

→ FUNDING & SUPPORT OF SPACE ENABLED RESPONSIBLE AGRITECH

Funding up to €64K per Activity Deadline: Extended to 11 December 2020

business.esa.int

European Space Agency

→ RESPONSIBLE AGRITECH

The European Space Agency offers technical support and funding to companies developing innovative and commercial space-enabled responsible agricultural technology (agritech) applications. Food production is facing numerous challenges in the 21th century: growing demographics, environmental impacts and farmers well-being. This Kick-Start activity aims to stimulate the development of space enabled agritech applications to tackle in a responsible manner the agricultural challenges of 21st century. Three key objectives are defined, in line with the new EU Common Agricultural Policy: Sustainability, Fairness and Competitiveness. This call is supported by ICT-AGRI-FOOD project, a network of stakeholders (European Research Area Network - ERANET) from across the entire agri-food eco-system.

→ KEY AREAS OF INTEREST INCLUDE

Sustainability: the impact of agriculture on climate change and the loss of biodiversity is very high. Intensive farming practices have disastrous effects on the fertility of soils and fresh water. European consumers are increasingly concerned by the quality of their food and the occurrence of major health crisis'. New technologies can monitor and advice for new farming practices that will reduce carbon emissions, preserve biodiversity, preserve soils and water reserves. In particular, Satellite Earth Observation can measure the impact of sustainable practices. Satellite Navigation and precision farming can optimize the use of our precious resources.

Fairness: the living conditions of farmers are difficult, all over the world. European farmers earn, on average, less than half of other sectors. Small farmers live on minimal margins and often suffer negative impacts of market fluctuations. As a consequence, European rural areas are deserted by young workers, and at risk of further economic difficulties. The new EU Common Agricultural Policy (CAP) objectives are to re-balance this situation and space technologies should play a key role to support farmers. For example, satellite data integrated with other technologies can streamline the allocation of CAP greening subsidies and better support small farmers. The deployment of broadband Internet leveraging on Satellite Communications makes available valuable online services such as e-training, e-workshops and remote monitoring.

Competitiveness: major technical innovations have changed the agriculture sector in the last decades. Innovation in chemicals (e.g. fertilizers), vehicles and machinery have been very disruptive. However the benefits for farm workers and managers have been small. In addition, European farmers have now to face new and necessary environmental regulations (e.g. reduce nitrogen application), whereas their means and available technical solutions to do so are limited. These challenges can be addressed with new and affordable GNSS enabled automations for berries harvesting or weed removal, for example. The power of AI combined with Satellite Earth Observation can anticipate the emergence of crop diseases and advise on suitable remedies. Working towards greater machine interoperability and data standardization would also greatly benefit farmers.

→ WHAT WE OFFER



Zero-Equity Funding up to €64K per Activity

Technical & Commercial Guidance

→ WHAT WE LOOK FOR

- Motivated teams with business and domain expertise
- Attractive market opportunities and customer

engagement

Access to our Network & Partners

Brand Credibility

- 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/responsible-agritech Official tender documentation available on ESA EMITS (emits.esa.int) <u>AO10535</u>

Submission period: 12th October 2020 — *Extended* to 11 December 2020 13:00 CEST This document is provided for information only. Solely the tender documentation published on ESA EMITS is applicable. Front Image @ By HQuality