

# Consortium with Swiss and South Korean partners seek a leading engineering company specialising in air samplers for Eurostars project

## Summary

| Profile type                   | Company's country                              | POD reference      |
|--------------------------------|--|--------------------|
| Research & Development Request | Switzerland                                    | RDRCH20250528012   |
| Profile status                 | Type of partnership                            | Targeted countries |
| PUBLISHED                      | Research and development cooperation agreement | • World            |
| Contact Person                 | Term of validity                               | Last update        |
| Enrico FRANZIN                 | 28 May 2025                                    | 28 May 2025        |
|                                | 28 May 2026                                    |                    |

# General Information

### Short summary

The Eurostars project, led by partners from Switzerland and South Korea, aims to develop an integrated monitoring device that combines air sampling with PCR (Polymerase Chain Reaction) diagnostics to detect airborne viruses on farms. The device will enable non-experts to detect three target viruses in the air simultaneously, providing farmers, veterinarians and animal health services with a practical, non-invasive solution for virus monitoring.

### Full description

The innovation provides a platform that couples air sampling with PCR (Polymerase Chain Reaction) diagnostics to detect airborne infectious agents, thereby improving our ability to monitor and combat costly infectious diseases. The device can be operated by non-specialists and offers a safe, automated solution. Our aim is to produce the device, which consists of a sampler developed by the Swiss team and a detector developed by the Korean team.

One of the major challenges in monitoring airborne viruses is their low concentration in the air, which requires efficient air sampling and highly sensitive analytical methods. In collaboration with Korean partners specialising in analysis, the consortium aims to develop a powerful virus monitoring device.

The consortium gathers 2 Swiss R&D institutions, 1 R&D institution and 1 high-tech company from South Korea. The







Swiss R&D institutions will focus on developing and validating the aerosol sampler. Meanwhile, the Korean partners will develop and validate an automated platform for analysing viral particles captured by the sampler using molecular techniques.

An engineering company specialised in the development and design of air samplers is sought to complete the consortium

The application is planned to be submitted for the Eurostars funding call deadline in September 2025.

#### Advantages and innovations

This innovative technology enables the rapid on-site monitoring of air environments, providing a swift means of controlling the spread of infectious viruses. It also facilitates regular viral surveillance, helping to identify, prevent and minimise the risk of disease through various management strategies.

The device can be operated by non-specialists and does not require further laboratory analysis under strict biosafety protocols, providing an effective detection method that can be incorporated into sustainable biosecurity programmes in various sectors.

Technical specification or expertise sought

Stage of development

Sustainable Development goals

# Under development

**IPR Status** 

Goal 3: Good Health and Well-being

**IPR Notes** 

# Partner Sought

#### Expected role of the partner

The consortium is looking for a leading engineering company specialising in the development of air samplers. The company expects to collaborate with the Swiss team to design and fabricate the prototype sampler.

The consortium also expects the company to have the capacity to produce the sampler in large quantities, thereby ensuring the timely market entry of the new device.









Type of partnership

Research and development cooperation agreement

Type and size of the partner

- SME 50 249
- SME 11-49
- SME <=10

## Call Details

Framework program

### Eureka

Call title and identifier

### Eurostars call for projects SEP 2024

Submission and evaluation scheme

Anticipated project budget

Deadline for Eol

1 Sep 2025

Project duration in weeks

Coordinator required

Deadline of the call

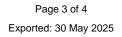
12 Sep 2025

Web link to the call

Project title and acronym

## Dissemination

Profile RDRCH20250528012











Technology keywords

- 10002007 Environmental Engineering / Technology
- 10002008 Measurement and Detection of Pollution
- 10002001 Indoor Air Pollution/Treatment
- 06001005 Diagnostics, Diagnosis
- 06002002 Cellular and Molecular Biology

Targeted countries

• World

Market keywords

- 05001005 Molecular diagnosis
- 05001001 Diagnostic services
- 09003001 Engineering services
- 08004001 Air filters and air purification and monitoring equipment

Sector groups involved



