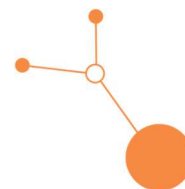


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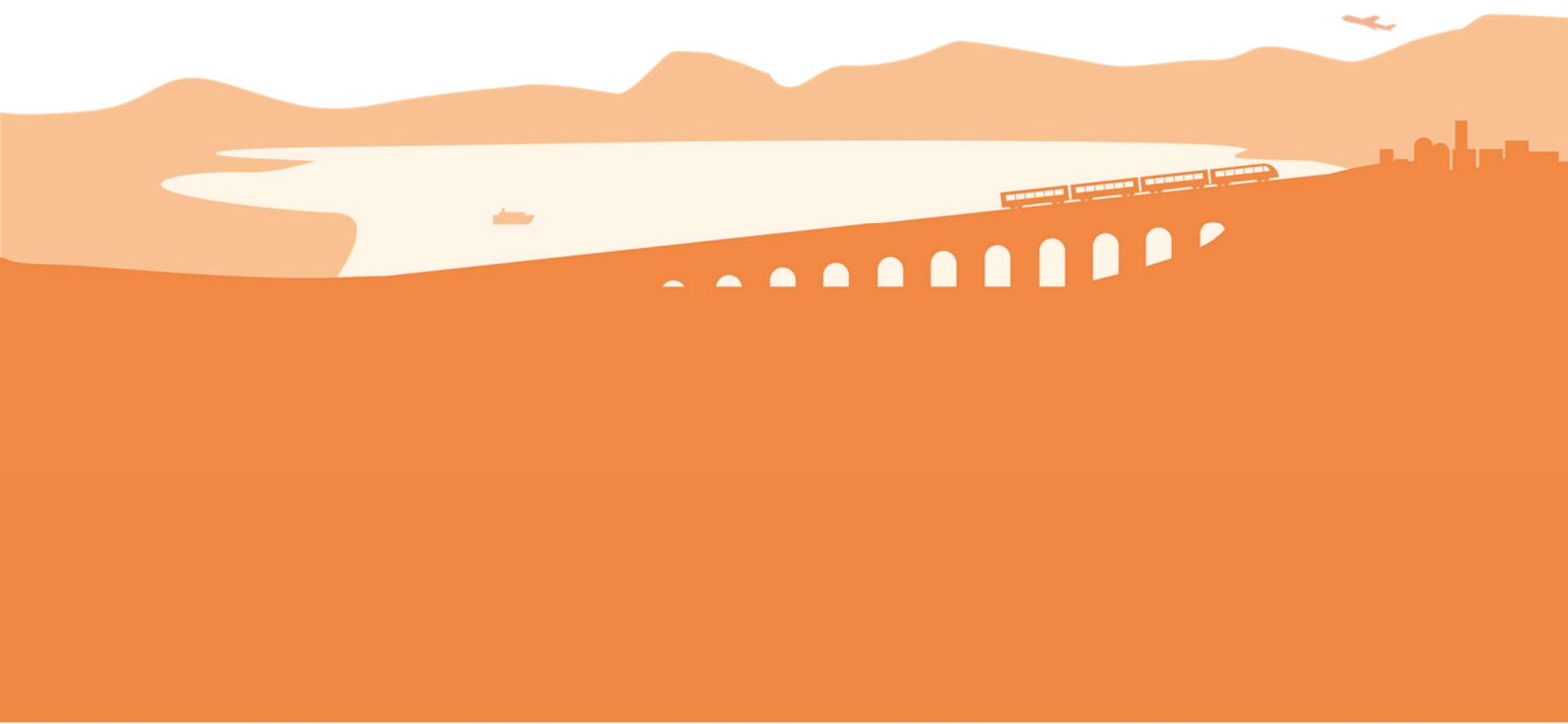
Rail4Regions

# ACTION PLAN

Małopolska, Poland



Final version  
January 2026



# GENERAL INFORMATION

## Partner Organization

**Partner organization: Małopolska Regional Development Agency (MARR),  
Tadeusz Kościuszko Cracow University of Technology (CUT)**

**A. Plan region: Małopolska Voivodeship (Poland) /  
MAŁOPOLSKA REGIONAL DEVELOPMENT AGENCY Regional  
context**

## Policy Application Processes

This section provides an overview of the socio-economic and transport context of the Małopolska Voivodeship, explaining why the region is relevant for the development of rail freight transport within the Rail4Regions project.

**The aim of this Action Plan is to define a coherent set of realistic short- and medium-term measures (up to three years), which will support the development of rail freight transport in Małopolska, improve the integration of rail into multimodal transport chains, and contribute to the implementation of EU and national transport and climate strategies.**

The Małopolska Voivodeship (area 15,183 km<sup>2</sup>) comprises 62 cities, including three cities with county rights: Kraków, Tarnów and Nowy Sącz. The region is administratively divided into 22 counties and 182 municipalities. As of June 2023, Małopolska had a population of 3.43 million and is among the leading Polish regions in terms of economic development: the regional GDP accounts for around 8.2% of national GDP, and over 481,000 businesses are registered here, ranking Małopolska 4th in Poland in terms of the number of enterprises.

