A consortium developing an AI-based airborne monitoring platform seeks a partner for exploitation strategy and business model development under the EIC Transition call.

Summary

Profile type	Company's country	POD reference
Research & Development Request	**Greece**	**RDRGR20250627005**
Profile status	**Type of partnership**	**Targeted countries**
PUBLISHED	**Research and development cooperation agreement**	**• World**
Contact Person	**Term of validity**	**Last update**
Enrico FRANZIN	**27 Jun 2025** **27 Jun 2026**	**27 Jun 2025**

General Information

Short summary

A European consortium is preparing a proposal under the EIC Transition call to advance the market readiness of an AI-powered airborne monitoring platform. A company is sought with expertise in exploitation strategy, business model development, and stakeholder engagement, particularly in the food, healthcare, and industrial monitoring sectors. The minimum requirement for the partner is to engage at least two relevant stakeholders from the food industry sector.

Full description

The consortium is developing an advanced AI-powered hardware-agnostic software platform designed for real-time detection of airborne biological threats. It integrates multiple forms of quantitative phase imaging microscopy image databases, along with computer-simulated image databases, to feed high-quality inputs into its machine learning algorithms.

In practical deployment, the platform captures airborne particulates through optical microscopy and analyzes these using AI-driven classification models. It has demonstrated detection and monitoring accuracy between 80–95 %, depending on how the system is configured and the type of imaging method used. The system's design supports real-world conditions, including algorithm optimization based on seasonal and geographic background noise, and has

been validated on both laboratory-prepared mixes (e.g., Bacillus simulants) and environmental samples. The platform is currently undergoing further development to enable training on water samples, thereby extending its capabilities toward integrated fluid sample analysis.

Modular and scalable in design, it can be configured for a wide range of commercial and dual-use applications across critical environments such as food processing, storage, environmental safety, chemical, biological, radiological, and nuclear (CBRN) contexts, as well as public health.

One of the goals of the EIC Transition proposal is to identify the most viable use cases, validate them through industry collaboration, and define clear exploitation pathways. A key focus area is the food industry, where improved air quality monitoring can significantly reduce spoilage and improve safety.

Thus, the consortium is looking for a company that will contribute to market validation and the co-development of commercialization strategies based on both direct customer acquisition and service-oriented business models. The partner must also involve at least two relevant food sector stakeholders (e.g., processing plants, storage facilities, or supply chain operators) to support the practical validation of use cases. Their engagement will inform regulatory, technical, and operational aspects of the commercialization plan.

Advantages and innovations

The platform combines advanced optical imaging with AI to deliver real-time detection of airborne biological particles, achieving up to 95% accuracy. It operates autonomously without consumables or lab processing, enabling continuous monitoring in environments such as food production, public health, and civil protection.

Its modular design supports both commercial and dual-use applications, offering flexibility and cost-efficiency. The system adapts to environmental variables, making it a reliable and scalable solution for early warning and quality control in critical sectors.

Technical specification or expertise sought

The consortium is seeking a company with proven experience in commercialization strategy, market validation, and business model design—preferably within deep-tech domains such as food technology, healthcare innovation, environmental safety, or industrial monitoring. Knowledge of regulatory and go-to-market requirements for sensor-based systems is considered essential.

The partner will contribute to several core activities essential to the project's success. This includes evaluating the market potential across selected use cases, with a particular emphasis on applications within the food industry. They will be responsible for developing and refining sustainable business models that align with different deployment strategies. In addition, the partner will support the definition of a modular product roadmap that addresses the needs of both commercial and dual-use markets, ensuring long-term coherence and scalability. As part of the validation process, the partner will also be expected to engage at least two stakeholders from the food industry to confirm market fit, define technical requirements, and provide insight into relevant regulatory considerations.

Stage of development

Available for demonstration

Sustainable Development goals

- **Goal 12: Responsible Consumption and Production**
- **Goal 13: Climate Action**
- **Goal 17: Partnerships to achieve the Goal**
- **Goal 6: Clean Water and Sanitation**
- **Goal 14: Life Below Water**
- **Goal 3: Good Health and Well-being**

IPR Status

Secret know-how

IPR Notes

Partner Sought

Expected role of the partner

The selected company will provide strategic input across business planning activities, including market research, competitor landscape analysis, exploitation strategy, and regulatory considerations. They will also contribute to customer and stakeholder engagement, playing a key role in defining commercially viable scenarios and supporting the overall transition from prototype to market-ready solution.

Type of partnership

Research and development cooperation agreement

Type and size of the partner

- **SME 11-49**
- **SME <=10**
- **SME 50 - 249**
- **Big company**

Call Details

Framework program

Horizon Europe

Call title and identifier

European Innovation Council (EIC) Transition

Submission and evaluation scheme

Anticipated project budget

Coordinator required

No

Deadline for EoI

25 Jul 2025

Deadline of the call

17 Sep 2025

Project duration in weeks

Web link to the call

https://eic.ec.europa.eu/eic-funding-opportunities/eic-transition_en

Project title and acronym

Dissemination

Technology keywords

- **01003023 - Environmental and Biometrics Sensors, Actuators**
- **01003010 - Databases, Database Management, Data Mining**
- **08002002 - Food Microbiology / Toxicology / Quality Control**
- **01003012 - Imaging, Image Processing, Pattern Recognition**
- **01003003 - Artificial Intelligence (AI)**

Market keywords

- **04017 - Micro- and Nanotechnology related to Biological sciences**
- **05009001 - Food & feed ingredients**
- **08002002 - Industrial measurement and sensing equipment**
- **08004001 - Air filters and air purification and monitoring equipment**
- **02007016 - Artificial intelligence related software**

Targeted countries

- **World**

Sector groups involved