

TAKING
COOPERATION
FORWARD



Transfer Conference - REIF Shift to rail award
9 March 2022



WPT1 - Smart governance concepts for improved regional rail freight transport | Main results



Institute of Traffic and Transport Ljubljana | Blaž Jemenšek

WPT1 - SMART GOVERNANCE CONCEPTS FOR IMPROVED REGIONAL RAIL FREIGHT TRANSPORT

MAIN ACTIVITIES:

- **Activity 1.1: Baseline survey on status quo, trends and good practices**
- **Activity 1.2: Market potential for rail freight transport**
- **Activity 1.3: Identification of bottlenecks in infrastructures and services**
- **Activity 1.4: Conclusions and Policy Recommendations**



WPT1 - SMART GOVERNANCE CONCEPTS FOR IMPROVED REGIONAL RAIL FREIGHT TRANSPORT

Activity 1.1: Baseline survey on status quo, trends and good practices

Regions/countries analysed:

Styria (Austria)



WPT1 - SMART GOVERNANCE CONCEPTS FOR IMPROVED REGIONAL RAIL FREIGHT TRANSPORT

Activity 1.1: Baseline survey on status quo, trends and good practices

Regions/countries analysed:

Styria (Austria)

Croatia



WPT1 - SMART GOVERNANCE CONCEPTS FOR IMPROVED REGIONAL RAIL FREIGHT TRANSPORT

Activity 1.1: Baseline survey on status quo, trends and good practices

Regions/countries analysed:

Styria (Austria)

Croatia

Trieste / Friuli Venezia-Giulia (Italy)



WPT1 - SMART GOVERNANCE CONCEPTS FOR IMPROVED REGIONAL RAIL FREIGHT TRANSPORT

Activity 1.1: Baseline survey on status quo, trends and good practices

Regions/countries analysed:

Styria (Austria)

Croatia

Trieste / Friuli Venezia-Giulia (Italy)

Emilia-Romagna (Italy)

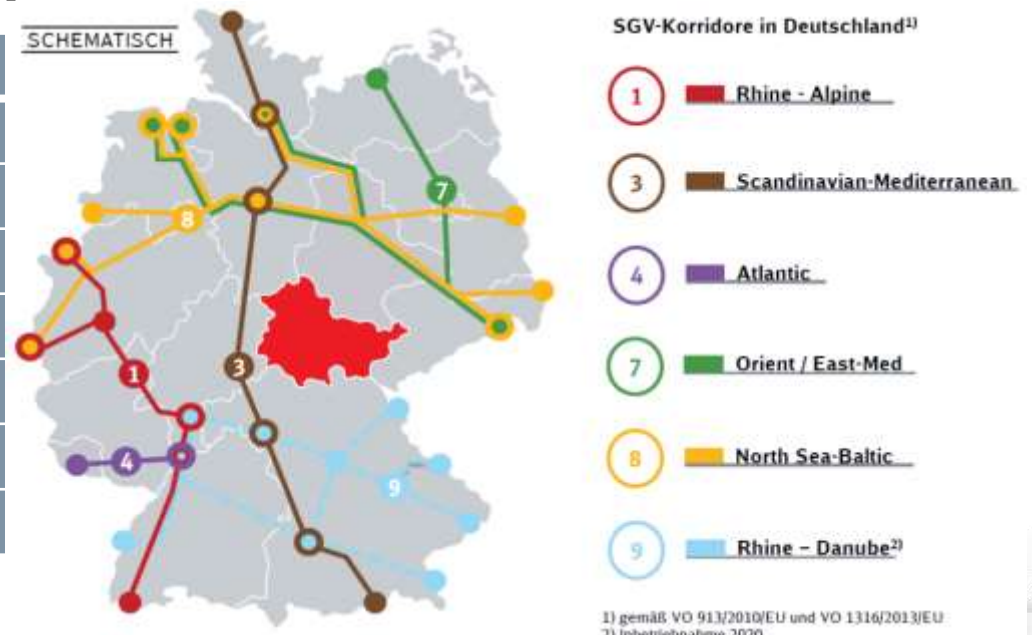


WPT1 - SMART GOVERNANCE CONCEPTS FOR IMPROVED REGIONAL RAIL FREIGHT TRANSPORT

Activity 1.1: Baseline survey on status quo, trends and good practices

Regions/countries analysed:

