

Framework conditions for combined transport (regulatory / support programmes)

A benchmark analysis of the BSR supporting programmes

WP 5, Activity 5.1, 5.2 and 5.3, Version: final version

Corresponding author:

Eric FEYEN
Technical Director
International Union for Road-Rail Combined Transport
Rue Montoyer 31 bte 11 – 1000 Brussels (Belgium)
Phone: +32 2 548 78 95 | www.uirr.com | efeyen@uirr.com

© by the authors | June 2021

The authors are solely responsible for the contents which do not necessarily represent the opinion of the European Union, the Baltic Sea Region Programme, or UIRR.

1 EXECUTIVE SUMMARY

According to various cargo flow analysis, the **current BSR CT market share is currently below 5%** and based on the results of the WP2 cargo flow analysis; a significant amount of road traffic exists that might be transferred to other transport modes exist.

The project COMBINE aims at enhancing all forms of combined transport (CT) in the Baltic Sea region (BSR) and to make freight transport more efficient and environmentally friendly. It is of vital importance that the framework conditions and the supporting measures between the transport modes are stable, fair and non-discriminatory.

The first objective of this work package was **to collect, compare and evaluate the current existing measures** to support the development of CT with a clear distinction between the financial initiatives from the non-funding actions. Based on this preliminary light assessment, the second objective was to propose recommendations for a more harmonised approach in the legal and policy approach for all CT combinations with a focus on the Road-Rail combination, which is considered the most dynamic rail freight segment and accounts in Europe for nearly 50% of all tonne-kilometres transported on rail.

The analysis of the **funding programmes**, performed through a survey among the project partners, has evidenced very large disparities in the BSR as some countries do not support at all Combined Transport (such as Finland) whereas other countries offer a large variety of measures such as Germany and Poland. Most of the BSR countries propose measures for all forms of Combined Transport services and also specifically for the Road-Rail Combination. Poland and Sweden develop specific programs for services including inland waterway. In the BSR the most common type of funding measure is related to operational support and terminal infrastructure. The fiscal support, as foreseen by the CT Directive 92/106 is only implemented in two countries (Germany and Latvia). Support measures like digitalisation, rolling stock and assets are only proposed in Poland whereas Sweden promotes research and innovation as well.

The analysis of the **non-funding support measures** has been structured around three main areas:

- *weights & dimensions*: significant differences in length (for example articulated vehicles may vary between 16.50m to 24m and 25.50m (EMS pilot test in Denmark for example), in maximum masses (40t up to 60t and even 76t in Finland. For CT operations, additional weight is allowed (42t or 44t depending on the number of axles) and under some conditions (radius fluctuates between 50 km and 150 km).
- *infrastructure compatibility*: any types of loading units (4m-high semi-trailers and high-cube containers included) are allowed in all BSR countries, the routes on which these loading units can be really operated are in most of the cases not graphically at disposal. The codification of lines are not done systematically in all BSR countries. The maximum axle load for CT wagons is most common set to 22.5t (higher values are permitted under special operational conditions) whereas the total admissible train length is not yet harmonised in the BSR. Depending on the countries, the train length may vary between 630m and 1,050m. The same is applicable for the maximum speed for CT trains as it may vary from 90km/h to 160km/h.

- *access to infrastructure*: an easy and non-discriminatory access to railway infrastructure capacity has been facilitated by the adoption of the so-called ‘applicant’ concept, which allows not only railway undertakings but also other interested parties such as CT operators, shippers... to reserve capacities for their trains. In all analysed BSR countries, the concept has been implemented. The list of submitted main railway improvements demonstrate the needs of the railway system to upgrade the current infrastructure with the main aim to free up new capacities for rail freight in general and CT in particular. The impacts of the TEN-T and RFC Regulations with the adoption of specific funding national programmes are playing a key role in the railway infrastructure redesign.

The **light impact assessment** performed within this work package includes the following four criteria: effectiveness (how strongly has the funding measure influenced CT growth in the selected BSR Member State), environmental efficiency (potential CO₂ savings of the funding measure), cost-benefit efficiency (relationship between investment and output) and transferability (roll-out of the funding measure to other countries). Based on the evaluation carried out thanks to the know-how of the project partners and to surveyed business operators, the following **three key areas** should be considered to promote further Combined Transport in the BSR: action plan regarding the network of terminals in the BSR, incentive plans for intermodal customers willing to enter the CT market (semi-trailers), the necessity for a stable framework regarding the weights and dimensions of commercial road vehicles in particular for the BSR where some important discrepancies exist in the current proposed road combinations and the elaboration of a harmonised set of operational, technical and legal rules for Combined Transport in order to achieve a significant decrease of the carbon dioxide emissions in the transport sector and to reach the objectives of the recently published Green Deal Programme.

