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1. Introduction

This report, prepared under DG REFORM's call for tender REFORM/2021/OP/0006 Lot 1 "*Integrated Policymaking in the Area of RDI*," serves as the project's final synthesis report. It has been developed with input from DG REFORM, VAIA, and relevant stakeholders and aims to consolidate the project's findings, recommendations, and lessons learned into a single comprehensive document.

The report builds on the insights gathered throughout the project's implementation, including Deliverables 2, 3, and 4, and integrates the contributions made during the Workshop and Final conference—Deliverables 5 and 6, respectively. The annexes will include the full set of deliverables produced throughout the project. The objective is to provide a coherent and actionable overview supporting the implementation of integrated policymaking in research, development, and innovation (RDI).

The structure of the report is outlined below:

- Executive summary
- Scope and purpose of the project
- Consolidated findings from Deliverables 2 and 3
- Consolidated findings from Deliverable 4
- Recommendations and lessons learned
- Conclusion
- Annexes consist of deliverables, including Deliverable 5 – Report from Workshop event and Deliverable 6 – Communication materials

2. Executive Summary

This final synthesis report consolidates the key findings, lessons learned, and recommendations from the project. The project aimed to strengthen Slovakia's strategic and institutional capacity for designing and implementing RDI policies that align with national industrial needs and EU objectives. This executive summary outlines the report's structure, summarising each section and the significant insights and recommendations derived from the project.

Scope and Purpose of the Project

The project was initiated to enhance Slovakia's ability to design evidence-based RDI policies that can foster innovation, resilience, and competitiveness within key industrial sectors. The project's scope included the development of a methodological handbook (Deliverable 2) to guide the creation of national industrial roadmaps and the application of this methodology in three pilot studies (Deliverable 3). These pilots focused on industrial automation, robotisation technologies, and automotive technologies in Slovakia. Additionally, stakeholder engagement events, including a workshop and a final conference (Deliverables 5 and 6), were conducted to ensure alignment with national priorities and foster broad-based support for the proposed policy directions.

Consolidated Findings from Deliverables 2 and 3

Deliverable 2, the Methodological Handbook, details the core methodology for creating industrial strategies. It provides a structured, data-driven approach to mapping Slovakia's industrial value chains and integrating them with broader technological trends. The handbook underscores the importance of

developing national industrial roadmaps as dynamic, iterative processes rather than one-off projects and recommends continuous monitoring and feedback to adapt to rapidly changing technological and economic landscapes.

Deliverable 3 operationalised this methodology through three pilot studies: a **horizontal pilot** on industrial automation and robotisation and two **vertical pilots** on cutting-edge robotisation and automotive technologies. These pilots mapped relevant companies and researchers within the sectors, providing insights into Slovakia's industrial capabilities and identifying key challenges and opportunities for innovation. The pilots revealed that while Slovakia has strong industrial foundations, gaps in R&D, early-stage innovation, and sectoral integration persist, limiting the country's ability to exploit emerging technological trends fully.

Consolidated Findings from Deliverable 4

Deliverable 4 provided a **comprehensive gap analysis** of Slovakia's institutional and administrative capacities for implementing integrated, evidence-based industrial strategies. It identified several systemic barriers, including insufficient analytical capacity, fragmented institutional roles, and underutilisation of data tools across government agencies. The report recommended strengthening institutional structures through enhanced coordination and recruitment and building digital and analytical tools to improve the data-driven policymaking process. It also highlighted the need for a more proactive approach to engage stakeholders and reduce reliance on EU project-based funding.

Recommendations and Lessons Learned

Finally, the report provides actionable recommendations and lessons learned that draw from the practical experience of implementing horizontal and vertical pilots and arranging workshops and final conferences. The key general recommendations for developing industrial roadmaps include:

- **Developing a structured approach:** establish a clear and systematic methodology for creating national industrial roadmaps, incorporating stakeholder feedback and data-driven insights at each stage.
- **Strengthening stakeholder engagement:** engage both public and private stakeholders from the outset to ensure that the roadmap aligns with the needs of industry and academia and fosters collaboration across sectors.
- **Building resilience through risk management:** develop risk management strategies to prepare for uncertainties and external shocks, ensuring the long-term sustainability of industrial strategies.

3. Scope and purpose of the project

This project was launched to strengthen Slovakia's strategic and institutional capacity to design and implement integrated RDI policies that align with both national industrial needs and EU-level objectives. The project supports evidence-based policymaking that bridges the gap between innovation potential and industrial application.

