

## → FUNDING & SUPPORT OF SPACE ENABLED ROBOTIC SERVICES

Funding up to €64K per Activity

Deadline: 15<sup>th</sup> July 2020



## → ROBOTICS FOR SOCIETY

The European Space Agency offers technical support and funding to companies developing innovative and commercial space-enabled services for robotic applications. Recent advances in robotics and AI are revolutionising business, society and our personal lives. This Kick-Start activity aims to stimulate the development of robotic applications underpinned by space technologies in a wide variety of sectors such as extreme environments, agriculture, infrastructure monitoring, transport, social care and soft robotics.

## → KEY AREAS OF INTEREST INCLUDE

**Robotics for extreme environments:** Robotic technology plays an important role in building robust systems that can be exploited in extreme environments, such as a dangerous environments (e.g. radioactive, gaseous, structurally unsafe) or remote infrastructure facilities that can be hard to access. Robotics and autonomous systems, equipped with advanced instrumentation and analytics, can represent the future of resilience management.

**Robotics for agriculture:** Agricultural robots, underpinned by GNSS, SatEO and Satcom technologies, are poised to be at the centre of the third agricultural revolution; not by displacing farmers, but by increasing the farmer's added value while maximising yield and optimising the use of natural resources.

**Robotics for infrastructure monitoring:** Structural health monitoring (SHM) is an essential component in civil engineering for safety and integrity of civil structures such as buildings, bridges, power plants, off-shore structures and tunnels. State-of-the-art sensing, automation and robotic technologies can greatly facilitate construction automation of infrastructure systems.

**Robotics in the transport sector:** Robotics is expanding the transport and logistics industry. Amongst all the modes of transport robots, self-driving cars are those receiving most of the attention. Safety can be improved and journeys made faster thanks to robot-enabled services for road maintenance. Getting autonomous buses on the road is a significant step forward for the future of public transport.

**Robotics for social care:** Robots and autonomous systems, together with AI, connected data and digital infrastructure have the potential to revolutionise the way in which social and medical care is delivered, for the elderly and disabled people.

**Soft robotic:** There is a whole field of cognitive robotics that is concerned with giving robots intelligent behaviour. Any artificial intelligence is of much greater use when embodied, and only with proper body an agent can do complex tasks. Types of soft robots include robotics muscles as well as climbing, edible, wearable and prosthetic robots.

## → WHAT WE OFFER



Zero-Equity Funding  
up to €64K per Activity



Access to our  
Network & Partners



Technical & Commercial  
Guidance



Brand Credibility

## → WHAT WE LOOK FOR

- ✓ Motivated teams with business and domain expertise
- ✓ Attractive market opportunities and customer engagement
- ✓ Commercially viable service concepts
- ✓ Technically feasible solutions enabled by Space

### Apply Now!

For further information, go to: <https://business.esa.int/funding/invitation-to-tender/robotics-for-society>  
Official tender documentation available on ESA EMITS shortly (emits.esa.int)

Submission period: 3rd June 2020 - 15th July 2020 13:00 CEST

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