

Space Solutions for Agriculture

ICT-AGRI-FOOD seminar 2024 Warsaw

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Business Applications & Space Solutions

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EUROPE'S GATEWAY TO SPACE

WHAT

22 Member States, 5500 + 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

€7.08 billion* = €11 per European per year

* 2023 budget



Business Applications & Space Solutions (BASS)



BASS aims at reaching **commercial exploitation of space assets, data and capabilities** addressing **technical feasibility and business development**. This includes the development of **operational services for a wide range of users** through the combination of different systems, and **support in creating viable companies as well as to existing companies**





Zero-Equity
Funding



Personalised
support from a
member of the
ESA Team

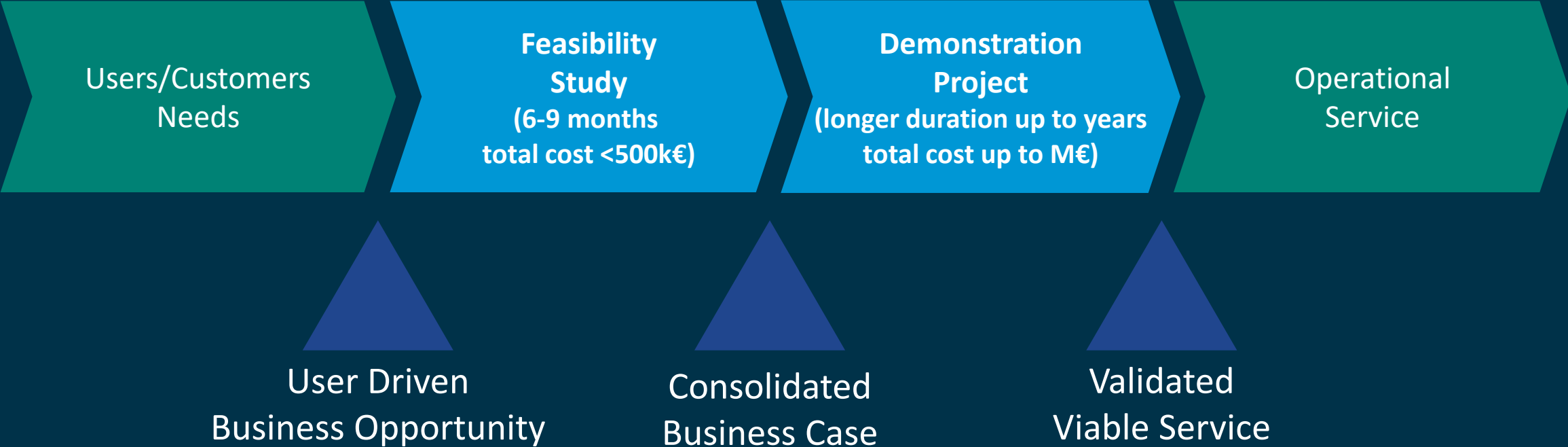


Access to our
Network and
Partners



Use of ESA
brand for
credibility

Feasibility Studies and Demonstration Projects



Partnership/Stakeholders



Engaging with industry stakeholders and public entities for delivering the green transition



ESA BASS ICT-AGRI-FOOD cooperation since 2017:

- Support for tenders preparation and dissemination
- Joint events and technical consultation

ICT-AGRI-FOOD has supported many BASS tenders:

- Organic Best Practices & Ecosystem Preservation (2018)
- Responsible Agritech (2020)
- Food Fraud (2020)
- Space Acting for Decarbonisation (2021)
- Connected Agriculture (2023)
- Sustainable transformation of agriculture through digitalization and space (2023)
- More to come ...



Kick-start *Connected Agriculture*

Investigate the technical feasibility and the economic viability of services which are based on the exploitation of digital technologies such as artificial intelligence (AI), robotics, blockchain, high performance computing (HPC), Internet of Things (IoT) and 5G, leveraged with space data and technologies, to increase farm efficiency, improve production, and enable new solutions such remote monitoring of livestock, remote maintenance of farming equipment

Topics of interest:

- Smart Livestock and Stable Monitoring
- Next Generation Farm Management Systems
- Precision Farming and Automation
- Farm Machinery Maintenance Management



CfP Sustainable transformation of agriculture through digitalization and space

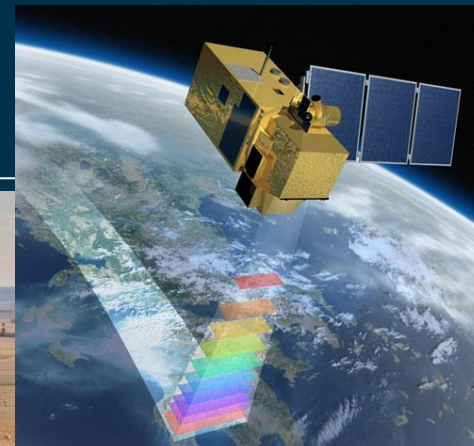
Support the development of innovative services for a sustainable transformation of the agri-food targeting different areas, e.g. services built on the results achieved in the German trial fields, data sharing and open platform for agriculture, machinery & automation

Digitale Experimentierfelder

Mit den digitalen Experimentierfeldern fördert das BMEL die Digitalisierung in der Landwirtschaft.



Aquafarm 2.0



Aquafarm 2.0 is a digital agriculture platform that provides reliable and up-to-date information for institutions and service providers.



Sentinel 2 optical data is the corner stone of the service, allowing for the monitoring of vegetation. The service can process other satellite EO data as needed.