The scope of the project encompassed the development of several key deliverables. **Deliverable 2 – Methodological Handbook** (for creating horizontal and sectoral industrial strategies, including an implementation roadmap and action plan) sets out a detailed methodology for mapping Slovakia's RDI

value chains. It outlines how to integrate data-driven insights into the planning and implementation of industrial strategies, thereby offering a practical framework for the development of a national industrial roadmap.

The application of this value chain mapping methodology is demonstrated through a series of analytical reports delivered under **Deliverable 3, comprising one horizontal and two vertical pilots**. The horizontal pilot – An extensive report on the ecosystem of automation and robotisation in Slovakia – provides a system-wide perspective on industrial automation. The two vertical pilots – Robotisation technologies in Slovakia and Automotive technologies in Slovakia – offer sector-specific analyses of emerging and enabling technologies. These pilots aimed to generate practical insights into the structure, capabilities, and dynamics of Slovakia’s innovation ecosystems, with a view to informing strategic policymaking and supporting the country’s industrial transformation.

In addition, the project facilitated a series of stakeholder validation activities to ensure alignment with national priorities and to foster broad-based support for the proposed policy directions. Beyond regular monthly coordination with VAIA, two key external events were held: **Deliverable 5 – Workshop** and **Deliverable 6 – Final conference**. These events served not only as validation points but also as platforms for dissemination, dialogue, and reflection. They brought together national stakeholders to explore how data-driven insights can inform strategic decision-making and to collectively assess the challenges, priorities, and future pathways for Slovakia’s industrial strategy.

Overall, the project contributes to reinforcing Slovakia’s RDI ecosystem by providing concrete tools and strategic guidance for policymaking, with the ultimate goal of fostering sustainable growth, industrial resilience, and competitiveness.

4. Consolidated findings from Deliverables 2 and 3

4.1. Deliverable 2 – Methodological Handbook

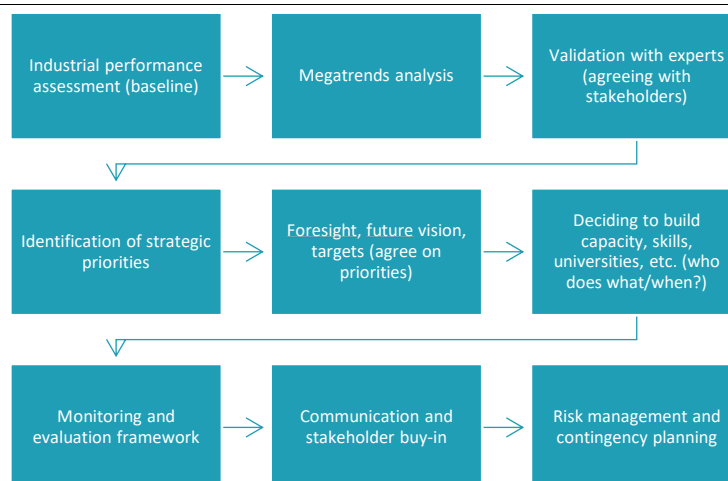
Deliverable 2 – Methodological Handbook provides a structured approach to evidence-based industrial strategy roadmapping (for the complete handbook, see Annex A: Deliverable 2). Its primary goal is to guide policymakers in developing national industrial roadmaps that are informed by robust data, grounded in value chain mapping, aligned with emerging technological trends and supported by stakeholder input.

Central to the methodology is the recognition that industrial strategies must be dynamic and iterative. In an environment shaped by rapid technological change, global competition and shifting societal needs, continuous data collection, monitoring, and re-evaluation are essential. The Handbook underlines that roadmapping must be a cyclical and adaptive process rather than a one-off exercise. Only by embedding structured feedback loops – supported by up-to-date data and analytical capacity – can policymakers remain responsive, forward-looking and capable of adjusting priorities as needed.

The approach outlined in the Handbook provides a comprehensive overview of all key stages in the roadmapping process. It begins with establishing a baseline through an industrial performance assessment, followed by the analysis of global megatrends to anticipate technological and economic shifts. The process further incorporates expert validation, quantitative data analysis and the collaborative identification of strategic priorities. These steps are followed by foresight activities, the formulation of a shared future vision and the definition of measurable targets.

