



→ KICK START ACTIVITY

Artificial intelligence

Consumer goods, business and industrial services

Webinar, 30th April 2019

Davide Coppola – Davide.coppola@esa.int

European Space Agency

→ 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

→ AGENDA

- Introduction
 - Fuel your business
 - What ESA offers
- Artificial intelligence kick start calls
 - Background
 - Opportunity
 - Topics of relevance
 - Enablers from space
- Kick-start Activity essentials
 - How to apply
 - Authorization from National Delegations
 - The Proposal Template
- Q&A



→ FUEL FOR YOUR BUSINESS

Could you be leveraging
Space technology and
data for the benefit of life
on Earth?



→ OUR OFFER

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



Zero-Equity
Funding
(€60k-€3M+)



Tailored Project
Management
Support



Access to
Our Network
& Partners



Use of the
ESA Brand for
Credibility



business
applications

→ FUNDING & SUPPORT OF SPACE-ENABLED SERVICES POWERED BY ARTIFICIAL INTELLIGENCE

Funding up to €60K per Activity

→ AI ESA KICK START CALL

- The European Space Agency is offering **technical support** and **funding** to companies developing innovative and **commercial products** and services combining **Artificial Intelligence with space technology**.



<https://business.esa.int/funding/invitation-to-tender/artificial-intelligence-kick-start>

INTRO TO KICK-STARTS

- “Kick-start Activities” are ESA’s **funding scheme** enabling companies to undertake short Feasibility Studies that explore new service and application concepts making use of space capabilities.
 - 6 months duration
 - up to €60K ESA funding (75% ESA co-funding)
- **Limited initial investment** by companies, 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**(*)

(*) <https://business.esa.int/funding/direct-negotiation-call-for-proposals/demonstration-projects>



INTRO TO KICK-STARTS

- Kick-start Calls 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).
- The Thematic Calls for Kick-Start Activities follow a competitive tendering procedure. The evaluation criteria and associated weighting factors are published in the cover letter of the Call for Proposals.
- If several proposals of sufficient quality are present, the Agency can place parallel contracts, subject to funding availability from the relevant Member States.



