

Space for Sustainable, Connected and Liveable Cities

Call for Proposals (Non-competitive)

Kavitha Muthu: <u>Kavitha.muthu@ext.esa.int</u> Beatrice Barresi: <u>Beatrice.barresi@esa.int</u> Business Applications - Space Solutions Directorate of Commercialisation, Industry and Competitiveness

ESA UNCLASSIFIED – For ESA Official Use Only

💳 💶 📕 💳 💳 📲 📕 🗮 💳 📕 🗮 💳 🗮 ன 🚱 🔤 🖛 🚱

Welcome to the webinar



Before we start...

- Please keep your microphones muted during the webinar and make sure your webcam is switched off.
- 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



ESA UNCLASSIFIED – For ESA Official Use Only





- ESA Welcome and Introduction
- About ESA Business Applications
- About Space for Smart and Green Cities Task Force
- About the Opportunity: Space for Sustainable,
 Connected and Liveable Cities
- How to Apply to the competition
- **Q&A** Session

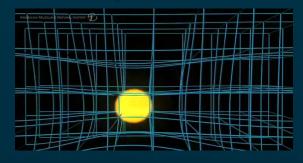




European Space Agency's Four Main Pillars



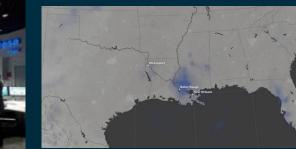
Science and Exploration



00:21

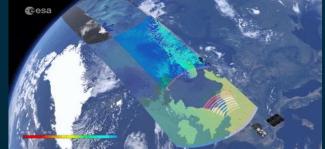
Enabling and Support







Applications





ESA UNCLASSIFIED – For ESA Official Use Only





Safety and Security

#SpaceDebris2017



→ THE EUROPEAN SPACE AGENCY

Business Applications: Space-enabled services





What's in it for us?



INDUSTRY COMPETITIVENESS

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

USE OF SPACE TECHNOLOGY

Expand the utilization of space in new markets and user communities

SOCIO-ECONOMIC IMPACT

Deliver social value and economic sustainability







ESA UNCLASSIFIED – For ESA Official Use Only

What can BASS offer to companies?



Our aim is to work together to make your idea commercially viable, with:

{}







Zero-Equity Funding (€50K-€2M+) Tailored ProjectAccess to ourManagementNetwork andSupportPartners

Use of ESA Brand for Credibility

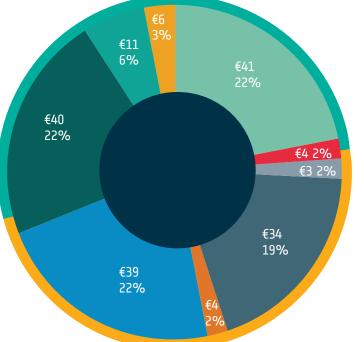
ESA UNCLASSIFIED - For ESA Official Use Only