The regional economy is diversified and export-oriented. In 2021, exports from Małopolska reached EUR 12.5 billion. Exports are dominated by two sectors (according to the Polish Classification of Activities):

- Section C - manufacturing (70.6%),
- Section G - wholesale and retail trade (19.4%).

This industrial and trade structure generates substantial freight flows and creates a solid basis for the development of rail and intermodal transport. The region is also characterised by a diversity of mineral and natural resources, including energy raw materials, chemical raw materials (such as iodine-bromine brines), non-ferrous metal ores, rock materials, medicinal waters and thermal waters, which are important sources of bulk and specialised cargo.

Małopolska has strong macro-regional visibility and investment attractiveness. It is the only region among 300 European regions to have received the European Entrepreneurial Region 2024 distinction. In the “European Cities and Regions of the Future 2024” ranking (fDi Intelligence), Małopolska ranked 4th in business friendliness and 9th in foreign direct investment strategy among medium-sized regions, while Kraków ranked 1st in human capital and quality of life, 1st in business friendliness and 6th in economic

potential. These factors support long-term demand for efficient and sustainable freight transport solutions.

The region benefits from a well-developed transport network. The A4 motorway, the longest motorway in Poland (nearly 672 km), and the main east-west transit corridor (Corridor III) from Western Europe to Ukraine cross the region. Nearly 1,100 km of railway lines run through Małopolska, providing direct rail connections to major Polish cities and to Vienna, Prague, Berlin, Dresden, Frankfurt am Main, Bucharest, Bratislava, Kyiv, Lviv and Budapest. This network offers strong foundations for the integration of regional rail freight into international corridors.

Kraków John Paul II International Airport (Kraków-Balice) handled 11,080,830 passengers in 2024 (18% more than in 2023) and has a daily cargo terminal capacity of around 35 tonnes. In 2023, the airport offered 161 connections operated by 25 airlines, mainly to major cities in Central and Western Europe. Although passenger traffic dominates, the airport infrastructure and connectivity provide additional potential for air-rail-road logistics chains.

Małopolska is also included in the strategic investment of the Central Communication Port (CPK), which aims to create a modern national transport system integrating air, rail and road transport. In the medium and long term, this project may further increase the role of rail in national and international freight flows affecting the region.

## Transport and spatial planning actors

Effective implementation of the Action Plan requires coordinated involvement of public authorities, infrastructure managers, railway and logistics operators, private industry and actors responsible for spatial planning. This section presents the main institutions and stakeholder groups, together with their roles and the mechanisms through which they will be engaged in the implementation of the proposed measures.

### 1. Strategy and regulatory actors

At the national level, the key strategic and regulatory actors are the Ministry of Infrastructure (MI), the Centre for EU Transport Projects (CUPT) and the Railway Transport Office (UTK). The Ministry of Infrastructure defines the national railway policy and long-term development strategies, allocates public and EU funds for railway investments and supervises national railway companies, including PKP PLK. CUPT evaluates and selects railway projects for co-financing from EU instruments and oversees the implementation of funding agreements. UTK regulates the railway market, issues licences, supervises the safety and condition of infrastructure and collects sectoral data. In the context of this Action Plan, these institutions provide the strategic and regulatory framework, support the assessment of feasibility and funding options, and ensure compliance with safety and market regulations.

### 2. Infrastructure Managers and Railway Companies

The core infrastructure actor is PKP PLK S.A., which manages the national railway network, assigns train paths and implements modernisation and construction projects. PKP PLK is a key partner for the provision of data on capacity, line parameters and access conditions, as well as for the evaluation of infrastructure-related components of the Action Plan. The PKP Investment Office, responsible for station and infrastructure modernisation using state and EU funds and private capital, may also contribute to pre-investment concepts and feasibility assessments. Regional railway operators, where relevant, provide operational know-how on timetable constraints, terminal access and practical conditions for rail freight services.

### 3. Regional and local authorities

Regional and local authorities represent the spatial planning and territorial development dimension. The Małopolska Regional Government is responsible for the regional transport strategy, co-financing of railway projects and coordination of regional development policies. Its role within the Action Plan is to embed the proposed measures in regional strategies, to co-lead coordination structures and to ensure coherence with other policy documents. Municipalities and counties are responsible for local land-use planning, zoning decisions and the development of access infrastructure. They play a crucial role in providing favourable planning conditions for terminals and sidings, facilitating land acquisition and addressing access roads and last-mile connections.

### 4. Private sector stakeholders

The private sector includes industrial, construction and agricultural enterprises, terminal and warehouse operators, freight forwarders and logistics operators, as well as owners of railway sidings. Industrial and trade companies are the main generators of freight demand and potential users of new or improved rail and intermodal services. Terminal and warehouse operators manage loading and unloading operations, storage infrastructure and local rail access, and are therefore indispensable partners in assessing current conditions and testing improvements. Freight forwarders and logistics companies plan and coordinate multimodal supply chains and have detailed knowledge of existing flows, routes and bottlenecks. Owners of sidings provide direct rail access to production sites and are key actors in any attempts to revitalise or optimise single-wagon and dispersed rail transport. Supporting actors include universities, research institutions, consulting firms and financial or investment institutions.

