Eureka / Eurostars or IraSME. Research and clinical partners sought for federated artificial intelligence in medical imaging and sovereign image compression technologies

Summary

Profile type	Company's country	POD reference
Research & Development Request	**Türkiye**	**RDRTR20260707017**
Profile status	**Type of partnership**	**Targeted countries**
PUBLISHED	**Research and development cooperation agreement**	**• All countries**
Contact Person	**Term of validity**	**Last update**
Enrico FRANZIN	**8 Jul 2026** **8 Jul 2027**	**9 Jul 2026**

General Information

Short summary

A Turkish SME active in teleradiology, medical imaging and clinical artificial intelligence seeks research, clinical and technology partners for the Eureka / Eurostars or IraSME. The R&D project will develop federated privacy-preserving artificial intelligence for medical-image screening and a sovereign medical-image compression codec. Partners are sought for collaborative research, validation and clinical pilot activities.

Full description

The client is a Turkish deep-tech small and medium-sized enterprise (SME) specialised in teleradiology and medical-imaging software. The purpose of the proposed project is applied research and development (R&D) to create three novel technologies that do not yet exist on the market and are currently at concept / early-prototype stage.

Innovation 1 — voice/audio analysis for radiology reporting: an automatic transcription and intelligent-reporting engine that converts a radiologist's dictated speech into a structured report. The research aims to adapt speech-to-text to medical and radiological terminology (with strong Turkish-language performance), map spoken findings to structured report templates, correctly capture measurements and values (e.g. Hounsfield units, millimetres), and support a human-in-the-loop review and correction loop. It is currently at early-prototype stage.

Innovation 2 — a federated, privacy-preserving artificial-intelligence method for medicalimage reading. The research aims to develop models that learn the normal appearance of studies per examination type with very high sensitivity, so that normal studies can be safely de-prioritised and scarce radiologist time is focused on suspect cases. Training would be distributed across institutions (cross-silo federated learning): each hospital's data remains a local silo and only model parameters are exchanged, so no images or patient records ever leave the institution (aligned with the General Data Protection Regulation, GDPR, and the European Health Data Space, EHDS).

Innovation 3 — a native medical-image compression codec written in a single modern programming language, without dependence on legacy third-party libraries, to improve cost, performance and cross-platform (edge) deployment. No production-ready native equivalent currently exists on the market; this involves genuine technical uncertainty and research. Foundation for the research (not the object of funding): the client already operates a teleradiology platform deployed across a network of more than 70 hospitals. This deployment is the real-world validation environment for the new technologies and provides the potential to build an extensive, weakly-labelled clinical dataset (radiology reports linked to imaging studies and examination codes) for training and validation. The funded work is the development of the new technologies above, not the existing platform. The client seeks consortium partners for European collaborative R&D programmes Eureka eurostars, Ira SME. Cooperation is envisaged as a research and development cooperation agreement within a multi-partner consortium.

Advantages and innovations

Medical voice-to-report analysis adapted to radiological terminology with strong Turkish-language support, aiming to Federated, privacy-preserving method that models “normal” rather than hunting pathology, aiming to enable high-sensitivity triage while keeping patient data inside each institution.

Potential to train on a large, weakly-labelled dataset distributed across hospital silos, which could reduce the most expensive step in medical AI — expert data labelling —without moving data

Native, dependency-free image-compression codec with no production-ready equivalent currently on the market, offering cost, performance and edge-deployment advantages.

Real-world validation environment: an operational platform across more than 70 hospitals substantially reduces the technical and integration risk of collaborative pilots.

Standards-based (DICOM, HL7/FHIR) and vendor-neutral; deployable in the cloud, on-premises or at the edge, supporting equitable access including for smaller sites

Technical specification or expertise sought

Stage of development

Under development

Sustainable Development goals

• Goal 3: Good Health and Well-being

IPR Status

No IPR applied

IPR Notes

Partner Sought

Expected role of the partner

The client contributes the federated-AI research, the native-codec R&D, the deployment and interoperability infrastructure, and access to real-world clinical validation sites. It seeks partners to cover the following complementary roles and work packages:
— Work Package: Management & Coordination.
Coordinator (university, research organisation or experienced company): lead proposal preparation, consortium and project management, and reporting
— Work Package: Clinical Pilots & Validation.

Clinical / screening centres (hospitals, radiology departments, organised screening programmes) in EU or associated countries: host prospective pilots as federated nodes (data kept on site), and provide clinical expertise, ground-truth and radiologist feedback
— Work Package: AI Integration & Multi-pathology extension.
Complementary imaging-AI developers (e.g. breast or other cancers, cardiovascular imaging): contribute validated screening algorithms to be deployed and evaluated on the client's platform
— Work Package: Evaluation, HTA & Regulatory.
Clinical-validation / health-technology-assessment (HTA) and regulatory experts: design and run performance evaluation and clinical/health-economic assessment, and support MDR/CE and EU AI Act readiness
— Work Package: Independent Testing.
(Optional) independent testing / validation organisation or testbed: independent verification of AI performance and safety

Cooperation type: research and development cooperation agreement within a multi-partner European consortium. For Eurostars, at least two partners from another eligible country is required;

Type of partnership

Research and development cooperation agreement

Type and size of the partner

- **R&D Institution**
- **SME 50 - 249**
- **SME <=10**
- **SME 11-49**
- **Big company**
- **University**

Call Details

Framework program

Eureka

Call title and identifier

Eurostars Call 11 for projects

Submission and evaluation scheme

Anticipated project budget

Coordinator required

Yes

Deadline for EoI

1 Sep 2026

Deadline of the call

10 Sep 2026

Project duration in weeks

104

Web link to the call

https://www.eurekanetwork.org/programmes-and-calls/eurostars/eurostars-call-for-projects-september-2026/

Project title and acronym

Dissemination

Technology keywords

- **01003009 - Data Protection, Storage, Cryptography, Security**
- **01004001 - Applications for Health**
- **01003012 - Imaging, Image Processing, Pattern Recognition**
- **06005003 - Health information management**
- **01003003 - Artificial Intelligence (AI)**

Market keywords

- **05002005 - Other medical imaging**
- **02006004 - Data processing, analysis and input services**
- **02007016 - Artificial intelligence related software**
- **02007012 - Medical/health software**
- **05001001 - Diagnostic services**

Targeted countries

- **All countries**

Sector groups involved

- **Health**