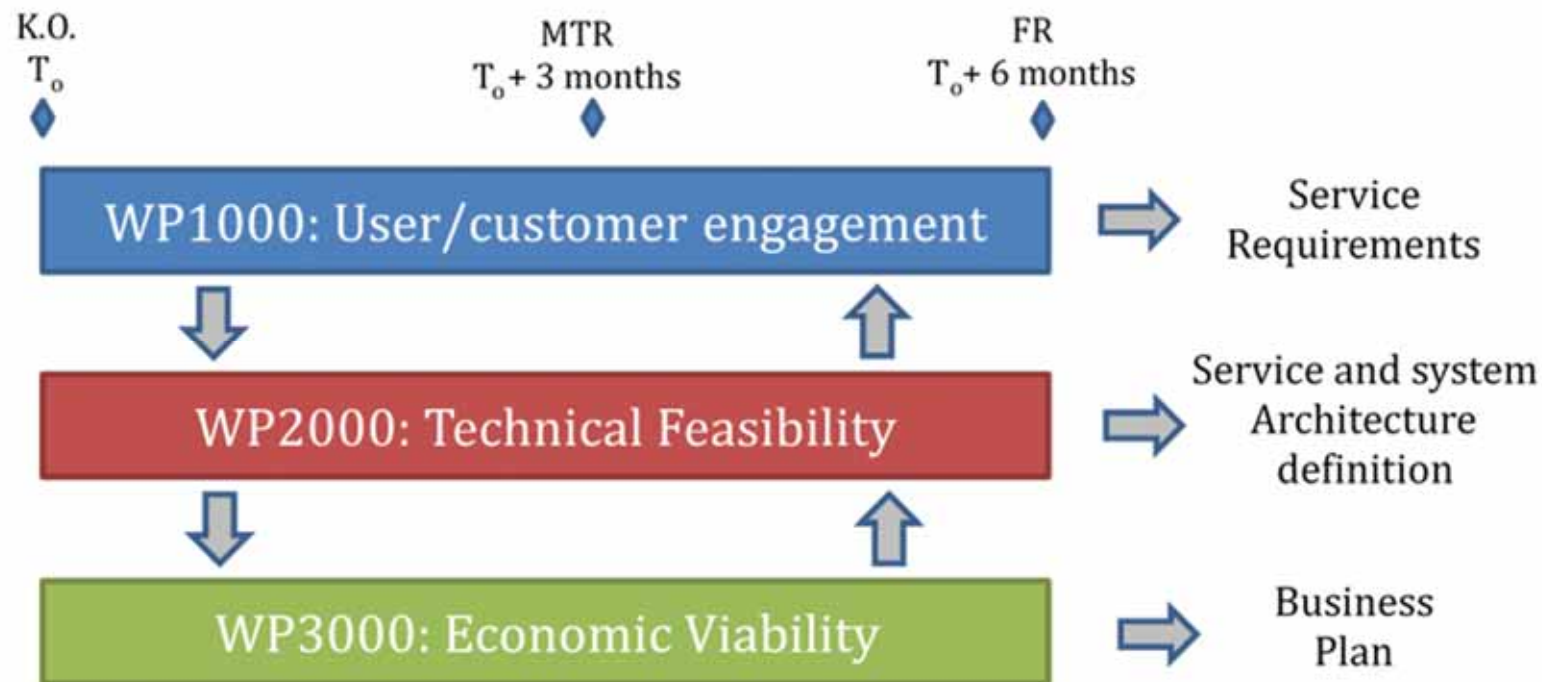
INTRO TO KICK-STARTS

Develop business case for commercially viable services

- **Customer Engagement**
- **Technical Feasibility Assessment**
- **Commercial Viability Assessment**



→ Study Tasks



→ AI KICK START: EXAMPLES OF AREAS OF INTEREST

Retail : customer behaviour, customer journeys and shopping experiences, etc.



Healthcare : Leveraging aggregated medical and social data to better manage costs, forecasting, etc.



Electric Utility: match energy supply to energy demand, energy renewable prediction, understand energy thefts, etc.



Manufacturing, Transport and Logistics: supply and demand planning, sales lead identification and price optimization, etc.



Social good: AI to make an impact on issues faced by societies.



→ AI KICK START: TIMING

The AI kick start is organised around specific macro-areas for which dedicated calls will be issued:

- **Consumer goods , business and industrial services**
(OPENING DATE 13th May 2019, CLOSING DATE 21st June)
- **Social Impact**
(OPENING DATE 25th June 2019, CLOSING DATE 30st August)
- **Infrastructure**
(OPENING DATE 2nd September 2019, CLOSING DATE 11th October)
- **Environment and natural resources**
(OPENING DATE 14th October 2019, CLOSING DATE 29th November)

→ THE POWER OF SPACE AND AI



Satellite Navigation

Positioning and guidance, goods tracing and tracking, geo-localisation for social media and internet data, etc. that can be used as inputs to AI-based models, for instance to infer customers' buying trends and provide short to medium term market projections, etc.



Earth Observation

Monitoring urban areas to detect traffic, distinguishing and counting vehicles near shops, mapping terrain features near power towers, meteorological data, contextual data e.g. the presence of human activities, or the distribution of households, etc.



Satellite Communication

To transfer data to and from remote locations where there is no terrestrial network, or where terrestrial networks are not yet operative.

Reliable communication infrastructure for different data speed, latency, and traffic needs. Satcom-supported Virtual Reality (VR) or Augmented Reality (AR) technologies .

Additional technology: **UAVs** can be used as a complementary solution for monitoring purposes complementing EO images and in-situ sensors.

→ HOW TO APPLY 1/2

1. Register by completing online questionnaire on [ESA-STAR Registration](https://esastar-emr.sso.esa.int) (minimum 'light registration') (<https://esastar-emr.sso.esa.int>)
2. Download the official tender documentation (Invitation to Tender) via EMITS
3. Create 'Bidder Restricted Area' in ESA-STAR
4. Write your proposal and obtain Letter of Authorization from [National Delegation](#), if needed.
5. Submit your proposal via 'Bidder Restricted Area' in [ESA-STAR Tendering](#) by the specific deadlines (Don't wait until the last minute!)

➤ **Consumer goods, business and industrial services**
(OPENING DATE 13th May 2019, CLOSING DATE 21st June)

➤ **Social Impact**
(OPENING DATE 25th June 2019, CLOSING DATE 30th August)

➤ **Infrastructure**
(OPENING DATE 2nd September 2019, CLOSING DATE 11th October)

➤ **Environment and natural resources**
(OPENING DATE 14th October 2019, CLOSING DATE 29th November)



