A Turkish Company is looking for project partners about the AI-powered autonomous optimization systems related to their current Eurostars 3 program application.

Summary

Profile type	Company's country	POD reference
Research & Development Request	**Türkiye**	**RDRTR20251002009**

Profile status	Type of partnership	Targeted countries
PUBLISHED	**Research and development cooperation agreement**	**• World**

Contact Person	Term of validity	Last update
Enrico FRANZIN	**2 Oct 2025** **2 Oct 2026**	**3 Oct 2025**

General Information

Short summary

The company is developing a fully autonomous AI-driven optimization assistant that learns device usage patterns and environmental factors to make predictive decisions. The solution optimizes RAM, CPU, storage, and energy consumption, operating both online and offline, with a central management panel for enterprises. A freemium model ensures accessibility, while modular AI and ad-based revenue support scalability.

Full description

The project aims to build an AI-powered optimization assistant that continuously analyzes system resources-CPU, RAM, temperature, storage, and energy usage-without user intervention. By leveraging machine learning models (Random Forest and advanced alternatives), the software learns from anonymized behavioral logs to make proactive, real-time optimization decisions.

Planned R&D activities:

  Behavioral Data Collection: Gathering anonymized usage logs (CPU, RAM, energy, runtime) as the foundation for adaptive optimization,

Behavioral Modeling: Training and testing AI models, comparing Random Forest with advanced algorithms to deliver scalable and accurate decision-making,

Device-Specific AI Training: Adapting behavior to each device through localized model updates,

Feedback Integration: Enhancing the feedback engine to incorporate user feedback for continuous learning,

Energy Optimization Module: Reducing energy consumption by up to 20% through predictive decision-making,

Freemium Ad-Supported Platform: Sustainable monetization via integrated ad modules that respect user experience,

Centralized Management Panel: Monitoring, role-based access, and security logs for enterprises and institutions, supporting environments without cloud access,

Cross-Platform UI: Lightweight ElectronJS interface for individual users, with mini versions for enterprise clients to minimize resource usage.

The final product will be a self-optimizing, learning AI assistant that adapts to user behavior, improves system stability, and extends device lifespan. Expected outcomes include up to 15% energy savings, ~25% reduction in unnecessary processing load, and >90% compatibility across diverse hardware configurations.

Advantages and innovations

The proposed solution introduces a new generation of optimization technology that moves beyond static, rule-based tools and becomes a proactive digital assistant for system performance. Its greatest strength lies in full autonomy: the AI engine continuously observes system behavior, learns from anonymized usage logs, and applies real-time optimization without requiring user input. This capability eliminates the burden of manual maintenance and ensures that performance improvements happen seamlessly in the background.

A key innovation is the dual-mode functionality, enabling the system to operate both online and offline. Unlike existing solutions that depend on constant internet access, this approach allows the software to function in highly secure or low-connectivity environments, making it equally valuable for individual users and institutions with strict infrastructure requirements. The design philosophy also prioritizes privacy: no personal data is collected, and all learning is based on anonymized logs, ensuring compliance with data protection principles.

From a performance perspective, the benefits are measurable and substantial. Users can expect faster boot times of up to 85% and consistent energy savings exceeding 15%. These gains not only extend device lifespan but also contribute to sustainability goals by lowering overall energy consumption. For enterprises, the centralized management panel represents another level of innovation, offering role-based control, real-time monitoring, and secure deployment across fleets of devices.

The modular architecture further enhances the product's long-term potential. It has been deliberately designed to support future expansions, such as threat detection, registry optimization, and advanced energy analytics. This ensures that the platform is not static but evolves alongside technological advancements and user needs. Solution delivers both accessibility and sustainability, lowering the barriers to adoption.

Technical specification or expertise sought

Partners will play a vital role in ensuring the successful development, validation, and market adoption of the technology. Their first contribution is expected to be in the validation phase, where real-world testing and pilot deployments are critical. By providing access to diverse environments and user groups, partners can help verify the system's adaptability across different hardware configurations and usage scenarios. Feedback from these pilots will

directly inform improvements to the AI engine, the user interface, and the centralized management panel.

Another important role involves contributing technical expertise in integration. Many organizations rely on local or hybrid infrastructures, and partner involvement will ensure seamless deployment within enterprise and institutional contexts. This includes testing compatibility with local servers, providing guidance on role-based security features, and supporting scenarios where cloud access is limited or not possible. Such input will strengthen the system's flexibility and broaden its potential market reach.

User experience is another area where partners' contributions are essential. By engaging end-users during the testing phase, partners will provide valuable insights into usability, accessibility, and satisfaction. These insights will guide refinements in the design of the interface, ensuring that the product remains intuitive for individuals while remaining efficient and lightweight for enterprise use.

In addition to technical and validation support, partners will contribute significantly to commercialization. Their networks will serve as channels for dissemination, promotion, and adoption, ensuring visibility in both individual and professional markets. Partners can also support the monetization strategy by collaborating in the integration of the advertising platform, helping to tailor content and engagement strategies to different user groups while maintaining an ethical, non-intrusive user experience.

Finally, partners are expected to act as long-term collaborators in sustaining and scaling the solution. Their role will extend to supporting continuous improvement through feedback cycles, participating in co-development of advanced modules, and aligning the product with emerging regulatory, security, and energy efficiency standards. In this way, partners will not only facilitate the project's immediate success but also contribute to its resilience and global growth potential.

Stage of development

Under development

IPR Status

No IPR applied

IPR Notes

Sustainable Development goals

• **Goal 9: Industry, Innovation and Infrastructure**

• **Goal 7: Affordable and Clean Energy**

Partner Sought

Expected role of the partner

Expected Partner Contributions

-Validation and Pilot Testing: Conduct real-world tests and pilot deployments to demonstrate the technology's adaptability across different hardware and usage scenarios.

-Technical Integration Support: Ensure seamless deployment within local and hybrid infrastructures, including server compatibility, security features, and solutions for limited cloud access.

-User Experience Contribution: Engage with end-users to provide feedback on usability, accessibility, and satisfaction, guiding improvements to the interface design.

-Commercialization and Dissemination: Leverage networks to increase visibility, accelerate adoption, and contribute to shaping monetization strategies.

-Long-Term Collaboration: Support continuous feedback cycles, co-develop advanced modules, ensure compliance with regulatory/security/energy efficiency standards, and contribute to global scalability.

Type of partnership	Type and size of the partner
Research and development cooperation agreement	• **SME <=10** • **SME 11-49** • **SME 50 - 249** • **Big company**

Call Details

Framework program

Eureka

Call title and identifier

Eurostars 3 -Call 10

Submission and evaluation scheme

This is a single stage application

Anticipated project budget	Coordinator required
1200000	**No**

Deadline for EoI	Deadline of the call
15 Nov 2025	**10 Mar 2026**

Project duration in weeks

156

Web link to the call

https://www.eurekanetwork.org/programmes-and-calls/eurostars/eurostars-september-2025/

Project title and acronym

AI-powered autonomous optimization software for real-time system performance, energy efficiency, and secure device management

Dissemination

Technology keywords

- **04007003 - Process optimisation, waste heat utilisation**
- **04007001 - Energy management**
- **01003003 - Artificial Intelligence (AI)**

Targeted countries

- **World**

Market keywords

- **06006002 - Metering and monitoring**
- **02007016 - Artificial intelligence related software**

Sector groups involved

- **Digital**
- **Energy-Intensive Industries**