### 5. Incentives for Stakeholder Participation

To ensure that these actors have a real incentive to engage, the Action Plan builds on several motivational factors. Participation offers access to shared data and analytical tools, in particular via the Railhub Planner platform, which can support better-informed decisions on logistics, capacity use and routing. Joint planning and shared information are expected to reduce individual coordination and transaction costs and to facilitate the identification of new business opportunities, for example unused siding capacity or attractive intermodal connections. Regional and local authorities can provide non-financial support by giving priority to key logistics projects in spatial planning processes and by assisting stakeholders in preparing applications for external funding. Cooperation with national regulators may also help streamline licensing and approval processes.

The main motivation for the participation of companies and organizations is:

- to create a unified institute for logistics intermediaries and rail operators (organizers of the freight flow system), which will reduce the operating costs of individual companies in maintaining their own logistics and dispatch staff;
  - Access to information provided by the newly created online information and dispatching application (Railhub Planner) as part of the R4R program, regarding:
    - potential customers;
    - access to vehicles of other R4R project participants;
    - access to logistics terminals, warehouses, and other transport infrastructure elements;
    - access to the repair database of R4R project participants;

- general management of the unified information and dispatch center;
  - opportunities to expand the customer base by providing better quality services (increased availability and functionality);
  - targeted training of essential professionals and other personnel,
  - the opportunity to attract new cargo flows in the region from cargo owners who are not part of the R4R project, thanks to the optimization of cargo flow distribution within the R4R project and the consistent reduction of traffic congestion in the Małopolska Voivodeship.
- 1) An additional incentive for all project stakeholders is the support and regulation of the Marshal's and Voivodeship authorities, ensuring the highest possible level of assistance to R4R project stakeholders in the Małopolska Voivodeship, based on, for example:
- a preferential licensing system;
  - preferential lending and investment;
  - preferential taxation;
  - simplified customs clearance procedures;
  - allocation of plots for the construction of terminals and other logistics infrastructure facilities.
- 2) The motivation of local governments and state authorities is:
- to develop related industries and business services to meet the needs of key producers of competitive products;
  - to create new jobs;
  - to increase the region's investment attractiveness;
  - to attract foreign and domestic investors to promising industries;
  - to increase budget revenues through increased business activity in the region;
  - to ensure favorable conditions for the functioning of the logistics services market in the Małopolska Voivodeship;
  - to integrate the region's industry and transport with European and (potentially) Asian economic systems.

## 6. Mechanisms of engagement

The mechanisms of engagement are structured and formalised. A Council for Supporting the Development of Rail Freight Transport in Małopolska will be established as a platform bringing together representatives of regional authorities, national institutions, PKP entities, terminal operators, logistics companies, industrial stakeholders and research organisations. Membership will be based on a transparent recruitment procedure combining nominations from institutions and, where appropriate, open invitations. The Council will meet regularly to review progress, provide guidance on priorities and facilitate coordination between actors.

In addition, Memoranda of Understanding will be concluded with key data providers such as terminal operators, owners of sidings, logistics companies and large industrial plants. These agreements will define responsibilities in terms of data sharing, participation in analyses and cooperation in pilot modelling,

while also addressing confidentiality and data protection requirements. The work of the Council will be supported by thematic working arrangements focusing for example on infrastructure and capacity, market demand and modelling, and intermodal services and digital tools. Municipalities will be involved through bilateral consultations, particularly where land-use planning, zoning and access infrastructure are directly affected by proposed measures. The Railhub Planner platform will serve as a practical, day-to-day interface for cooperation, enabling stakeholders to provide and update information on terminals, sidings, loading points and services. Finally, outreach activities addressed to major freight generators (such as sectoral roundtables, surveys and interviews) will help identify concrete cargo potential and barriers to shifting more freight to rail.

## B. Adopted solutions

The assessment of the regional transport system, market needs and infrastructure bottlenecks carried out within the Rail4Regions project has identified several strategic solution areas that can support modal shift to rail and improve the performance of freight transport in the Małopolska region. These solutions reflect both regional development priorities and European transport policy frameworks, including the EU Sustainable and Smart Mobility Strategy, the TEN-T guidelines and the European Green Deal. They provide a coherent foundation for the practical measures presented in the subsequent section of the Action Plan (Proposed Actions).

The basis for planning regional activities is the research and analysis results undertaken in the Rail4Regions project in four thematic groups:

- 1) creating a tool at the regional (transregional, cross-border) level called **RailHub Finder, or, as in the Małopolska Action Plan: Railhub Planner,**
- 2) developing an action plan at the local and regional levels for **the revitalization of branch lines,**
- 3) identifying and mobilizing a **decision-making tool for industrial sidings at the local (municipalities, counties) and regional levels,** as a condition for attracting business interest in rail transport,
- 4) using the implementation of points 1) and 2), introducing an **alternative in the form of a SWL offer,** particularly in relation to the SMSE sector and the existing and developing Economic Activity Zones in Małopolska.