- Styria (Austria)
- Croatia
- Trieste / Friuli Venezia-Giulia
- Emilia-Romagna (Italy)
- Slovenia
- Turingia (Germany)**



1) gemäß VO 913/2010/EU und VO 1316/2013/EU
 2) Inbetriebnahme 2020



WPT1 - SMART GOVERNANCE CONCEPTS FOR IMPROVED REGIONAL RAIL FREIGHT TRANSPORT

Activity 1.1: Baseline survey on status quo, trends and good practices

Regions/countries analysed:

- Styria (Austria)
- Croatia
- Trieste / Friuli Venezia-Giulia (Italy)
- Emilia-Romagna (Italy)
- Slovenia
- Turingia (Germany)
- West Pomerania, Lubusz, Lower Silesian (Poland)**



WPT1 - SMART GOVERNANCE CONCEPTS FOR IMPROVED REGIONAL RAIL FREIGHT TRANSPORT

Activity 1.1: Baseline survey on status quo, trends and good practices

Regions/countries analysed:

- Styria (Austria)
- Croatia
- Trieste / Friuli Venezia-Giulia (Italy)
- Emilia-Romagna (Italy)
- Slovenia
- Turingia (Germany)
- West Pomerania, Lubusz, Lower (Poland)
- Vas and Zala Counties (Hungary)**



WPT1 - SMART GOVERNANCE CONCEPTS FOR IMPROVED REGIONAL RAIL FREIGHT TRANSPORT

Activity 1.3: Bottlenecks methodology

An analysis of bottlenecks have to comprise all types of bottlenecks:

- transport infrastructure,
- rolling stock,
- services & operations and
- legislation & administration



WPT1 - SMART GOVERNANCE CONCEPTS FOR IMPROVED REGIONAL RAIL FREIGHT TRANSPORT

Activity 1.3: Bottlenecks methodology - transport infrastructure

Lack of capacities at roads, sea/river ports and railway lines

Speed restrictions on the transport infrastructure

Railway lines regarding technical parameters

- track gauges
- traction systems
- signal systems
- axle load
- train length
- loading gauge
- station sidings
- loading ramps
- missing links

Cargo road/rail/sea/river terminals

- Lack of storage areas
- Access to the terminals
- Railway station sidings
- Lack of storage capacities
- Missing terminals

Sea/river port infrastructure

- Lack of berths
- Short length of the berths
- Short draft at the berth
- Lack of storage capacities



WPT1 - SMART GOVERNANCE CONCEPTS FOR IMPROVED REGIONAL RAIL FREIGHT TRANSPORT

Activity 1.3: Bottlenecks methodology - rolling stock and machinery

Rail transport

- Lack of locomotives at rail carriers
- Lack of freight wagons at rail carriers
- Old rolling stock with often defects
- Diesel traction, changes of locomotives

Road transport

- New intermodal technologies (Modalohr)

Cargo terminals (including ports)

- Transshipment capacity machinery
- Lack of gantry cranes, reach stackers, forks
- Lack of trailers
- Old transshipment machinery with often defects



WPT1 - SMART GOVERNANCE CONCEPTS FOR IMPROVED REGIONAL RAIL FREIGHT TRANSPORT

Activity 1.3: Bottlenecks methodology - services and operations

Services and operations comprises several components (Hardware, Software, Orgware, Lifeware, Netware and Dataware) that must all possess the same level of quality.

Lack of Information communication technologies in transport is a bottleneck regarding

- information flows or
- data exchange between different transport stakeholders and end users.

Market services:

- Lack of offers - no providers for different services
- Only one provider - market monopoly (high prices)

Transport restrictions

- Limits during the weekends/holidays
- Limits on transport infrastructure (bridges...)