🖮 🚍 📕 🔚 🚍 🔚 📲 📕 🗮 🧰 🚺 📕 🚍 🚼 🔤 🛶 👰 🚬 📲 👫 🛨 📰 🔤 🐷 🖓 🗠 The European Space Agency

Sustainable Services for Society



Environmental Benefits



183 M€ Investment in 300 BASS Green Activities since 2010





Sustainable Tourism

Sustainable Mobility

Green Finance

Societal Benefits



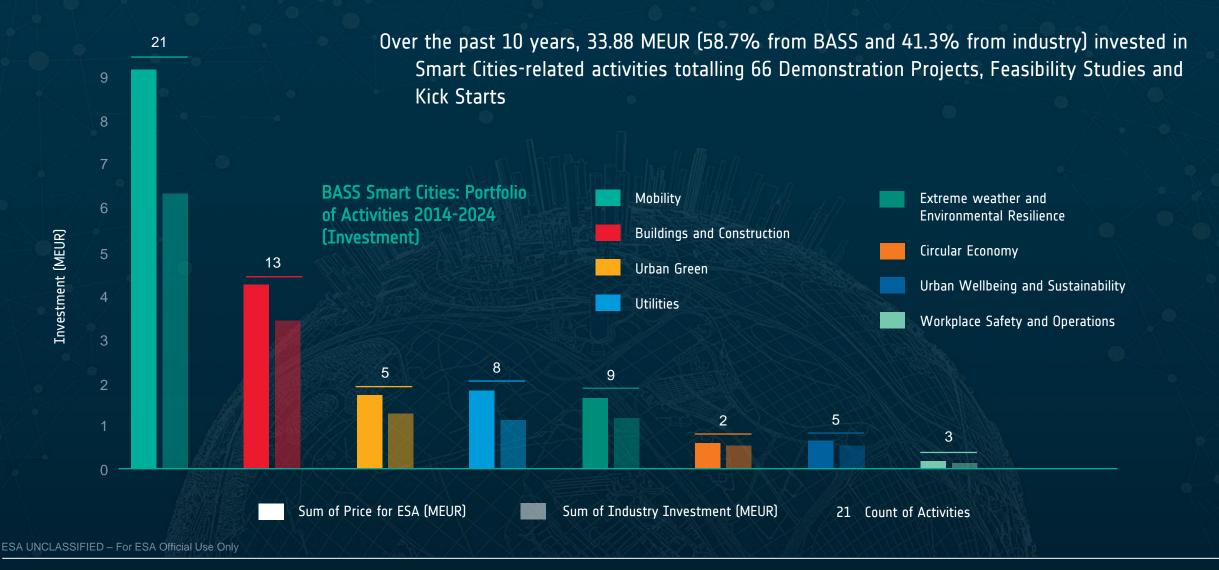
355 M€

total investment in over 300 demonstration projects

ESA UNCLASSIFIED – For ESA Official Use Only

Smart and Green Cities: Investment from BASS





👝 🚍 📕 🚝 🔤 🔚 🗮 🚍 📕 📕 📲 📲 📲 🚝 🚱 🔤 🖉

Smart and Green Cities: Impact for European Industry





Companies new to BASS SMEs

Smart Cities Sector

43% of SC projects have been implemented by companies that are new to BASS and nearly half (46%) were classified as SMEs. Companies new to BASS

SMEs

BASS Programme

In comparison, 39% of companies supported by the BASS Programme as a whole are newcomers, and 70% are classified as SMEs. The Smart and Green Cities initiative is attractive for both SMEs and corporates

and equally appealing to entities that want to explore business opportunities in the downstream sector for the first time.

Half of the projects have been able to sell during the pilot.

ESA UNCLASSIFIED – For ESA Official Use Only

Initiatives since 2019





Space for Smart and Green Cities Task Force





Priority Topics



The Task Force has identified four key priority topics:

Urban Development – prioritising environmental impact reduction and the green economy to create and maintain healthier, more sustainable places to live and work

> Wellbeing and Inclusiveness – creating positive impacts which are environmental, societal, and economic, improving the quality of life for all citizens.

Urban Development

Wellbeing and Inclusiveness



Energy



Sustainable Mobility – engaging technologies to reduce emissions in the transport sector and improve city infrastructure to support a green transition.

more urgent

Energy – focusing on a secure and sustainable supply of clean energy, as the risks of climate change and the need to reduce our carbon footprint grow ever

ESA UNCLASSIFIED – For ESA Official Use Only

THE POWER OF SPACE



Satellite Earth Observation (SatEO)



- Mapping of urban sprawl and spatial analysis
- Air pollution data with ground-based monitors to develop spatially resolved maps of air pollution.
- 'Digital Twin' generation for urban asset management and planning.
- Provision of mapping information, feature characterisation, boundary delineation, and change detection.
- Monitoring and managing natural resources

Satellite Navigation (SatNav)



- Supporting smart traffic management
- Real-time traffic updates and navigation assistance to help alleviate congestion.
- Location based services and navigation analytics to keep visitors safe and crowds flowing.
- Providing route optimisation for better flow of traffic and easier walkability.
- Enhancing navigation for emergency services ensuring faster response times, making streets safer.