### 1. Strengthening Regional Governance and Coordination

One of the key challenges in Małopolska is the fragmentation of actors involved in freight transport and the absence of a formal structure enabling coordinated decision-making. A regional governance solution—such as a Council for Supporting the Development of Rail Freight Transport—addresses this challenge by creating a platform for cooperation between authorities, infrastructure managers, logistics operators, industrial companies and research institutions. Stronger governance enhances planning efficiency, reduces overlaps in investment processes and supports long-term stakeholder engagement, which is essential for modal shift.

The proposal directly addresses the use of examples of actions identified in the Rail4Regions studies regarding the creation and implementation of the RailHub Finder (RailHub Planner) and the identification of a decision-making tool for industrial sidings. Ultimately, this task should encompass all four thematic groups identified in the Rail 4 Regions project.

## 2. Improving Knowledge, Data Availability and Market Transparency

Limited availability of reliable data on freight flows, infrastructure use and regional production capacities prevents effective planning and forecasting. Therefore, a key adopted solution is the development of a comprehensive, shared knowledge base that includes:

- in-depth market and logistics analyses,
- modelling of existing transport and supply networks,
- integration of regional data into the Railhub Planner platform,
- taking action to implement a decision-making tool for industrial sidings,
- taking action to plan investments in the area of revitalization of branch lines

These measures improve transparency, support data-driven decision-making, and create the analytical foundation for optimizing rail-based supply chains in the region.

## 3. Developing an Optimized and Intermodal Transport Network

Małopolska's industrial and export structure generates diverse freight flows, yet the current network is not fully adapted to intermodal transport. Solutions identified in the assessment include designing an optimized transport network that facilitates:

- efficient multi-node connections between terminals, sidings and industrial sites,
- improved last-mile delivery systems,
- better integration of rail services into regional logistics chains.

This approach responds directly to regional transport challenges such as congestion, environmental impacts and low competitiveness of dispersed rail transport.

The indicated area of the activity allows for the analysis and possible application of solutions covered by the Single Wagon Loading concept, taking into account economic conditions (profitability, declared demand) and technical conditions (availability, safety and competitiveness)

## 4. Enhancing Infrastructure Efficiency and Preparing Pre-Investment Concepts

Although long-term infrastructure projects cannot be implemented within the timeframe of this Action Plan, preparatory activities—such as infrastructure audits, process analysis on sidings and terminals, and conceptual work for terminal or line development—represent an essential solution area. These activities support rationalization of handling technologies, identification of bottlenecks, and preliminary assessments of potential investments (including profitability, location suitability and feasibility). This early-stage planning ensures alignment with broader infrastructure programs such as the National Railway Program, TEN-T development and the future CPK rail network.

## 5. Fostering Regional and International Integration

Małopolska's freight market is highly connected with Central European economies. Strengthening cooperation with neighboring regions and other Rail4Regions partners represents a strategic solution aimed at increasing interoperability, facilitating cross-border flows and sharing best practices. This

aligns with EU objectives on territorial cohesion and supports the long-term competitiveness of rail freight.

## Summary

Together, these adopted solutions form a coherent framework that responds to the key challenges of the region: insufficient modal shift to rail, limited data transparency, fragmented stakeholder landscape, infrastructure bottlenecks and the need for environmentally sustainable and economically efficient freight transport. The solutions coordinate with existing regional and national development strategies and provide the conceptual basis for the concrete Proposed Actions presented in the following section.

The indicated activities include the results of the work of the Rail 4 Regions project teams and constitute their adaptation to the conditions and structure of rail transport operations in Poland and Małopolska.

The adopted solutions correspond to the following development and investment programs:

1. The European Green Deal, Communication from the European Commission, COM(2019) 640 final.
2. The EU Strategy for Mobility and Transport: Measures needed for 2030 and beyond, Brussels, 9 December 2020, COM(2020) 789.
3. Europe 2020. A strategy for smart, sustainable and inclusive growth, Communication from the European Commission, Brussels, 3 March 2010, COM(2010) 2020 final.
4. The EU Strategy for the Baltic Sea Region, endorsed by the European Council in 2009.
5. Roadmap to a Single European Transport Area - Towards a competitive and resource-efficient transport system, White Paper from the European Commission, Brussels, 28 March 2011, COM(2011) 144 final.
6. Strategy for Responsible Development until 2020 (with a perspective until 2030), document adopted by the Council of Ministers on 14 February 2017, M.P. 2017 item 260
7. Sustainable Transport Development Strategy to 2030, document adopted by the Council of Ministers on 24 September 2019, Official Journal of the Republic of Poland 2019, item 1054.
8. Polish Seaports Development Program to 2030, adopted by Resolution No. 100 of the Council of Ministers on 17 September 2019, Official Journal of the Republic of Poland 2019, item 1016.
9. National Regional Development Strategy 2030, adopted by Resolution No. 102 of the Council of Ministers on 17 September 2019, Official Journal of the Republic of Poland 2019, item 1060.
10. Concept for the preparation and implementation of the Solidarity Port investment - Central Communication Port for the Republic of Poland, adopted by Resolution No. 173 of the Council of Ministers on November 7, 2017, RM-111-163-17.
11. Strategy for the socio-economic development of Eastern Poland until 2020, adopted by Resolution No. 121 of the Council of Ministers on July 11, 2013, MP 2013, item 641.
12. Strategy for the development of Southern Poland until 2020, adopted by Resolution No. 3 of the Council of Ministers on January 8, 2014, MP 2014, item 152.