To significantly increase the market share of Combined Transport in the BSR, supporting and accompanying measures should be integrated into **a BSR overall strategy on Combined Transport**. This plan should be structured around three main axes: (1) legal & policy review, (2) digitalization & knowledge platforms and (3) additional studies & research needs.

The activities and results performed in this work package have contributed to the identification of potential measures that would significantly impact the development of CT. **The Baltic Sea Region, as high potential region for further CT growth, shall consider the COMBINE recommendations as a strong support** to green efficiently land transport through active promotion of Combined Transport.

Contents

1	<i>Executive summary</i>	2
2	<i>Introduction</i>	5
3	<i>Methodology</i>	6
3.1	Data collection.....	6
3.2	Evaluation & selection	7
4	<i>Directive 92/106 and previous projects</i>	9
4.1	EU Directive 92/106 on Combined Transport	9
4.2	NAIADES and PLATINA.....	10
4.2.1	Measures for the improvement of the competitiveness of inland vessels in general.....	10
4.2.2	Measures for the improvement of the competitiveness of container transport by IWW	16
4.2.3	Lessons for COMBINE	17
5	<i>Support Programs</i>	18
5.1	Denmark	18
5.2	Germany	20
5.3	Lithuania	24
5.4	Latvia	26
5.5	Poland.....	28
5.6	Sweden	31
5.7	Austria	33
5.8	Belgium.....	38
5.9	Switzerland	42
5.10	Consolidated results	46
5.10.1	Funding Measures	46
5.10.2	Non-Funding Measures.....	48
5.10.3	Country sheets.....	51
6	<i>Assessment & selection of the measures</i>	52
6.1	Impacts of the Financial Support Measures.....	52
6.2	Impacts of the Non-financial measures.....	53
6.3	Selection of the most relevant measures.....	54
7	<i>Recommendations of measures</i>	56
8	<i>Conclusions</i>	60

2 INTRODUCTION

The project COMBINE aims at enhancing the combined transport (CT) in the Baltic Sea region (BSR) and to make freight transport more efficient and environmentally friendly.

Freight transport is an essential part of the modern economy as it ensures the availability of products outside their place of production, and also the sourcing of components from the most efficient location. Without transport, today's economy and Western living standards would be inconceivable. The optimisation of this physical movement of goods is essential, not only in terms of productivity but also, increasingly, in terms of environmental sustainability. Throughout Europe, main corridors and agglomerations are regarded as "hot spots" of transport. Since years, capacity problems and environmental impacts are at the forefront of transport policy discussions. Infrastructure bottlenecks are seen as obstacles to the free movement of people and goods.

Aim of this report

The first aim of this report is to identify and categorize all existing funding and relevant non funding support programmes for Combined Transport in the Baltic Sea region and in some key other European Member States such as Belgium, Switzerland and Austria. The second objective is to sum up the (light) impact assessment of all these incentives on Combined Transport based on defined criteria. The last objective is to consolidate all gaps and propose recommendations for a more harmonised approach in policy regulations in the BSR for Combined Transport.

Structure of the report

The report is structured as follows: Chapter 2 summarizes the basic elements of the methodology used in WP5 to collect evidence related to the funding and non-funding measures. Chapter 3, on the other hand, aims at the consolidation of the identified support programs in the different BSR Member States. The chapter 4 reports on the results of the evaluation and selection activities. Chapter 5 sums up the recommendations of the consortium related to BSR support measures whereas chapter 6 concludes the activities performed within work package 5.

3 Methodology

Initially designed and planned as two separate activities, the analysis of the support and non-support measures for Combined Transport in the BSR has been merged in one single approach. This section of the document details the overall methodology used to collect and categorize the regulatory framework of all types of Combined Transport mixing the transport modes road, rail, inland navigation and short-sea-shipping.

The analysis and impact assessments of activities outside COMBINE have been also used as foundations for identifying the different supporting measures considered as relevant for BSR in particular (1) the EU Directive 92/106 and all related actions and activities (market analysis, refit procedure impact assessment, legal analysis) and (2) the lessons learned from the European projects NAIADES and PLATINA.

3.1 Data collection

The first objective of activities 5.1 and 5.2 was the creation of an inventory of all relevant funding and non-funding schemes implemented in the various BSR Member States as support for Combined Transport (all forms).

To this effect, two different surveys were designed to collect all types of measures for all forms of Combined Transport: one focusing on the financial support measures in the BSR and the second one concentrating on the other types of support measures in the BSR on specific pre-selected topics.