Aquafarm delivers a range of products such as vegetation Indices, biomass health, crop classification and moisture content, over large areas



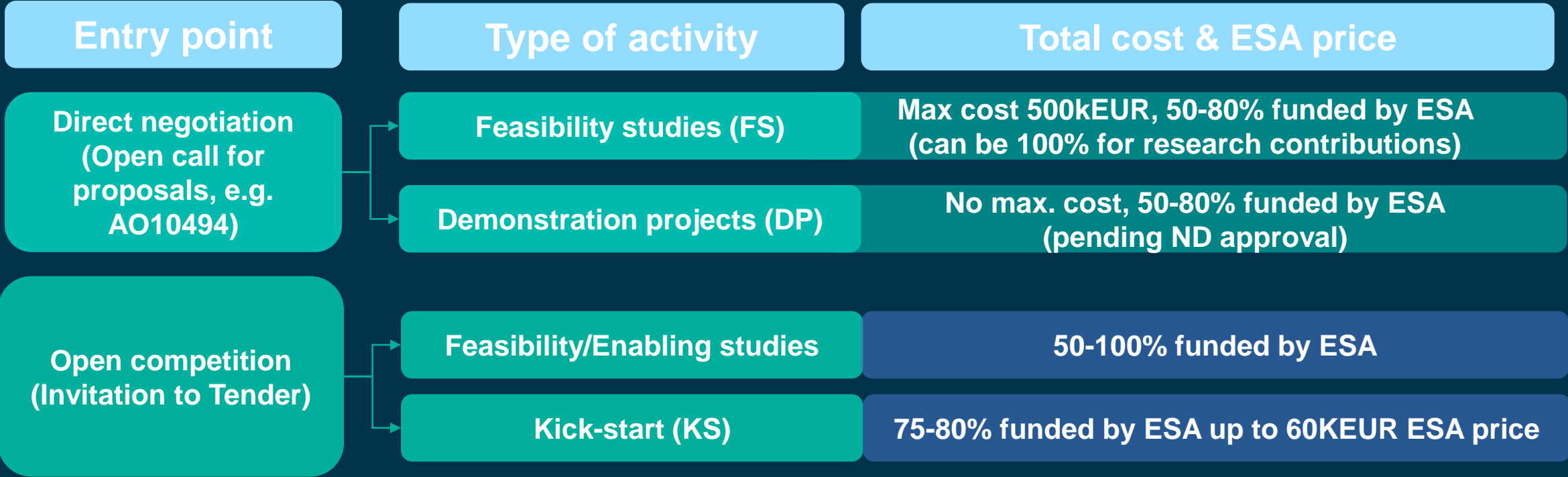
Kick Start Feasibility Study

Demonstration Project

First contract (IFAP)



Business Applications: activities and what we offer



IPRs remain with companies

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



Downstream Applications Open call for proposals



AO-1-10494: Permanently Open Call for Proposals. **You can apply at any time!**

Companies propose activities (Feasibility Studies or Demonstration Projects) on any subject.

Focus on applications/services:

- using space technologies/data (e.g. SatNav, SatEO, SatCom),
- customer/user-driven, with support from potential customers/users,
- sustainable business plan,
- Environmental and Societal Benefits.

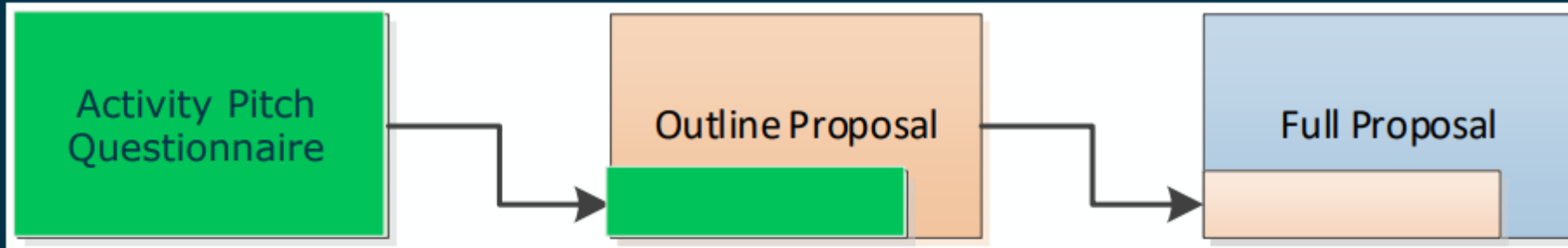
Streamlined Procurement approach, activities in Direct Negotiation.

<https://business.esa.int/funding/direct-negotiation-generic-programme-line>

<https://esastar-publication-ext.sso.esa.int/ESATenderActions/details/6900>



Staggered procurement approach (AO 10494)



- Team introduction
- What
- Why
- How

Objective: allowing ESA to quickly take informed decision. In case the APQ is approved, start interactions with submitter to discuss next steps

- Business Plan
- Team
- High level architecture
- Implementation approach
- Cost & Price

Objective: allowing ESA to have the basis for a formal judgement to move forward

- Programmatic & Admin information (CVs, WBS, WPDs, planning, cost forms, ...)

Objective: allowing ESA to undertake the formal evaluation, which, if successful, will lead to the contract signature

Guidelines for APQ preparation available [here](#)

<https://business.esa.int/documents>

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

The **collaboration with ICT-AGRI-FOOD** continues growing:

- New funding opportunities in preparation
- Stay tuned on <https://business.esa.int/funding>

ESA BASS is looking for more **partners**:

- Profile : large organizations/institutions with several members
- Topics : Agriculture, Fisheries and Forestry
- Please contact me during the seminar or email me : Olivier.Becu@ext.esa.int



ESA BASS can support your **business idea**:

- All sectors accepted, all ideas submitted are reviewed
- Submit your pitch (APQ) here : <https://business.esa.int/apq-submit>

Thanks for listening!

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