## C. Stakeholder Engagement

Effective stakeholder engagement is a core component of the Rail4Regions methodology and has played a key role in shaping the adopted solutions and proposed actions in the Małopolska Action Plan. The region's transport system involves a wide range of actors, including national regulatory bodies, infrastructure managers, regional and local authorities, terminal operators, private companies, and research institutions. Their involvement ensures that the proposed measures are both realistic and aligned with regional needs.

### Stakeholder Consultation Process

Stakeholders were consulted throughout the development of the Action Plan, primarily through a dedicated workshop organised within the Rail4Regions project. Participants included representatives of:

- the Małopolska Regional Government,
- local authorities (municipalities and counties),
- the Railway Transport Office (UTK),
- railway infrastructure and transport sector representatives,
- private-sector stakeholders (freight-generating companies),
- research and academic institutions.

During the workshop, stakeholders discussed regional freight transport challenges, infrastructure limitations, opportunities for modal shift, and the potential benefits of digital tools such as the Railhub Planner. Their insights informed the identification of key solution areas, such as strengthening governance structures (the Council), improving data transparency, enhancing coordination mechanisms, and preparing analytical groundwork for future investments.

Feedback received from stakeholders also directly shaped the Proposed Actions, especially those linked to:

- data sharing and integration with the Railhub Planner,
- carrying out in-depth market and demand analyses,
- modelling existing freight flows,
- identifying feasible locations for infrastructure improvements,
- defining governance and cooperation mechanisms.

The table below summarises the principal stakeholders consulted and their expected roles in the implementation of the Action Plan.

Table 2. List of potential stakeholders involved in the R4R project in the Małopolska Region

Stakeholder	Key roles
<b>Ministry of Infrastructure (MI)</b>	Establishes national railway policy and strategy, allocates public and EU funds, supervises railway companies such as PKP PLK.
<b>Centre for EU Transport Projects (CUPT)</b>	Evaluates and selects railway projects for EU funding (OPI&E, CEF, RRF), signs funding agreements, and monitors compliance.
<b>PKP PLK S.A.</b>	Plans and implements railway infrastructure investments, manages railway traffic, assigns train routes to carriers.
<b>PKP Investment Office</b>	Plans and implements station modernisation programmes and other investment projects using state budget, EU funding and private investment.
<b>Railway Transport Office (UTK)</b>	Regulates the railway market, issues licences to operators, supervises safety and infrastructure condition, monitors market data.
<b>Central Transport Hub (CPK)</b>	Plans and coordinates components of the new high-speed rail network, manages regional projects, supports integration with existing lines.
<b>Małopolska Regional Government</b>	Develops regional transport strategy with emphasis on rail, co-finances railway projects, establishes service contracts.
<b>Local governments</b>	Identify logistical needs, participate in consultations, co-finance access infrastructure, support land acquisition processes.

### How Stakeholder Input Influenced the Adopted Solutions

Stakeholder involvement had a direct impact on shaping the solution areas adopted in Section C. The workshop and subsequent consultations highlighted the need for:

- stronger coordination mechanisms, as stakeholders identified fragmented decision-making as a major barrier. This led to the adoption of the governance solution involving the Council for Supporting the Development of Rail Freight Transport;
- better access to reliable data for planning freight flows. This informed solutions related to market research, modelling activities, and integration into the Railhub Planner;
- improved understanding of existing infrastructure constraints, especially sidings and terminals. This shaped solutions related to infrastructure assessment and pre-investment preparation;
- enhanced cooperation between public authorities and private companies, particularly in developing realistic logistics concepts. This reinforced the integration-oriented solutions in the Action Plan.

### Mechanisms of Stakeholder Engagement Moving Forward

To ensure continuous and well-structured stakeholder engagement during the implementation of the Action Plan, several complementary mechanisms will be applied. A central role will be played by the Rail Freight Development Council, acting as a permanent coordination platform for public authorities, infrastructure managers, logistics operators, terminal owners, industry representatives and academic institutions. The Council will provide strategic guidance, support decision-making and monitor progress in the implementation of the proposed actions.

Cooperation with key operational stakeholders will be formalized through Memoranda of Understanding (MoUs) with terminals, siding owners, logistics operators and industrial companies. These agreements will secure access to necessary data and ensure active participation in analytical and modelling activities. Engagement will be further supported by thematic working arrangements focusing on areas such as infrastructure and capacity assessment, market demand analysis and the digital integration of regional data into the Railhub Planner.

At the territorial level, structured consultations with local authorities, conducted through regular bilateral meetings, will address land-use planning, zoning and access infrastructure requirements. Stakeholders will also participate via the Railhub Planner platform, by updating and sharing data on terminals, sidings and logistics services, which will improve transparency and operational coordination.

Continuous outreach to freight-generating companies will be maintained through workshops, interviews and sectoral roundtables, helping to identify cargo potential, understand constraints and validate the relevance and feasibility of the proposed solutions. Taken together, these mechanisms will ensure that stakeholders remain actively involved in the planning and implementation process.