Working hours of terminals

- No working hours at night/during holidays

Language barriers for international transport

Lack of the labour force for different types of professions (drivers, technicians...)

- Lack of knowledge

Border crossing procedures for rail and road transport

- Take a lot of time
- Police and customs procedures
- Mismatch organisation

- EU member state - EU non-member state



WPT1 - SMART GOVERNANCE CONCEPTS FOR IMPROVED REGIONAL RAIL FREIGHT TRANSPORT

Activity 1.3: Bottlenecks methodology - legislation and administration

Legislated bottlenecks, which arise in circumstances when the existing legislation is not following work normative in actual technology and labour organization, therefore the world labour normative can't be accomplished.

Administration bottlenecks, which evolve due to ancient or unsuitable documentation or information processes that precede and follow all technological processes in traffic.

Non harmonized legislation for transport between different levels

- Local
- Regional
- National

Environment restrictions:

- Emission standards
- Energy efficiency standards
- Emission taxes
- Sustainability transport

Non harmonized fees

- Railway transport
- Road transport
- Maritime transport

Legislation for labour force

- Social rights
- Labour certifications

Standards for transport infrastructure and operations

- Safety standards in transport
- Technical Specifications for Interoperability (TSI) in railway transport



WPT1 - SMART GOVERNANCE CONCEPTS FOR IMPROVED REGIONAL RAIL FREIGHT TRANSPORT

Activity 1.3: Bottlenecks identification

Styria: missing links and capacities

Croatia: old infrastructure; Old rolling stock; Change of locomotives in the border area

Trieste/Friuli Venezia-Giulia: lack of capacities port/terminals/railway lines, which include technological improvements (ERTMS) and new infrastructures; Diesel traction, changes of locomotives; Border crossing procedures: Long stopping times, specific controls while entering/exiting from/to landside

Emilia-Romagna: lack of access to Ravenna port terminals, low capacity of railway lines; Ravenna port - Low capacity and high operation costs of the railway links between station and harbours; traffic must cross passenger station (Ferrara, Ravenna); limitations on weight and length of trains

Slovenia: railway hub Ljubljana, railway connection Koper-Divača; Rolling stock of the national rail carrier in Slovenia, Stopping (dwell) times at border crossings, Process of delivering & dispatching the wagons between Koper train freight station and the Port of Koper, Reading/registering the numbers on wagons going to Iron ore and coal terminal

Turingia: missing terminals, links, infrastructural deficits; Rail freight transport is only profitable on routes with rail passenger transport

West Pomerania, Lubusz, Lower Silesian (Poland): Cargo road/rail/sea/river terminals: missing terminals (Taking into account the growth trend, the number of terminals and total annual transshipment capacity will be insufficient.), Lack of the labour force - Lack of knowledge; Legislation for labour force - the complex process of training and certification

Vas and Zala Counties (Hungary): Railway lines regarding technical parameters: missing links between Lendava (Slovenia) and Rédcics (Hungary), Lack of Information communication technologies in transport - The public transport services are not harmonized in the Hungarian-Croatian-Slovenian cross-border region.



WPT1 - SMART GOVERNANCE CONCEPTS FOR IMPROVED REGIONAL RAIL FREIGHT TRANSPORT

Benchmarking study (based on Baseline survey, Market potential study and Bottleneck analysis)

Region/country	Advantages	Deficiencies
Styria	Developed economy, industry, Good condition, capacity of infrastructure and services, 3 terminals, favorable strategy, plans, allocated funds	Missing connections between areas, Missing capacities of terminals, rail lines
Croatia	Lively market, wide range of production, 3 major freight, logistics ports connected to the hinterland, Favorable strategic plans	Old, less efficient infrastructure (single-track lines), Poor maintenance, poorer level of interoperability, Less favorable services (replacement of locomotives at the border), old vehicles
Trieste / Friuli Venezia-Giulia	Developed trade, Cargo port of Trieste, Good rail line infrastructure, Developed logistics centers, Good cooperation, Favorable policy, strategies, Extensive transport	Poor "last mile" connections, diesel traction, locomotive replacement, delayed border procedures
Emilia-Romagna	Developed trade, economy, Extensive transport (export), Good infrastructure, Developed many intermodal hubs, connections, Good cooperation, Favorable transport policy	Poorer access to intermodal hubs, poorer accessibility of the port of Ravenna, Limited line capacity, High costs, dependence on subsidies