Support seamless data transfer whenever the terrestrial communications are absent or not reliable;
provide with a faster connectivity to support smart city infrastructure

ESA UNCLASSIFIED - For ESA Official Use Only

💳 💳 📔 🚝 💳 🔚 🗮 💳 📕 🔚 💳 🕂 🔤 🔤 🚱 🔤 🖓

Space for Sustainable, Connected and Liveable Cities



Space for Sustainable, Connected and Liveable Cities



The Call for Proposals will be open for Feasibility Studies and Demonstration Projects.

Awarded Contracts:

- Are **co-funded up to 50%** by the European Space Agency, up to 80% in case of SMEs (pending authorization from National Delegation).
- Team needs to be based in one of the eligible countries: Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Ireland, Italy, Lithuania, Luxembourg, Norway, the Netherlands, Poland, Portugal, Romania, Slovenia, Sweden, Switzerland and United Kingdom.

Call opens on **31 March** and Closing date is **30 September 2025**

Please do not wait until the end of the closing period to apply! ESA will be reviewing proposals regularly throughout the opening period.

New Use Cases will be added. Check regularly the webpage of the Call

ESA UNCLASSIFIED – For ESA Official Use Only



💳 📰 📕 📰 💳 🕂 📲 🔚 📰 📰 👭 🖉 📰 📲 📰 🛶 🚳 🛌 📲 📰 🖬 🖬 📰 🖛 🌆 🗰 👘 🔸 The European space agency

Challenges and Use Cases



Sustainable Cities (Urban Sustainability)

- Requalification of abandoned industrial areas
- Local energy production
- Building Energy Consumption
- Circular economy

Connected Cities (Urban Infrastructure)

- City walkability
- Optimising traffic flow
- Improving street lighting management
- Affordable housing

Liveable Cities (Urban Environment)

- Climate change and emissions
- Urban park management
- Monitoring of Air Quality





Extreme Weather and Environmental Resilience





ESA UNCLASSIFIED – For ESA Official Use Only





Building Energy Consumption

Air Quality Monitoring

Smart Lighting

Production of Local Energy

Green Index Measurements

Water quality monitoring and flood risk management

💳 🔜 🖬 🔚 💳 🛶 🛯 🖉 🔚 🔄 🔚 📲 💳 🛻 🛐 🍉 🚺 👫 📲 🛨 🔤 📾 🐏 🍁 🔸 THE EUROPEAN SPACE AGENCY

BASS Funding Schemes



Entry point	Type of activity	Total cost of activity & funding		
Direct	Feasibility studies	Max 500k EUR, 50-80% funded by ESA (can be 100% for research institutions)		
Negotiation	Kick-Starts (KS)			
	Demonstration projects	No max cost, 50-80% funded by ESA (dependent on delegation decision)		
Invitation To Tender				
IPRs remain with companies https://business.esa.int/funding/open-call-for-proposals-feasibility-studies-and-demonstration-projects				

How to apply – process





- 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

ESA UNCLASSIFIED - For ESA Official Use Only

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

ESA UNCLASSIFIED - For ESA Official Use Only





ACTIVITY PITCH QUESTIONNAIRE (APQ) ESA-TIAA-PO-2017-1054 - V. 4.20

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 ers do ahead fargeting a Feasibility Study or a Demonstration Project

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



Prepare your pitch:

- · Make sure you use the LATEST VERSION of the APQ templat
- Explanations of terminology used here can be found in the document <u>Terminology used in ESA Business</u> Applications
- Some explanations on how to prepare the APQ are available in the presentation 'ESA Business Applications - Guidelines for APQ Pr



- Contact your <u>National Delegation</u>¹ as specific rules, including the level of co-funding, may vary 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 THREE MONTHS: in case of no draft of Outline Proposal is submitted within three months 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 For Greek entities, please note that Greece does not support non-competitive bids, therefore Greek proposals are not admissible under in this call.