## D. Proposed actions

*Actions aimed at implementing the R4R project stages in the Małopolska Voivodeship go beyond purely transport-related issues, encompassing the industrial, transport, commercial, and social spheres of both the region and Poland, as well as the countries involved in the project (Germany, Italy, Austria, Croatia, the Czech Republic, Slovenia, Slovakia, and Hungary).*

### **Action 1: Establishment and Operationalization of the Regional Rail Freight Council**

#### **Objective:**

*Create a stable institutional mechanism coordinating actors involved in rail freight development in Małopolska.*

#### **Description:**

*The Council will be formally established by the Małopolska Regional Government as a permanent advisory and coordination body for rail freight. It will bring together representatives of the Marshal's Office, PKP PLK, CUPT, UTK, CPK, local governments, terminal operators, logistics companies and industrial stakeholders. During the first phase the Council will approve its statute, membership rules and work programme, agree on procedures for data exchange (including Railhub Planner), and set priorities for analytical and investment preparatory work. Meetings will be held regularly and will serve as the main*

forum for discussing bottlenecks, monitoring progress of the Action Plan and preparing joint positions towards national authorities and funding institutions.

**Short-term outputs:**

- Council formally established and operational,
- annual work programme and basic procedures for cooperation adopted.

**Relations: RAIL 4 REGIONS - ACTION PLAN MAŁOPOLSKA Action #1**

**A.1.1. The establishment, scope of competences, and influence of the Regional Rail Freight Council on the development of rail freight transport in the Małopolska region directly relate to several factors important from the perspective of regional planning:**

**A.1.2. • Development of an investment plan (identification of investment locations) as part of the "Guideline for the revitalization of branch lines" and the "Decision-making tool for industrial sidings,"**

**• Development of conditions for the development program and the creation of Economic Activity Zones in Małopolska ("Decision-making tool for industrial sidings," "Green Book on SWL")**

**Action 2: Market and Demand Assessment for Rail Freight in Małopolska**

**Objective:**

Produce a concise, data-based assessment of freight potential to support future investment and service planning.

**Description:**

A targeted study will analyse the structure of regional production and trade, identify major freight generators and receivers, and map their current transport patterns. Historical data, company surveys and existing statistics will be used to estimate volumes, directions and frequency of shipments, with particular attention to flows suitable for rail or intermodal solutions. The assessment will also look at seasonal and cyclical variations in demand and at factors that currently favour road transport. The results will provide a realistic picture of the market, allow to identify segments with the highest potential for modal shift and feed the modelling and infrastructure actions of the plan.

**Short-term outputs:**

- Market & Demand Report for Małopolska,
- list of priority sectors and corridors for rail/intermodal development.

**Relations: RAIL 4 REGIONS - ACTION PLAN MAŁOPOLSKA Action #2**

**2.1. Establishing a Regional Rail Freight Council to utilize and implement the RailHub Finder (Railhub Planner) framework, with the goal of integrating entities responsible for the development of rail transport in Małopolska.**

**2.2. Introducing the "Guideline for the revitalization of branch lines" and the "Decision-making tool for industrial sidings" proposal for strategic planning at the local (municipality, city, district, sub-region) and regional levels, taking into account national priorities.**

**2.3. Recognizing the importance of LSG cooperation in promoting rail freight transport in the region.**

**2.4. International cooperation**

### **Action 3: Data Integration and Activation of Railhub Planner for Małopolska**

**Objective:**

Improve transparency and operational coordination in rail logistics through a shared digital information tool.

**Description:**

In cooperation with the Council, a common data template and rules for participation in Railhub Planner will be agreed. Terminals, siding owners, operators and local authorities will then provide structured data on infrastructure parameters, handling capacity, access conditions, opening hours and available services. These datasets will be validated and uploaded to Railhub Planner so that all partners can use the same information base when planning transport chains. In parallel, basic training sessions will be organized for users to ensure that the tool becomes part of day-to-day planning, not only a one-off inventory exercise.

**Short-term outputs:**

- Railhub Planner populated with complete data for Małopolska,
- at least several key actors actively using the tool in planning processes.

**Relations: RAIL 4 REGIONS - ACTION PLAN MAŁOPOLSKA Action #3**

**3.1. Using local experience from the implementation of Rail 4 Regions, prepare and implement the Railhub Finder (Rail Hub Planner) system in Małopolska.**

**3.2. Leverage the potential of the Regional Rail Freight Council, while also leveraging European examples (Rail 4 Regions Project Partners).**

**3.3. Conduct economic and environmental analyses (Methodology for the calculation of CO2 emission reduction potentials of the action plans D.3.2.2) for planned and operational railway sections.**

### **Action 4: Mapping and Functional Assessment of Regional Transshipment Infrastructure**

**Objective:**

Identify the current state, gaps and immediate improvement opportunities within the regional rail freight infrastructure.

**Description:**

Building on data collected for Railhub Planner, a systematic mapping of all relevant facilities will be carried out, including intermodal terminals (Brzesko, Włosienica), stations with sidings and loading tracks, and freight-intensive industrial areas. For each location, parameters such as track layout, axle load, electrification, handling equipment, road access and operational constraints will be examined. The assessment will distinguish between infrastructure that is already capable of handling additional traffic and locations that suffer from clear capacity or accessibility problems. This will create a coherent geospatial picture of the network and allow to select a limited number of priority sites for further analysis.