The first survey was composed by the following main elements (see annex for guidelines and template):

- Coverage: all forms of Combined Transport except accompanied transport and air-road, air-rail
- Name of the program
- Area coverage (national, regional, local/urban, other)
- Type of measure: direct grant, tax allowance, loan, others
- Market segments: Combined Transport (general), CT Road-Rail, CT Inland Waterway
- Total funding scheme in EUR
- Funding period
- Classification criteria: (1) Operational (funding per km, support of processes, technology support), (2) Rail Infrastructure (first/last mile, hinterland access, access charges), (3) Terminal infrastructure (e.g. for horizontal technologies), (4) Digitalisation (smart systems, IoT, Industry 4.0, artificial intelligence), (5) Rolling stock (wagons), (6) Assets (intermodal loading units), (7) Research and innovation (studies, demonstrators), (8) Fiscal support (reimbursement vehicle tax, exemption of vehicle tax...) and (9) Others
- Short description of the measure
- Contact details (website, contact point, email)

As the second survey covered a multitude of complex elements of the CT ecosystem, it was decided to focus the questionnaire on three domains (see guidelines and template in the annex):

- **Topic ‘Weights & Dimensions’:** for a smooth transfer between all (land) transport modes, it is required (and essential) that the road vehicles, equipment and loading units are compatible with intermodal transport. An analysis and an assessment of the existence of this compatibility has been performed in the different BSR Member States.
- **Topic ‘Infrastructure Compatibility’:** for rail operations, it is also essential that the assets (rolling stock + intermodal loading units) are safely managed on an interoperable railway infrastructure. The core elements such as railway gauge, train length, train weight have been collected under this topic.
- **Topic ‘Access to Infrastructure’:** to promote modal shift on rail, the railway operators need a non-discriminatory access to the railway infrastructure (for example the implementation of the applicant concept to all railway actors, the future infrastructure works and upgrades to facilitate the organisation of trains).

The following partners have been participating in the design and completion of these two surveys (main BSR countries + Austria/Belgium/Switzerland as benchmark European countries): Austria (SGKV), Belgium (UIRR), Germany (SGKV), Denmark (TBST), Poland (Uni. Gdansk), Latvia (LLA), Finland (Pirka), Lithuania (LIT Rail) and Sweden (Closer).

As support activities for WP5, UIRR has subcontracted the following tasks:

- Design of country sheets (incl. data collection & lay-out): the idea is to include all WP5 results in one comprehensive database with static and dynamic data. The mandate included the following main activities: (1) set-up of a data matrix, (2) validation of the process, (3) data collection, (4) controlling and reviewing of data. This study was carried out by BE Multimodal Consult (Mr. Frédéric Buyse) based in Belgium.
- Support measure for a mandatory craneable requirement for semi-trailers: the objective is to assess the impact of such a measure on the shift of semi-trailers onto rail: The following tasks have been performed: role of Combined Transport for the EU Green Deal, the current general possibilities and hurdles and the potential for the BSR. This analysis has been realised by the company Railiable (Dr.-Ing. Jens Engelmann) based in Germany.
- Legal analysis on the mobility package II (cabotage rules for road and CT): the consultant Oliver Wymand was selected to perform an evaluation of the impacts of the suspension of article 4 of the CT Directive on the competitiveness of Combined Transport in Europe.

3.2 Evaluation & selection

The grant agreement foresees an evaluation of all measures identified for the BSR. As a full-fledge impact assessment of every support scheme is not feasible, the project partners decided to perform a light impact assessment based on the return of experiences of business partners and of project partners. The exchanges with national authorities were also used for this task.

This light impact assessment includes the following criteria:

- **Effectiveness:** how strongly has the funding measure influenced CT growth in the selected BSR Member State
- **Environmental efficiency:** CO2 savings (potential) of the funding measure
- **Cost-Benefit efficiency:** relationship between investment and output
- **Transferability:** assessment of the transferability of the funding measure to other countries

The following table represents the template used for the evaluation scheme. It has been structures in three different elements (details are included in the annex):

- Measure: (1) categorization of the measure, (2) subcategory of measure and (3) small description of measure
- Impact: list of criteria (see above), scoring point (1 blue ball = minor impact, 5 = major impact)
- Transferability: 1 blue ball = low, 5 = high)

Measure			Impact			Transferability
Category of measure	Sub Category of measure	Funding/ Non-Funding Scheme	Effectiveness (CT growth)	Environmental Efficiency (CO2-Reduction)	Cost-benefit Efficiency	
regulatory	Positive	Exemption from driving bans (§ 30 Abs. 3 StVO)	● ● ●	●	● ● ● ●	● ● ● ●

All individual evaluation reports will be consolidated in a summary table which will serve as a basis for the selection of the three most relevant supporting measures for the BSR. The following criteria have been used during the selection procedure:

- Expertise and knowledge of the project partners
- The high-level of transferability of single measures (as identified by selected business partners during the evaluation)
- The results of the benchmark analysis (in particular with Austria and Switzerland where the impacts of the various support measures on Combined Transport are considered as high and very positive
- The conclusions of the subcontracting activities

4 DIRECTIVE 92/106 AND PREVIOUS PROJECTS

The following sections of the report will summarize the main relevant conclusion regarding (1) the only EU legal instrument on Combined Transport (Directive 92/106) and (2) the previous projects NAIADES and PLATINA.