In addition, the methodology emphasises the importance of strengthening administrative capacity, establishing a robust monitoring and evaluation framework, and enabling effective communication for stakeholder engagement and policy legitimacy. It also includes guidance on risk management and contingency planning to ensure resilience throughout the implementation process.

FIGURE 1. METHODOLOGY FOR CREATING INDUSTRIAL STRATEGIES, INCLUDING ROADMAPS

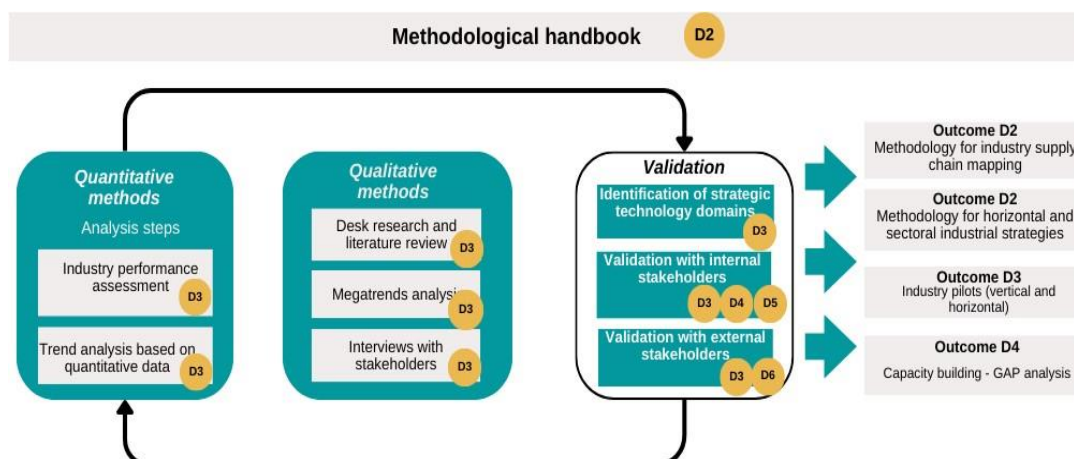


Source: prepared by the project team.

While the Handbook sets out a comprehensive implementation methodology, its practical application within the project was limited to three pilot studies carried out under **Deliverable 3** and to a more theoretical assessment of administrative capacity under **Deliverable 4**. As such, only selected elements of the methodology were operationalised in practice, with a primary focus on value chain mapping, ecosystem analysis and technology positioning. Deliverable 4 complemented this by conducting an in-depth analysis of administrative and institutional barriers and by proposing possible actions to address identified issues across four key categories: strategic governance and coordination, analytical and data capabilities, human resources and organisational capacity, and operational tools and implementation mechanisms.

Broader components of the methodology—such as evidence-based policy planning, the identification and prioritisation of strategic domains, foresight activities, and the design of monitoring, evaluation and risk management mechanisms—were addressed only at a conceptual level. These elements remain outlined in the Handbook but were not implemented within the scope of this project.

FIGURE 2. OVERVIEW OF THE PROJECT'S METHODOLOGICAL FRAMEWORK AND LINKS TO DELIVERABLES OF VALUE CHAIN MAPPING



Source: Created by the project team.

4.2. Deliverable 3 – horizontal and vertical pilots

Deliverable 3 operationalised core elements of the methodology set out in Deliverable 2 through one horizontal pilot on **industrial automation and robotisation** and two vertical pilots on **cutting-edge robotisation** and **automotive technologies** in Slovakia (for complete horizontal and vertical pilots, refer to Annex B: Deliverable 3). These pilots served as **practical demonstrations** of how structured, validated data can be leveraged to support strategic policymaking, assess national capabilities, and guide targeted interventions in priority industrial and technology areas.

The pilots followed differentiated but complementary methodological approaches reflecting their distinct scopes:

- The **horizontal pilot** adopted a broad, **ecosystem-wide, data-driven methodology**, mapping nearly 2,500 Slovak companies active in industrial automation and robotisation. It examined company characteristics (age, size, sector, value chain role) and conducted network analysis to identify key industrial and sectoral interlinkages.
- The **vertical pilots** employed a **technology-focused, dual-mapping approach**, combining company-level data with researcher profiling to assess the development of selected cutting-edge technologies. Each vertical study applied the **LEAD-GROW-LAG classification model** to evaluate the density and balance of industrial and research activity and benchmarked Slovakia's performance against its Visegrád counterparts.

Throughout the process, national stakeholders, including VAIA, were actively engaged in validating the selection of technologies and datasets, thereby strengthening the analytical quality and policy relevance of the findings.