**Short-term outputs:**

- georeferenced inventory of terminals, sidings and loading points,
- shortlist of 3-5 priority locations for optimization or investment preparation.

**Relations: RAIL 4 REGIONS - ACTION PLAN MAŁOPOLSKA Action #4**

*This action draws on the results of the work in the thematic groups: Railhub Finder and Decision-making tool for industrial sidings, both in the context of valorizing (competitiveness) the profitability of rail transport, as well as in relation to environmental protection.*

## **Action 5 Identification of Bottlenecks and Development of Operational Improvement Measures**

### **Objective:**

*Develop practical technological and organizational improvements that can be implemented quickly and at low cost.*

### **Description:**

*For the priority locations identified in Action 4, detailed operational diagnostics will be performed. The work will include time measurements of key processes, analysis of train and wagon movements, and consultations with staff responsible for shunting, loading and dispatching. On this basis, proposals will be formulated for improving the organisation of work, simplifying procedures, adjusting timetables or better coordinating road and rail operations. Wherever necessary, preliminary concepts of small-scale infrastructure changes (e.g. additional crossovers, modification of siding use, signage improvements) will also be prepared. The focus will be on measures that can reduce dwell times and increase throughput without requiring complex investment projects.*

### **Short-term outputs:**

- set of “quick-win” operational measures for selected terminals and stations,
- initial concepts of small-scale infrastructure adaptations, where justified.

### **Short-term outputs:**

- 2-3 project briefs with basic cost-benefit analysis,
- prioritised list of investment concepts for further development beyond the Action Plan timeframe.

### **Relations: RAIL 4 REGIONS - ACTION PLAN MAŁOPOLSKA Action #5**

*The action primarily includes studies from the Rail 4 Regions project relating to existing and planned infrastructure:*

**5.1. Decision-making tool for industrial sidings**

**5.2. Guidelines for the revitalization of branch lines**

**5.3. As part of the forward-looking solutions (after technical and economic assessment), it indirectly refers to analyses within the Green Book on SWL**

## **Action 6: Preliminary Site Assessment for a Future Border-Area Intermodal Terminal (Muszyna Region)**

### **Objective:**

*Provide an initial analytical basis for a possible future intermodal terminal in the vicinity of the Slovak border.*

### **Description:**

*In the Muszyna area, which offers favourable conditions for cross-border rail links, a screening-level comparison of two or three potential sites will be conducted. Using a simplified centre-of-gravity approach and qualitative criteria, the study will consider rail accessibility (track parameters, electrification, connection to corridors), available land, distance to major generators of freight, environmental and planning constraints, and the relationship to existing terminals in Poland and*

Slovakia. The outcome will not be a detailed design, but a reasoned recommendation indicating which site appears most suitable for a subsequent full feasibility study when funding becomes available.

**Short-term outputs:**

- comparative assessment of candidate sites in the Muszyna area,
- recommendation of one preferred location for future detailed planning.

**Relations: RAIL 4 REGIONS - ACTION PLAN MAŁOPOLSKA Action #6**

The proposed action is the result of an analysis of regional specificities and the selection of an example of an international rail border crossing (Poland-Slovakia) in the Muszyna commune (southern Małopolska) as part of a case study in the Rail 4 Regions project. The proposed action addresses specific local conditions (no other Poland-Slovakia cross-border crossing in Małopolska) and indirectly refers to the following project studies:

- 6.1. The possibility of using the border crossing to supplement Railhub Finder (Railhub Planner) data
- 6.2. Indicating actions on existing route sections - Guidelines for revitalization of branch lines
- 6.3. Creation of new loading infrastructure - Decision-making tool for industrial sidings, based on Polish-Slovak agreements
- 6.4. Considering the feasibility of promoting solutions included in the Green Book on SWL

## E. Monitoring and Evaluation

### Monitoring Mechanism

- **Action #1.1: Establishment of a Council for Supporting the Development of Rail Freight Transport in the Małopolska Voivodeship (hereinafter referred to as the Council)**

The mechanism for monitoring the implementation of the Action Plan for Małopolska is closely linked to the successful establishment of a "Council for Supporting the Development of Rail Freight" in the region. The Council's primary participants should be institutions directly involved in the planning and implementation of rail investments in the region:

- Marshal's Office of the Małopolska Voivodeship,
- Office of Rail Transport / Southern Branch
- Małopolska Railways
- Polish State Railways (PKP) (Investments, Cargo, etc.)
- Krakow University of Technology
- Małopolska Regional Development Agency

### Potential participants in the Council's work should include:

- companies in the transport sector,
- economic self-government (chamber of industry and commerce),
- local government units.

The objectives and working methods of the Council should be established during negotiations between MARR SA, the Krakow University of Technology and the Marshal's Office of the Małopolska Voivodeship (July-October 2025)

- Activity #2.6: Evaluate the Profitability of Proposed Actions.

Monitoring and evaluation of indicators and objectives included in the Action Plan for Małopolska is the subject of action # 2.6. The implementation of these activities should be entrusted to a research institution (Cracow University of Technology) with the competences and research tools necessary to conduct all analytical projects, verify changes, undertake research initiatives, collect data, and prepare expert opinions for planned investment tasks (economic analysis, environmental impact analysis, social assessment).