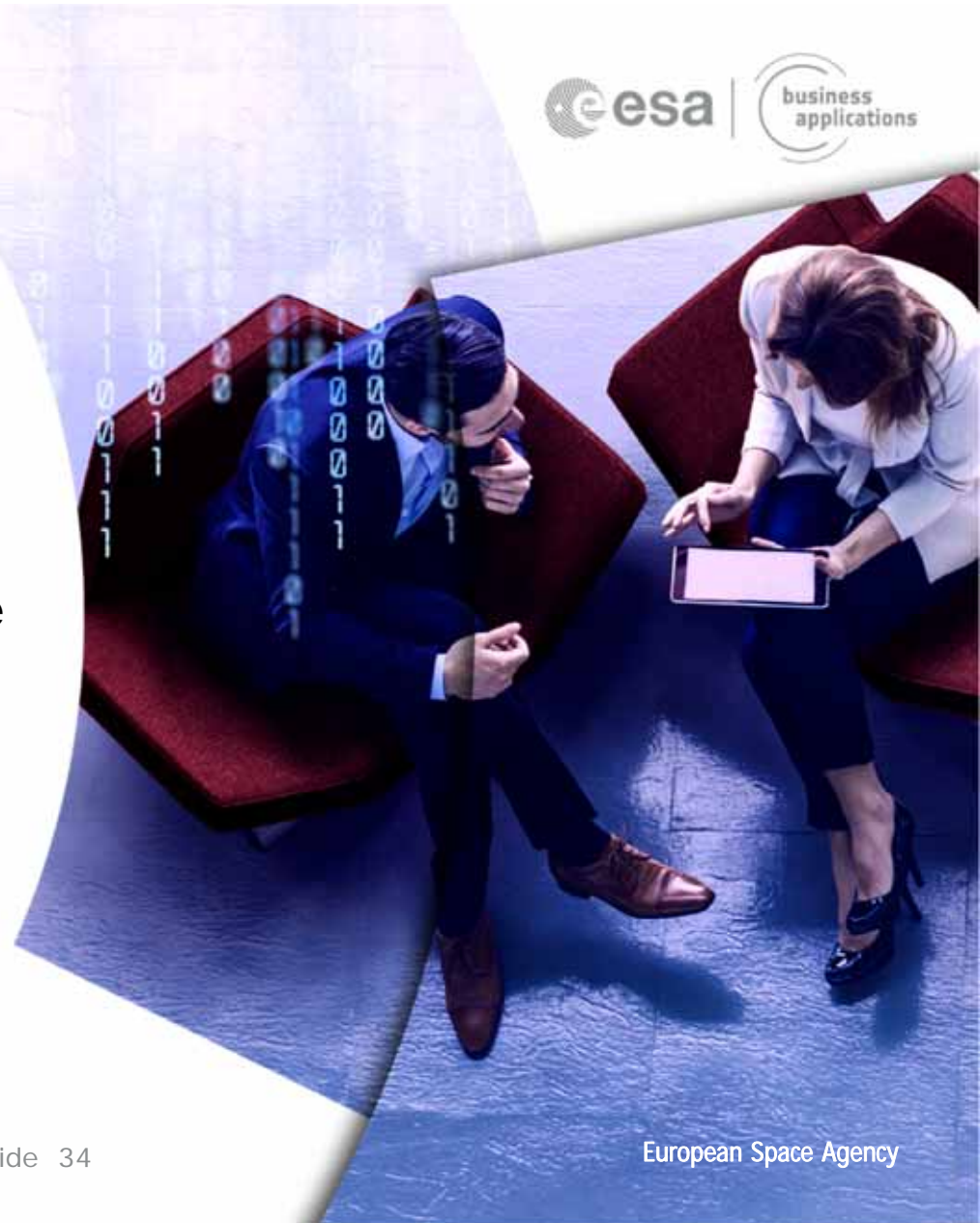
→ HOW TO APPLY 2/2

The Letter of Invitation to Call for Proposals will be issued on EMITS (<http://emits.sso.esa.int/emits/owa/emits.main>) and includes:

- Cover letter
- **Appendix 1:**
List of Thematic Calls for Ideas (including the calendar of the Thematic Call for Ideas and specific information on the themes)
- **Appendix 2:**
Draft Contract
- **Appendix 3:**
Tendering Conditions for Express Procurement Procedure - EXPRO/TC
- **Appendix 4:**
Proposal Template

ESA UNCLASSIFIED - For Official Use

ESA 30/04/2019 | Slide 34



AUTHORIZATION FROM NATIONAL DELEGATIONS



The [availability of funding](#) for the 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, dedicated clarifications will be posted in EMITS to provide information on the list of Member States that have already provided their financial support to the Thematic Call.

In case your company/organisation resides in a country which has not provided their financial support to the Thematic Call you are interested in, you need to [contact your National Delegation](#). The contact information of the National Delegations can be found at <https://business.esa.int/national-delegations>.