Consolidated findings across pilots

- Over **2,460 Slovak companies** identified across the automation and robotisation ecosystem

- **108 companies** and **244 researchers** mapped in the automotive pilot across five technological areas, namely Electric Vehicles & Battery Technology, Digital Controlled Micro-Precision Manufacturing, Additive Manufacturing (3D Printing), Smart Mobility Solutions, Intelligent Transportation Systems (ITS).
- **164 companies** and **147 researchers** identified in the robotisation pilot across six technological areas, including Robotic Process Automation (RPA), Collaborative Robotics (Cobots), Aerial Drones, Agricultural Robotics, Medical Robotics, and Humanoid Robotics.

The pilots confirmed Slovakia's strong industrial base in manufacturing-related domains but revealed persistent gaps in R&D intensity, early-stage innovation, and sectoral integration. Research capacities are concentrated in a few institutions, and links between academia and industry remain underdeveloped, particularly in emerging technology fields.

Key data insights – status quo

- **Automation and robotisation (horizontal):** The ecosystem is mature but fragmented, dominated by SMEs and older firms. While there is substantial capacity in manufacturing, machinery, and hardware, R&D intensity remains limited. The network analysis revealed that consumer goods, electronics, and IT services are the central sectors, with high potential observed in biotech, renewables, and security. Innovation bottlenecks include weak startup participation, insufficient integration of digital and software components, and limited cross-sector coordination.

Additionally, the analysis identified **three multifaceted clusters** that underpin the automation and digital transformation landscape in Slovakia:

- **Cluster 1 – Industrial automation companies:** firms directly engaged in developing or manufacturing automation technologies or providing sector-specific IT services.
- **Cluster 2 – Manufacturing companies engaged in R&D:** traditional manufacturing firms with in-house research and innovation functions.
- **Cluster 3 – Software development companies involved in R&D:** firms creating digital tools, platforms and automation software with cross-sectoral applications.
- **Automotive technologies (vertical):** The sector is strongly positioned in electric vehicles, battery technologies and additive manufacturing. However, there is low startup penetration (7%) and limited researcher presence in areas such as smart mobility and intelligent transport systems. While the sector benefits from a critical mass of established firms, future competitiveness depends on innovation renewal and greater collaboration with research institutions.
- **Robotisation technologies (vertical):** Slovakia shows notable strengths in robotic process automation (RPA), Cobots and aerial drones, with clear industrial activity and research engagement. However, it lags in more complex domains, such as medical and humanoid robotics. The sector is highly SME-driven and lacks larger innovation anchors. Sectors with growth opportunities that could merit targeted support include agricultural robotics and embedded AI applications.

5. Consolidated findings from Deliverable 4

Deliverable 4 provided a comprehensive gap analysis of the administrative, institutional and systemic conditions necessary for implementing integrated, data-driven industrial strategies in Slovakia (for explicit gap analysis see **Annex C: Deliverable 4**). It assessed the capacity of relevant public institutions to operationalise the methodological approach outlined in Deliverable 2 and applied through the pilot studies in Deliverable 3.

The report was structured around four key focus areas: human resources, institutional structures, systems and tools, and external contextual factors. For each area, it identified systemic barriers and proposed targeted actions to strengthen implementation capacity.

The analysis revealed that while there is broad institutional interest in evidence-based policymaking, significant challenges persist in terms of staff shortages, weak analytical capacity, siloed operations and underutilisation of data and evaluation tools. Fragmented institutional mandates and limited cross-ministerial coordination hinder strategic coherence. Moreover, the absence of standardised methodologies, including foresight and performance monitoring, undermines the ability to develop and update national industrial roadmaps effectively.

Digital and analytical tools are inconsistently used across institutions, and decision-making processes often remain reactive and compliance-driven rather than strategic. In addition, external factors such as over-reliance on EU funding, limited stakeholder engagement and legislative instability constrain long-term planning and adaptation.

Proposed recommendations include:

- **Human resources:** increase institutional analytical capacity through strategic recruitment and training programmes and reduce administrative burden.
- **Structures:** clarify institutional roles and responsibilities, strengthen inter-ministerial coordination and introduce mechanisms for joint planning.
- **Systems and tools:** apply the methodology from Deliverable 2 more systematically; improve access to structured data; develop foresight and evaluation functions; and digitise internal workflows.
- **External context:** reduce reliance on project-based EU funding, engage stakeholders earlier and more consistently, and introduce mechanisms to manage uncertainty and external shocks.

