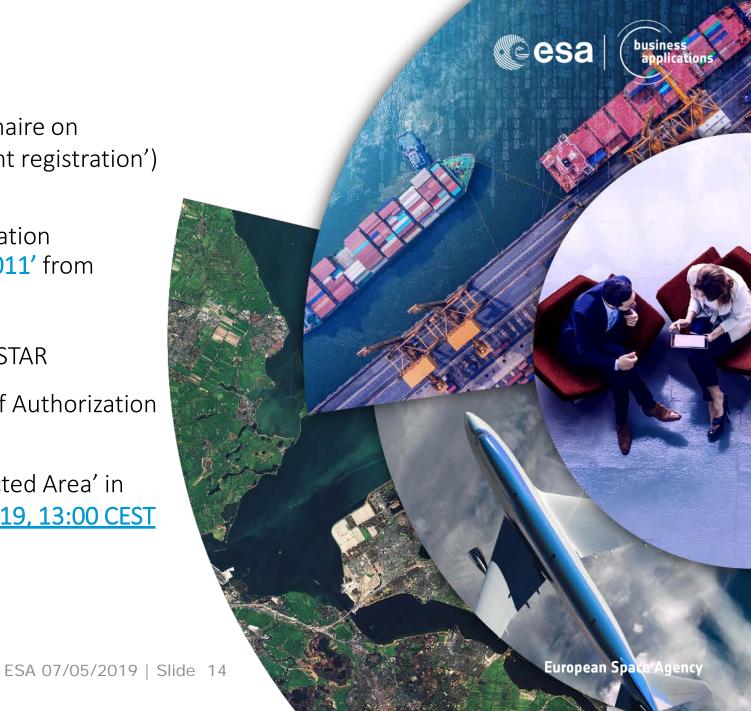
For each individual Thematic Call, information on the list of Member States that have already provided their financial support (pre-authorization) to this Thematic Call in provided in the cover letter of the tender documents.

In case your company/organisation resides in a country which has not pre-authorized this Thematic Call, you need to contact your National Delegation as soon as possible to potentially obtain such authorization. The contact information of the National Delegations can be found at https://business.esa.int/national-delegations.

For the Thematic Call on 'Biodiversity', **Germany, Luxembourg, Norway, UK** have pre-authorized the funding. **Switzerland** is not supporting any kick-start activity.

→ HOW TO APPLY 1/2

- Register by completing online questionnaire on ESA-STAR Registration on (minimum 'light registration') (<u>https://esastar-emr.sso.esa.int</u>)
- 2. Download the official tender documentation (Invitation to Tender) via EMITS 'AO-10011' from O2nd September 2019 onwards.
- 3. Create 'Bidder Restricted Area' in ESA-STAR
- 4. Write your proposal and obtain Letter of Authorization from **National Delegation**, as needed.
- 5. Submit your proposal via 'Bidder Restricted Area' in **ESA-STAR Tendering** by <u>25th October 2019</u>, <u>13:00 CEST</u> (Do not wait until the last minute!)



→ HOW TO APPLY 2/2

The Letter of Invitation to Call for Proposals is issued on EMITS (http://emits.sso.esa.int/emits/owa/emits.main) under 'AO-10011' and includes:

- Letter of Invitation
- **Appendix 1:** Activity Description "Biodiversity"
- **Appendix 2:** Draft Contract
- **Appendix 3:** Tendering Conditions for Express Procurement Procedure - EXPRO/TC
- **Appendix 4:** Proposal Template



→ THE PROPOSAL TEMPLATE

Your Proposal shall include the following information:

- A) Proposal Cover Letter (template)
- B) Detailed Proposal (template)
 - 1) Executive Summary (max 1 page)
 - 2) Business Potential (max 5 pages)
 - 3) Technical Concept (max 5 pages)
 - 4) Team and Resources (max 3 pages)
 - 5) Management (max 4 pages, pre-filled)
 - 6) Financials (max 2 pages)



→ STUDY TASKS