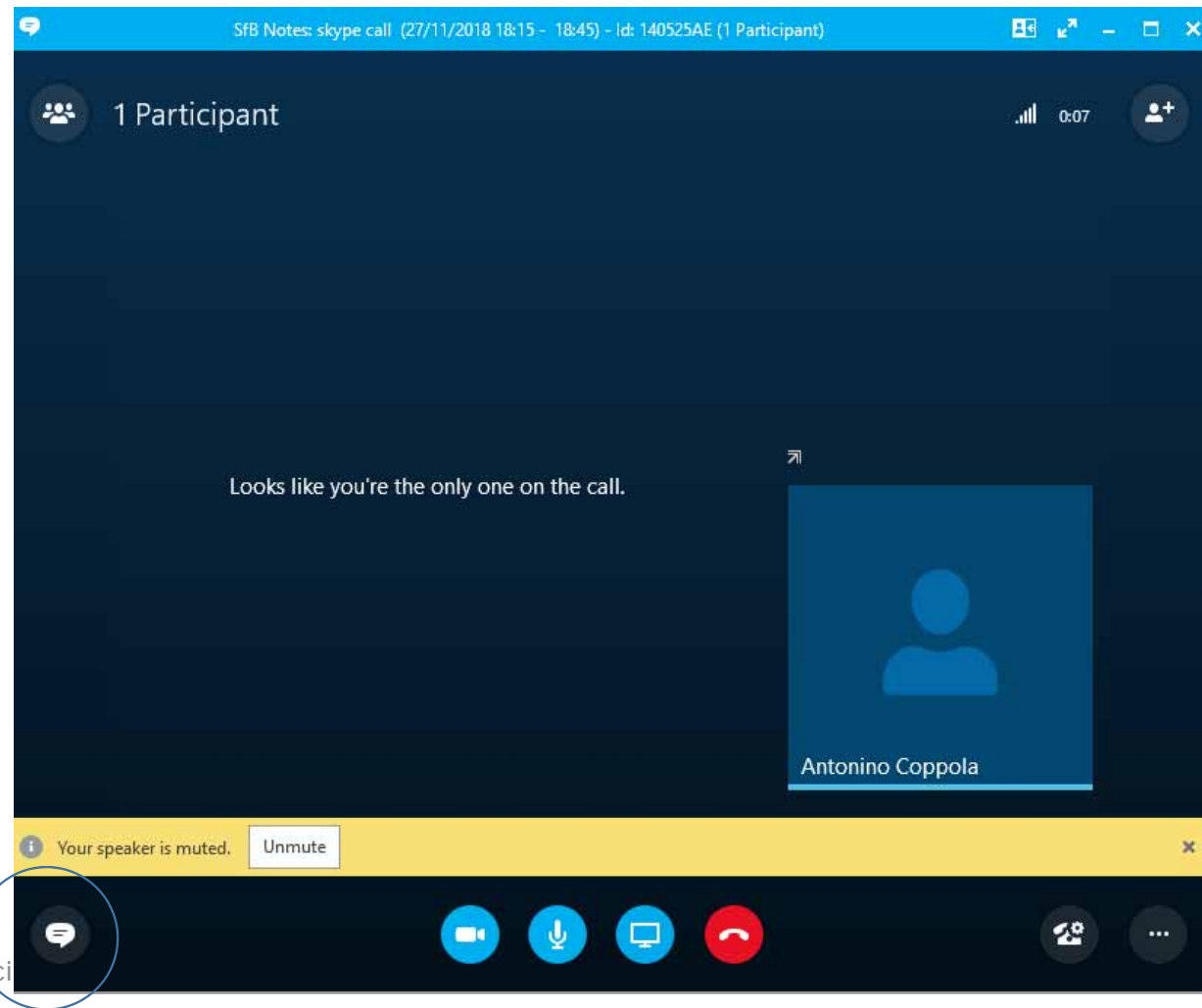
For the Thematic Call on 'AI', [Ireland, Norway, Germany and UK](#) have already pre-authorized the funding.

→ THE PROPOSAL TEMPLATE

Your Proposal shall include the following information:

- 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)
- 6) Financials (max 2 pages)

OPEN QUESTIONS & ANSWERS SESSION



→ Q&A



Next AI kick start webinars

- **12/06/2019 (11:00 CEST) Social Impact** (OPENING DATE 25th June 2019 - CLOSING DATE 30th August)
- **28/08/2019 (11:00 CEST) Infrastructure** (OPENING DATE 2nd September 2019 - CLOSING DATE 11th October)
- **01/10/2019 (11:00 CEST) Environment and natural resources** (OPENING DATE 14th October 2019 - CLOSING DATE 29th November)

→ YOUR BUSINESS POWERED BY SPACE

We have already invested



€200M in over



500 European Businesses

Your company could be next.



A large circular collage centered on the Earth, surrounded by various images of Earth's surface (oceans, land, forests) and industrial scenes (ports with shipping containers, solar panels, wind turbines). Overlaid on the collage are icons for a bar chart, lungs, and a person running.

→ THANK YOU!