6. Recommendations and lessons learned

6.1. Recommendations and lessons learned for implementation of vertical and horizontal pilots

These lessons and recommendations were identified during the industrial performance assessment, specifically in the process of identifying relevant companies within the robotics, automotive, and industrial automation sectors. The following key insights can inform future work in similar assessments.

Refine company identification and categorisation processes

- To ensure comprehensive and accurate identification of relevant companies, a combination of qualitative revisions and data-driven approaches should be employed. This includes using filters to exclude companies from unrelated sectors and applying relevance scores to focus on those directly contributing to technological innovation.
- It is recommended that technology lists be continuously updated and revised based on emerging trends and feedback from industry experts, ensuring that the companies captured are relevant to the specific objectives of the assessment.

Implement an iterative and flexible methodology

- Adopting an iterative approach is crucial for managing evolving assumptions and refining technology lists over time. Regular reviews and updates based on expert feedback are essential to ensure that the assessment stays aligned with the project's goals and accurately reflects the evolving technological landscape.
- Expanding the scope from a narrow focus to a broader ecosystem view helps capture the full range of companies and technologies that contribute to sector development. This flexibility allows for a more comprehensive analysis and ensures that all key actors are included in the assessment.
- Sufficient buffer time should be allocated to evaluate datasets, especially when manual data collection is involved, to ensure high data quality and validity.

Leverage digital tools to enhance efficiency

- Digital tools can play a key role in expediting the initial stages of data collection, such as identifying and scraping company information. These tools allow for faster, more efficient data extraction, enabling researchers to focus on the qualitative aspects of the analysis.
- While digital tools can provide valuable initial insights, it is essential to complement their use with qualitative methods to ensure that the data is properly contextualised and aligned with the specific objectives of the industrial performance assessment.

Exercise caution when using benchmarking

- Benchmarking against other countries or regions provides valuable contextual insights, but it should be used with caution. Variations in economic size, technological focus, and sector development may limit the comparability of results.
- Results from benchmarking exercises should be interpreted as providing context rather than definitive rankings, and any comparative framework should be tailored to account for differences in sector maturity and technological specificity.

Ensure the inclusion of subsidiary companies

- To ensure a complete dataset, it is recommended to integrate subsidiary companies into the company lists, especially if they lack an easily accessible online presence. Desk research and expert input are critical for identifying these companies.

- Manual inclusion of subsidiary companies may be necessary to ensure comprehensive coverage, particularly when subsidiaries are part of larger corporate structures that may not be fully represented through automated data collection methods.

6.2. Recommendations and lessons learned for external validation, training and dissemination events

These recommendations, based on insights from both the dissemination workshop and the final conference, aim to enhance the planning, execution, and impact of future events.

Engage stakeholders earlier in the planning process

Initiate engagement with stakeholders well in advance to allow for deeper consultation on key themes and to better align the event agenda with their expectations. Early involvement ensures that the event is more relevant, focused, and productive and allows for a more targeted approach to addressing participants' specific needs and interests.

Ensure a balanced and diverse stakeholder participation

Broaden the spectrum of stakeholders to include stronger representation from industry. A more diverse mix of government, academia, and industry participants will enrich discussions, foster practical insights, and help generate more actionable recommendations. Specifically, enhancing industry participation in discussions about academia-industry collaboration will provide valuable perspectives on bridging the gap between research and practical application.

Expand multilingual communication efforts to improve accessibility

In addition to translating materials into local languages, expand these efforts to cover key preparatory materials such as agendas, discussion prompts, and data summaries. This will not only make the event more inclusive but also ensure that participants from different linguistic backgrounds can engage fully with the content before and during the event. Ensuring linguistic inclusivity promotes wider participation and a richer exchange of perspectives.

Bridge the gap between theoretical insights and practical experience

Ensure that theoretical insights from data and research are linked with real-world examples and experiences. This can be achieved by simplifying complex data summaries, using real-world case studies to demonstrate the application of insights, and incorporating interactive data visualisations to make findings more tangible. Facilitating structured discussions where participants connect data to their personal and professional experiences will help make the event more relevant and actionable.

7. Conclusion

This project has played a pivotal role in enhancing the capacity of VAIA to develop and implement integrated, evidence-based industrial policies. Through the provision of a methodological framework and the application of this approach in practical pilot studies, the project has strengthened VAIA's competencies in strategic policymaking, data analysis, and stakeholder engagement.