## Performance Indicators (KPIs)

Effective monitoring is essential to ensure that the proposed actions are implemented within the planned timeframe (up to 3 years) and deliver measurable improvements in the competitiveness of rail freight transport in Małopolska.

### 1. Economic Indicators

- payback period,
- economic net present value (FNPV / ENPV),
- economic internal rate of return (ERR),
- economic efficiency ratio (BCR)

### 2. Environmental Indicators

- Examination of pollutant emissions in road transport vs. Rail transport
- Assessment of pollution reduction based on the emission model for various modes of transport (rail, air, road, mixed)
- Forecasting changes in rail transport development indicators

### 3. Socio-economic indicators

- Creation of investment areas with rail transport accessibility
- Map of passenger and freight railway lines

- Establishment and development of transshipment centers

### Institutional Responsibilities

Each action in the Action Plan is assigned to a lead institution responsible for implementation and progress reporting:

- **Marshal's Office of the Małopolska Region (UMWM)** - coordination of the Action Plan, monitoring of short-term actions, preparation of implementation reports.
- **Council for the Development of Rail Freight Transport (after establishment)** - strategic assessment, review of progress, recommendations for corrective actions.
- **UTK, PKP PLK, CUPT** - technical verification of feasibility, infrastructure-related indicators, data provision for capacity and performance.
- **Local governments** - monitoring actions affecting land-use planning, access infrastructure and terminal development.
- **Terminal operators and logistics companies** - updating operational data (capacity, transshipment volumes, service availability) through Railhub Planner.

These responsibilities ensure that monitoring is no longer solely declarative but anchored in specific institutions with the capacity to deliver the required data.

### Monitoring Cycle

Monitoring will be conducted in a structured and predictable cycle:

- **Quarterly operational updates:**  
Data on demand, terminal performance, and stakeholder engagement collected via Railhub Planner and direct reporting from terminals, local governments and PKP PLK.
- **Biannual review meetings:**  
Conducted by the Marshal's Office together with the Council (after establishment). The aim is to evaluate progress on each action and identify delays or barriers.
- **Annual evaluation report:**  
Summarises implementation status, evaluates indicators, and provides recommendations for the following year. The report will be shared with regional and national stakeholders and project partners.

This regular cycle ensures that progress can be tracked effectively, and corrective mechanisms activated in a timely manner.

## F. Conclusion and Next Steps

The Małopolska Action Plan developed within the Rail4Regions project provides a realistic and operational framework for strengthening the role of rail freight transport in the region. It addresses the key challenges identified during the assessment phase—limited data availability, low integration among stakeholders, bottlenecks in transshipment infrastructure, and insufficient planning tools—by introducing a coherent set of short-term solutions and actions that can be initiated within the project timeframe.

The adopted solutions focus on reinforcing regional governance structures, improving knowledge and market transparency, optimising the performance of existing infrastructure, and preparing analytical groundwork for future investments. Together, they create a foundation for more effective cooperation between public authorities, infrastructure managers, logistics operators, terminal owners and industrial stakeholders. The actions proposed in this plan translate these solution areas into concrete, feasible steps that can be implemented within one to three years, and which directly support the ambition of increasing the competitiveness and reliability of rail freight transport in Małopolska.

A central outcome of the Action Plan will be the establishment of the Regional Rail Freight Council, which will ensure continuity of cooperation beyond the Rail4Regions project and serve as a long-term governance mechanism. Alongside this, market analyses, modelling work, inventory and assessment of regional infrastructure, activation of the Railhub Planner and preparation of pre-investment briefs will provide essential knowledge and strategic direction for the region. These measures will enable Małopolska to take informed decisions, position itself for national and EU funding opportunities and strengthen its role within Central European freight corridors.

To maintain momentum and ensure effective implementation, several next steps are required:

First, the institutionalisation of the Council for Supporting the Development of Rail Freight Transport should proceed immediately after the adoption of the Action Plan. Its establishment will formalise cooperation, secure partner involvement and create a structured environment for monitoring progress. The Council will also coordinate further analytical and preparatory work and act as the main point of contact between regional stakeholders and national or EU-level institutions.

Second, the data collection and integration activities must be launched early, as they underpin several subsequent actions. Completing the Railhub Planner database, together with the initial market and infrastructure analyses, will allow the region to build a transparent and up-to-date information base, enabling stakeholders to plan more efficiently and identify opportunities for modal shift.

Third, the results of the mapping, modelling and pre-investment assessments should be used to prioritise locations for future interventions. Although major infrastructure investments lie beyond the timeframe of this Action Plan, well-prepared project briefs will allow regional authorities and partners to apply for funding through national programmes and EU mechanisms such as CEF or future cohesion policy instruments.

Finally, stakeholder engagement must continue throughout the implementation period. Regular consultations, working arrangements and sector-specific dialogues will ensure that proposed actions remain relevant, feasible and aligned with market needs. Strengthening cooperation between public and private actors will be essential for achieving long-term change and improving the competitiveness of rail freight transport in Małopolska.

## H Annex

Fig. 1 - Spatial development of the Małopolska Voivodeship

