AI-driven hazard detection & compliance reporting (Health and Safety (OHS)

Summary

Profile type	Company's country	POD reference
Technology offer	**Slovakia**	**TOSK20250528035**
Profile status	**Type of partnership**	**Targeted countries**
PUBLISHED	**Research and development cooperation agreement** **Commercial agreement with technical assistance** **Investment agreement**	**• World**
Contact Person	**Term of validity**	**Last update**
Enrico FRANZIN	**29 May 2025** **29 May 2026**	**29 May 2025**

General Information

Short summary

Slovak SME has developed an automated, AI-driven solution that recognises hazards on site and instantly maps each one to the exact legal paragraph eliminates these bottlenecks. It accelerates risk assessments, guarantees clause-level traceability, and generates a one-click report or email that documents all non-conformities for seamless follow-up and audit readiness. The SME is looking for business and R&D partners in EU countries.

Full description

A small Slovak-based business with fewer than 10 employees is specialised in applied research and development of artificial-intelligence and machine-learning technologies, as well as system integration.

The company has developed a solution that automates risk- and hazard-identification processes through advanced image-recognition techniques. Every detected risk or hazard is cross-referenced with local legal and regulatory requirements, and all non-conformities are clearly flagged in the final report. The cloud-ready solution integrates with existing CCTV or mobile-device cameras, flags hazards instantly, and produces compliance reports aligned with EU and national legislation.

Problem Statement — Occupational Health & Safety Compliance
In the occupational-health-and-safety (OHS) domain, companies must comply with ≈ 100 separate laws comprising

1,000 – 1,500 individual paragraphs. Memorising this body of regulation—and manually cross-checking each clause against real-world site conditions during an inspection—is unrealistic. The result is:
• Slow, labour-intensive inspections that interrupt operations.
• Human error and omissions, leaving critical hazards unflagged.
• Regulatory exposure: missed clauses translate into fines, legal liability, and reputational damage.
• Fragmented audit trails that are difficult to export, share, or defend during external audits.

The SME is looking for partners in EU countries, such as re-sellers / local market distributors / OHS companies with domain knowledge for R&D partnership / Looking for investment for further scaling / Commercial agreement with technical assistence / Research and development cooperation agreement with OHS domain expertise companies.

Advantages and innovations

The company offers:
• A working prototype validated in industrial environments.
• A multidisciplinary research team (AI, computer vision, safety engineering).
• Openness to technical cooperation, commercial agreements with technical assistance, and joint EU-funded projects.

Current state: TRL 6, aiming for TRL 7.

Technical specification or expertise sought

Stage of development

Under development

IPR Status

No IPR applied

IPR Notes

Sustainable Development goals

• **Not relevant**

Partner Sought

Expected role of the partner

The SME is looking for:
• Industrial end-users (manufacturing, energy, construction, logistics) to pilot or adopt the technology and improve HSE performance.
• Distributors / system integrators active in industrial automation, safety, or computer-vision solutions.

• R&D partners or consortia for Horizon Europe / Eurostars calls in AI, computer vision, occupational safety, or predictive maintenance.

Type of partnership

Research and development cooperation agreement

Commercial agreement with technical assistance

Investment agreement

Type and size of the partner

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

Dissemination

Technology keywords

- **01004017 - Work Hygiene and Safety Management**

Market keywords

- **02007021 - Other Artificial intelligence related**

Targeted countries

- **World**

Sector groups involved