The Methodological Handbook developed under Deliverable 2 has served as a key resource in this process, equipping VAIA with a structured, step-by-step approach for designing national industrial roadmaps. This methodology provided VAIA with a toolkit to integrate value chain mapping, sectoral analysis, and technological foresight into its decision-making processes, providing a foundation for the development of more responsive and adaptable industrial strategies.

The pilot studies presented in Deliverable 3, focusing on automation, robotisation, and automotive technologies, have been particularly valuable in demonstrating to VAIA the real-life application of the methodology. Through these pilots, VAIA has been exposed to hands-on experience in understanding how sectoral data is collected and analysed, how findings are validated with national stakeholders, and how key challenges and opportunities for innovation are identified. These practical exercises have strengthened VAIA's ability to design and implement industrial strategies that are both data-driven and aligned with the needs of Slovakia's industrial ecosystem.

Deliverable 4's assessment of institutional and administrative capacity has also contributed to building VAIA's competencies in evaluating and strengthening the systems required for effective industrial policy implementation. Through this analysis, VAIA has gained a deeper understanding of the internal barriers that can hinder the successful execution of integrated policies and has been provided with actionable recommendations to enhance its own organisational and analytical capabilities.

Moreover, the stakeholder engagement activities, including the workshop and final conference (Deliverables 5 and 6), have reinforced VAIA's ability to engage with diverse stakeholders across government, industry, and academia. These events have not only provided a platform for validating the project's findings but have also enhanced VAIA's skills in facilitating collaborative discussions, gathering feedback, and building consensus among various actors involved in the industrial policymaking process.

As a result of this project, VAIA is now better equipped to carry forward the development of Slovakia's national industrial strategy. The competencies gained through this initiative – ranging from data-driven policy design and sectoral analysis to stakeholder engagement and institutional capacity building – are essential for fostering long-term, sustainable industrial transformation in Slovakia.

Looking forward, the competencies strengthened through this project equip VAIA with the tools to better navigate evolving technological trends, address industrial challenges, and foster innovation in the years to come. The insights and methodologies provided offer a solid foundation for VAIA to further develop Slovakia's industrial strategy, ensuring it remains aligned with both national priorities and EU objectives while maintaining the agility to respond to emerging opportunities.

In conclusion, this project has successfully contributed to VAIA's capacity to shape and implement integrated industrial policies. With the tools and competencies gained, VAIA is well-positioned to play a key role in driving Slovakia's industrial development and resilience in a rapidly changing technological landscape.

8. Annex A: Deliverable 2

Please refer to the separate file, D2 Methodological Handbook.

9. Annex B: Deliverable 3

Please refer to the following D3 files:

- *Extensive Report on the Ecosystem of Automation and Robotisation in Slovakia*
- *Vertical pilot Robotisation technologies in Slovakia*
- *Vertical pilot Automotive technologies in Slovakia*

10. Annex C: Deliverable 4

Please refer to the separate file – D4 Gap analysis report.

11. Annex D: Deliverable 5

Please refer to the separate file – D5 Report, from the workshop/training on the use of the methodology among the administration.

12. Annex E: Deliverable 6

12.1. Project Public Brief

Project Public Brief provides an overview of the project's context, objectives, methodology, key deliverables, stakeholder engagement, and expected impact in supporting Slovakia's RDI ecosystem through integrated industrial strategies, implemented with the support of the European Union.

Integrated Policymaking in the Area of RDI: Slovakia

Strengthening Slovakia's RDI Ecosystem through Integrated Industrial Strategies

Context of the project

Slovakia faces key challenges in transforming its industrial ecosystem, including gaps in research and development (R&D) intensity, early-stage innovation, and integration across sectors. The need for a cohesive, data-driven industrial strategy that aligns with both national priorities and EU-level objectives is paramount. This project aims to enhance Slovakia's capacity to design and implement integrated research, development, and innovation (RDI) policies that promote sustainable growth, competitiveness, and industrial resilience.

Brief presentation of the Beneficiary Authority

The project was executed in collaboration with VAIA (Slovak Innovation and Technology Agency), which plays a central role in developing and implementing industrial policies in Slovakia. VAIA is responsible for ensuring the alignment of Slovakia's innovation efforts with EU strategies, supporting the country's industrial development through strategic planning, research, and capacity building.

