Integrated policymaking in the area of RDI
Slovakia

This project strengthens Slovakia's capacity to design and implement integrated Research, Development, and Innovation (RDI) policies. It supports evidence-based policymaking by bridging innovation potential with industrial application, offering practical and methodological guidance for industrial roadmapping.

Implemented under the Technical Support Instrument (TSI), it contributes to institutional and structural reforms by helping national authorities enhance their reform capabilities and improve the design and implementation of Slovakia's Recovery and Resilience Plan in line with EU Regulation (EU) 2021/241.

Key project deliverables include:

- A **methodological handbook** outlining the steps for roadmapping
- **Horizontal and sectoral pilots** assessing Slovakia's position in robotics, automotive, and industrial automation
- A **gap analysis** identifying the administrative capacities of Slovak public institutions.

Technical Support Instrument

Supporting reforms in 27 Member States

INDUSTRIAL PERFORMANCE ASSESSMENT (BASELINE)

The project employed a data-driven approach to assess Slovakia's industrial automation and robotisation ecosystem. An expert-driven approach was applied to evaluate Slovakia's academic and industrial positioning in selected automotive and robotisation technologies.

Quantitative evaluation of strategic position

Milda.ai — **Data mining with Milda.ai**

Company and researchers' analysis

Robotics industry

Automotive industry

Industrial Automation industry

MEGATRENDS ANALYSIS

Long-term global megatrends were systematically assessed to understand their potential impact on Slovakia's industries. The analysis played a key role in identifying emerging technologies with strong growth potential or alignment with expected future developments.

- **Accelerating technological change and hyperconnectivity**
- **Climate change and environmental degradation**
- **Growing consumption**
- **Continuing urbanisation**

INDUSTRIAL FORESIGHT

Explores future scenarios and long-term strategic directions for industry development. Combines expert visioning and trend analysis to anticipate changes, supporting informed industrial strategies.

VALIDATION WITH EXPERTS

Expert validation from government, industry, and academia ensured alignment with stakeholder needs. Internal coordination through regular check-ins and external validation via workshops ensured the accuracy and relevance of the analyses.

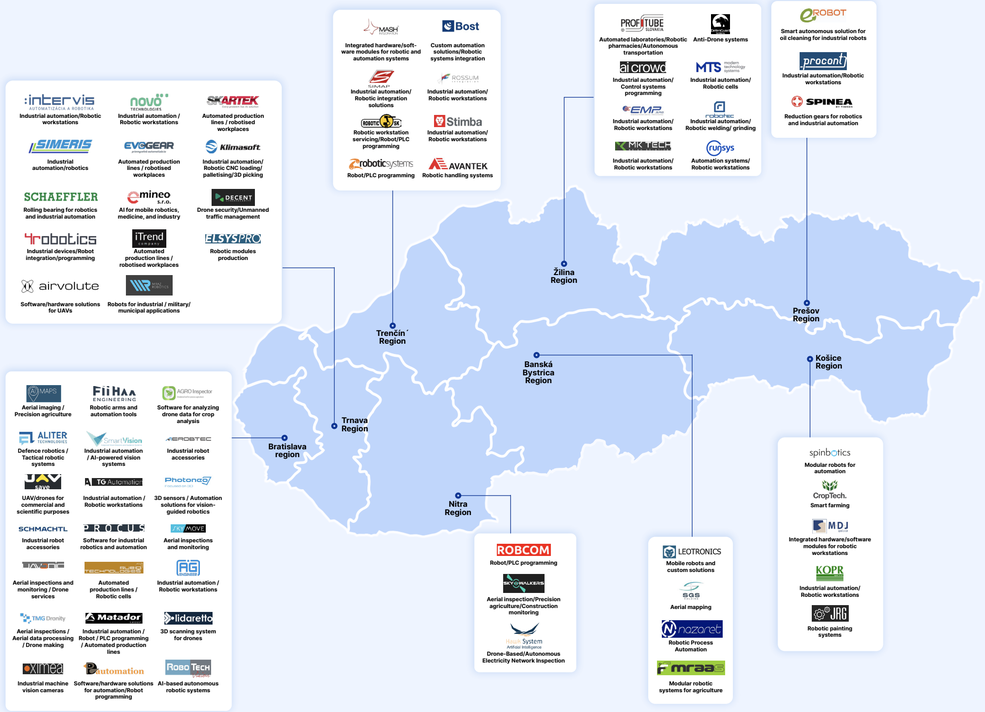
CAPACITY-BUILDING (GAP ANALYSIS)

A gap analysis was conducted to evaluate the administrative capacities of Slovak public institutions in implementing industrial strategies. By comparing the current state with the desired future capabilities, key areas for improvement were identified to strengthen institutional governance and strategy execution.

- **Human resources**
- **Organisational structures**
- **Systems and tools**
- **External factors**

Robotics ecosystem in Slovakia

As part of the industrial pilots, the study team identified key companies across the automotive, robotics, and industrial automation sectors. Highlighted on the map are Slovakia's leading robotics companies, showcasing the country's growing innovation landscape.



IDENTIFICATION OF STRATEGIC PRIORITIES

Translates visions into actionable focus areas. Priorities are identified based on performance assessments and expert insights, guiding resource allocation and policy efforts toward the most impactful domains for industrial growth.

COMMUNICATION AND STAKEHOLDER BUY-IN

Promotes transparency and collaboration through inclusive communication strategies. Enhances trust, fosters shared ownership, and ensures the roadmap reflects both national and EU priorities.

MONITORING & EVALUATION FRAMEWORK

Establishes a structured system for tracking implementation progress and measuring policy impact. Defines indicators, timelines, and data collection processes to enable continuous evaluation and adaptive management.

RISK MANAGEMENT AND CONTINGENCY PLANNING

Outlines proactive measures to identify and mitigate risks that may affect roadmap execution. Includes contingency planning to maintain momentum and flexibility, ensuring continuity, and mitigating uncertainty.

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PPMI — Part of the Verian Group

CONSULTING ASSOCIATES

VAIA RESEARCH AND INNOVATION AUTHORITY