WPT1 - SMART GOVERNANCE CONCEPTS FOR IMPROVED REGIONAL RAIL FREIGHT TRANSPORT

Benchmarking study (based on Baseline survey, Market potential study and Bottleneck analysis)

Region/country	Advantages	Deficiencies
Slovenia	Port of Koper with a high share of railway transport, Freight terminals, Favorable transport policy	Poor condition of infrastructure and vehicles, Bottlenecks on the lines, Divača-Koper connection, Delayed services, Long-term border procedures
Turingia	Developed economy, market, Many loading points, Satisfactory infrastructure, Diversity of cargo types, Good strategies, plans, logistics policy, Many operators	Insufficient electrification of lines and terminals, Missing (closed) lines, connections, Missing terminals, Unprofitable freight traffic
West Pomerania, Lubusz, Lower Silesian	Well-developed railway network, good railway connections, Ports by the Baltic Sea, Individual legal acts	Poor technical condition of lines, vehicles, stations, Poor regional connections, Missing terminals, Insufficient workforce, knowledge, Limited funding, Slow development of transport
Vas and Zala Counties	Business cluster development, Diversified railway network, Developed logistics, Intensive international services	Lack of connection, Bad technical rail line characteristics, Uncompetitiveness of small businesses, Poor IT support, Lack of education, knowledge, communication technologies, cooperation



WPT1 - SMART GOVERNANCE CONCEPTS FOR IMPROVED REGIONAL RAIL FREIGHT TRANSPORT

Activity 1.4: Conclusions and Policy Recommendations

Priority list of actions and Potential policy measures

Region/country	List of actions	Policy measures
Styria	Construction of new tunnel connecting TEN-T core network; upgrading new railway line; expansion of the cargo centre	Involvement of the investments in planning documents (masterplans, strategies)
Croatia	Reconstruction, renewal and modernization of railway lines	Involvement of the investments in planning documents (masterplans, strategies)
Trieste / Friuli Venezia-Giulia	Upgrade of train station: reactivation of the railway siding; construction of new railway gates	New simplified rules for public tenders
Emilia-Romagna	Upgrade of the shunting track; doubling of railway line; upgrade and construction of new railway line; incentives for regional rail transport: establishment of logistic zone	Involvement of the investments in planning documents (business plans, regional transport plans), amendments of national law



WPT1 - SMART GOVERNANCE CONCEPTS FOR IMPROVED REGIONAL RAIL FREIGHT TRANSPORT

Activity 1.4: Conclusions and Policy Recommendations

Priority list of actions

Region/country	List of actions	Policy measures
Slovenia	Construction of new railway hub; rolling stock Replacement; stopping (dwell) times at border crossings, IT integration of rail and port infrastructure, digitalization of port/railway operations	Involvement in national transport strategies, changed legislation, financial policy plans, simplifying procedures for rail investments, international agreements, Financial policy and plans for IT system upgrade and funding
Turingia	Reactivation of railway lines for freight transport; reactivation, modernization and expansion of railports/terminals and loading points	Financial policy and infrastructure policy that supports (spatial) planning, financing and frame-conditions; creation of cost fairness between the types of transport
West Pomerania, Lubusz, Lower Silesian	Reconstruction of the railway lines, construction of new rail sections, constructions of 2nd track, electrification of the section, construction of new stations	Regional infrastructure policy that supports in planning, financing and frame-conditions; National program for the development of railway infrastructure



THANK YOU FOR YOUR KIND ATTENTION!



Blaž Jemenšek
Institute of Traffic and Transport Ljubljana



www.interreg-central.eu/reif



facebook.com/REIF



linkedin.com/in/REIF



twitter.com/REIF