Description of what needs were addressed

The project focused on addressing the gaps in Slovakia's industrial policies by developing a robust framework for evidence-based policymaking. Specific challenges included enhancing R&D capacities, fostering cross-sector collaboration, increasing innovation in emerging technologies, and ensuring the adaptability of industrial strategies to rapid technological changes. The project also aimed to improve institutional capacity within Slovakia's public sector for managing these strategies effectively.

Methodology and approach used to produce the final deliverables

The project adopted a structured, data-driven approach to industrial roadmapping. The methodology involved mapping Slovakia's industrial value chains, identifying key technologies, and developing sector-specific strategies based on evidence and stakeholder input. Three pilot studies on automation, robotisation, and automotive technologies were conducted to operationalise the methodology, providing real-world insights into Slovakia's industrial landscape. These efforts were complemented by an institutional capacity assessment and stakeholder engagement activities to ensure comprehensive strategy development.

Key deliverables and activities that were undertaken

- Deliverable 2: Methodological Handbook for the creation of national industrial roadmaps.
- Deliverable 3: Pilot studies in three key industrial areas: industrial automation, robotisation technologies, and automotive technologies.
- Deliverable 4: Gap analysis of institutional and administrative capacities for implementing integrated RDI strategies.
- Deliverables 5 & 6: Stakeholder engagement activities, including a Workshop and a Final Conference, to validate findings and ensure alignment with national priorities.

Consultation with stakeholders

Throughout the project, extensive consultation with national stakeholders, including public authorities, industry representatives, and academic experts, was conducted. The findings from the pilot studies were validated and disseminated through two key events – a Workshop and a Final Conference – where stakeholders had the opportunity to engage with the methodologies and contribute to shaping the future direction of Slovakia’s industrial strategy.

Key findings and lessons learnt

- Slovakia has a solid industrial foundation but faces gaps in R&D intensity and sectoral integration.
- The methodology for developing industrial roadmaps must be dynamic and iterative, allowing for continuous feedback and adjustment.
- Stakeholder engagement is crucial to ensuring that industrial strategies are aligned with national needs and can gain broad-based support.
- Institutional capacity building is necessary to implement and sustain evidence-based industrial strategies, especially those related to data analysis, coordination, and risk management.

Expected results

The project has delivered a comprehensive, evidence-based methodology for creating national industrial roadmaps that can be used to guide Slovakia’s industrial transformation. The provided methodology is expected to enhance the capacity of VAIA and other public institutions to develop, implement, and update industrial strategies, ensuring they are responsive to technological advancements and emerging market trends.

Expected impact

The project is expected to enhance Slovakia’s ability to develop sustainable, data-driven industrial policies that promote innovation, competitiveness, and resilience. By improving institutional capacities and fostering greater collaboration between the public and private sectors, the project will support Slovakia in achieving its industrial goals while aligning with broader EU strategies.

Mention of EU assistance

This project is funded by the European Union via the Technical Support Instrument and implemented by the European Commission.



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12.2. Project Summary

Project Summary presents a concise overview of the project's objectives, context, methodology, key activities, and achieved results, highlighting its contribution to strengthening Slovakia's RDI ecosystem through integrated industrial strategies with the support of the European Union.

Integrated Policymaking in the Area of RDI: Slovakia

Strengthening Slovakia's RDI Ecosystem through Integrated Industrial Strategies

Summary

This project aimed to strengthen Slovakia's capacity to design and implement integrated research, development, and innovation (RDI) policies. Through a structured, data-driven methodology, Slovakia's industrial value chains were mapped, and pilot studies in key industrial sectors were conducted to foster sustainable growth and competitiveness.

Context

Slovakia faces challenges in transforming its industrial ecosystem, including gaps in R&D intensity, early-stage innovation, and sectoral integration. The project supports Slovakia's alignment with EU-level objectives, aiming to enhance the country's RDI strategies. The project addresses the need for a cohesive, evidence-based industrial strategy to foster competitiveness, resilience, and sustainable growth, in line with EU priorities for digital and green transitions.

Support delivered

The project adopted a structured, data-driven approach, mapping Slovakia's industrial value chains and developing sector-specific strategies. Key activities included three pilot studies on automation, robotisation, and automotive technologies. The methodology was underpinned by a comprehensive gap analysis of institutional capacities and strengthened through stakeholder engagement activities. Delivered in collaboration with VAIA, the Slovak Innovation and Technology Agency, the project was funded through the EU Technical Support Instrument, with active consultation from public authorities, industry, and academic experts.