Page 2

UNCLASSIFIED -	For Official Use Only		Important Note: • For optimal viewing and accurate completion of the template, please download and install the				
Section AP	AP.1 Background information			 Iatest version of <u>Acrobat Reader</u>, which is available for free. Click on "1" for more information. 			
1 AP.1.1	Idea name:						
Brand name:		Full na	ime:				
Themat	tic market area						
Primary 1:		- Subca	tegories 1:			•	
Primary 2:	Subcategories 2:						
Keywords 1:		Keywords 2: -	-	• Key	words 3:	•	
1 AP.1.2	Basic compan	y information					
Name:			Website:				
Address:			Country:		Phone:		
Contact poin	t name:		Email:				
More details:	ESA BIC(*):		(*) lf		date of BIC contract	t: mm/yyyy	
If Yes, indica	-	any previous activ evious activities and)				<u> </u>	
AP.1.5	Are you apply	ing with sub-cont	ractors?			•	
,	re the other entitie						
Name:		Website:		Industry:	Country:		
Name:		Website:		Industry:	Country:		
Name:		Website:		Industry:	Country:		
Roles in Activity:	Max 360 charact	ers (no spaces)					

→ THE EUROPEAN SPACE AGENCY

Authorisation from National Delegation



- 1. The authorisation form the National Delegation will be required for the submission of the Full Proposal (third step in the application process), thus it is a good idea to initiate a dialogue with your National Delegation early on.
- Please note that funding is open to consortiums, however all organisations and businesses must be located in an ESA member state participating in the programme BASS
- 3. To date, these countries include Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Ireland, Italy, Hungary, Luxembourg, Netherlands, Norway, Poland, Portugal, Romania, Sweden, Switzerland, United Kingdom, Lithuania, or Slovakia.
- 4. The contact information of the National Delegations can be found at <u>https://business.esa.int/national-delegations</u>

ESA UNCLASSIFIED - For ESA Official Use Only

Thank you for your attention: Q&A



→ THE EUROPEAN SPACE AGENCY



Home + Funding + Space For Sustainable, Connected and Liveable Otles



ESA-STAR REFERENCE	1-10494				
OPPORTUNETY	Call for Proposals (Non-Competitive)				
ACTIVITY	Feasibility Study, Demonstration Project				
OPENING DATE	31-03-2025				
CLOSING DATE	30-09-2025				
WEBINAR	02 July 2025 - 11:00 CEST	REGI			

Funding Opportunity

This call invites proposals for Feasibility Studies and Demonstration Projects for services that leverage space-based services and applications for the smart cities sector. Successful bidders may have the opportunity to work closely with Space for Smart and Green Cities Task Force members who are supporting this call in the development of the proposed service. Please refer to the 'authorisation of funding' section below to determine whether your team is eligible for this funding.

The Challenge

ESA UNCLASSIFIED - For ESA Officiar Use Of

Cities are facing numerous challenges that arise from rapid population growth, as well as the rapid effects of dimate change. Over 140 experts from 65 countries came loggifter in Riga, Latvia from 16 to 19 April 2024, to draft the outline of the Intergovernmental Parel on Climate Change (IPCC)'s Special Report on Climate Change and Cities. Several challenges and opportunities were identified for scoping this report. These included urban development, urban emissions, urban carbon cycle, air pollution, digital communication, transport, heat islands and urban overheating.

The challenges described are, to varying degrees, common to all cities. However, each city has its own unique set of questions and issues to address. This fragmented situation became evident during the several bilateral discussions that the European Space Agency (ESA) had with cities and towns participating in the Smart and Green Olies Task Force.



Opening Date:31st March 2025

Closing Date: 30th September 2025

Click here and visit Space for Sustainable, Connected and Liveable Cities