Results achieved

The project successfully developed a comprehensive, evidence-based methodology for creating national industrial roadmaps. Key results include the implementation of pilot studies across crucial industrial sectors, a gap analysis of institutional capacities, and extensive stakeholder engagement. The project enhanced Slovakia's ability to design, implement, and update industrial strategies, improving institutional coordination, data analysis capabilities, and fostering stronger public-private sector collaboration. These outcomes will drive sustainable industrial transformation in Slovakia, aligning with broader EU strategies.

Mention of EU assistance

This project is funded by the European Union via the Technical Support Instrument and implemented by the European Commission.



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12.3. Social Media Posts

LinkedIn Post No 1

We are pleased to announce the **Final Conference** of the project "Integrated Policymaking in the Area of RDI: Slovakia," hosted by **VAIA** – the Slovak Innovation and Technology Agency – on **11 April 2025** at SPOT in Bratislava (and online). This event marked the culmination of our efforts to map Slovakia's robotics and industrial automation ecosystem, as part of the broader initiative to strengthen Slovakia's industrial strategy.

The conference provided a platform for discussing the findings from the **data mapping pilot**, focusing on Slovakia's robotics sector and its role in the country's industrial innovation. We were honoured to host representatives from key organisations and public agencies, technical universities, and innovative companies.

Key highlights of the conference included:

- **Keynote address** by Miroslav Balog (VAIA) on the role of robotics in Slovakia.
- **Presentation of results** from the data mapping pilot by Monika Didžiulytė (PPMI| Part of the Verian Group), providing insights into Slovakia's industrial automation and robotisation ecosystem.
- A **panel discussion** on the importance of making robotics a horizontal priority within Slovakia's Research and Innovation Strategy for Smart Specialisation (RIS3), featuring introductions by Professor František Duchoň (Slovak Technical University) and Mr.

Habovštiak (Modern Technology Systems), and moderated by Andrea Uhrínová (former head of RIS3 unit at VAIA).

The conference served as an essential opportunity for stakeholders to engage in discussions around the future of robotics, AI, and automation in Slovakia. It also highlighted the need for further integration of these technologies across sectors to promote sustainable growth and innovation.

#TSI #EUReformSupport #RDI #IndustrialStrategy #Innovation #Robotics #Slovakia

Together with this text, the post will include a collage of pictures from the conference.

LinkedIn Post No 2

We are pleased to present the results of the project "Integrated Policymaking in the Area of RDI: Slovakia," executed in collaboration with the Slovak Innovation and Technology Agency (VAIA), funded by the European Union under the Technical Support Instrument (TSI) and managed by the Secretariat-General – Task Force for Investments and Reforms (SG REFORM) of the European Commission.

This project, implemented by PPMI (part of the Verian Group) and Consulting Associates, has played a pivotal role in strengthening Slovakia's industrial ecosystem. It focused on addressing key challenges such as enhancing R&D intensity, fostering cross-sector collaboration, and improving institutional capacities to manage and implement integrated RDI policies.

The project's main deliverables include:

- A **Methodological Handbook** for creating national industrial roadmaps to guide Slovakia's industrial strategy.
- Pilot studies on **industrial automation, robotisation technologies, and automotive technologies** to explore sector-specific strategies.
- A **gap analysis** to assess institutional and administrative capacities, ensuring Slovakia is equipped to implement these strategies effectively.
- Stakeholder engagement through a **Workshop** and **Final Conference**, ensuring the strategies align with national priorities.

The impact of this work extends beyond Slovakia's industrial strategies. It strengthens Slovakia's competitiveness, innovation, and resilience, aligning with broader EU strategies and promoting sustainable growth.

We invite you to explore the detailed infographic, which details the steps and deliverables of the project's key feature: the **data-driven industrial roadmap methodology**.

#TSI #EUReformSupport #RDI #IndustrialStrategy #Innovation #Robotics #Slovakia

*Together with this text, the post will include the project **infographic** and the **map**, which details the robotics companies identified during the industrial performance analysis, specifically focusing on the **vertical pilot on***

robotisation technologies. Additionally, the post can include the project video, which has similar content to the infographic but is animated.

For the remaining communication materials included under Deliverable 6, please refer to the separate files listed below:

- *D6 Final Conference Presentation Deck*
- *D6 Project Infographic*
- *D6 Map of Identified Slovak Robotics Companies*
- *D6 Project Video*

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