4.1 EU Directive 92/106 on Combined Transport

The Council Directive 92/106/EEC on the establishment of common rules for certain types of combined transport (known as the Combined Transport Directive) was adopted on 7 December with the original intention to improve the sustainability of the EU transport system through modal shift from road to rail and waterborne transport. It was meant to do so by lifting existing regulatory obstacles and increasing the competitiveness of international intermodal (and more specifically "combined") transport vis-à-vis road only freight transport.

As the only EU legal instrument in place that directly supports intermodal freight transport, the Directive did not impose obligations on economic operators but rather introduced support measures for strictly defined ("combined") intermodal transport operations. Those measures were split between:

- "regulatory" support measures : measures a) safeguarding the freedom to provide the cross-border service, i.e. preserving combined transport from possible national protectionist restrictions (authorisation schemes, regulated tariffs and quotas), b) exempting the road legs of international combined transport from the road cabotage limitations under Regulation (EU) and c) allowing, through cross-reference with the Weights and Dimensions Directive (53/96/EC), heavier loads for vehicles used in intermodal transport road legs to compensate for the tare weight of the load unit as well as use of 45 foot containers;
- "economic" support measures: providing selected fiscal incentives and an extension of the definition of the own-account transport. These were meant to partially correct the unbalance between combined transport and road-only transport caused by the existence of negative externalities not fully reflected in the price of road freight.

A REFIT evaluation of the Directive was carried out in 2014-2016 and concluded that the Directive continues to be a relevant instrument for supporting combined transport. It was established that without EU action, cross-border Combined Transport services would likely be faced with barriers resulting from different legal systems, making Combined Transport services less attractive and possibly unfeasible. The evaluation underlined that Combined Transport helps to reduce negative externalities through modal shift: it was estimated that the shift from road to intermodal transport induced by the Combined Transport Directive has brought along an annual saving of up to €2.1 billion in external costs. More specifically the evaluation reported that the shift from road to rail/road combined transport saved in 2011 (compared to road only) 7.3 Mt of CO₂, while the shift to inland waterways saved 0.96 Mt of CO₂ in the same year.

As pointed out in the evaluation, the freight transport market has evolved significantly since 1992 with the globalisation of the world economy and in particular the spread of global supply chains which has generated a considerable increase in freight transport volumes in the world and in the EU. The

enlargement of the EU from 12 to 28 Member States has also further influenced the trade flows and therefore the transport market of the EU. These trends have supported the continuous growth of the transport volumes in the EU, including growth of Combined Transport. In addition some technical developments during the last 25 years can be assumed to have influenced multimodal transport more than single modal transport. In particular the widespread use of containerized transport can be seen as having supported intermodal transport, while the greater use of ICT have made it easier to plan and execute multimodal journeys.

Considering the benefits of the Combined Transport Directive and the freight transport market development since 1992, the evaluation showed that there is significant margin for further improving the effectiveness of the Directive, owing to the fact that some of its provisions are outdated, its language is sometimes ambiguous, and its scope is limited. The shortcomings relate in particular to the definition of Combined Transport, the limitations of fiscal incentives and the outdated provisions relating to transport documents.

In addition, the transposition and implementation of the Directive has been somewhat problematic. While the Directive has been transposed into national legislation by most Member States, the quality of transposition is not homogenous. Both the analysis by the Combined Transport Study as well as the public consultation highlighted that considerable differences exist in the implementation of the Combined Transport Directive. Some Member States' legislation seems to miss parts of the measures, while in others the chosen language is not in full conformity with the Combined Transport Directive or allows contradictory or misleading interpretation.

4.2 NAIADES and PLATINA

The objective of NAIADES especially of NAIADES II is to develop a framework for inland navigation to become a quality mode of transport. Inland waterway transport should be efficient and well-integrated into the intermodal chain but should also still be a mode of transport with a high environmental standard.

Therefore the European Commission launched the PLATINA project. PLATINA's aim was to implement efficiently actions and measures promoting inland waterway transport. Neither NAIADES nor PLATINA are projects for a better promotion of container transports on inland waterways, but projects for a better promotion of all waterway transports. Though there is a distinction of cargo categories, most recommendations and measures are independent from these categories. Thus, it should be differentiated between general measurements and specific measurements for container transports.

4.2.1 Measures for the improvement of the competitiveness of inland vessels in general

There are three general measures mentioned by PLATINA

- Improving infrastructure quality and fostering integration of inland waterway transport into the logistics chain
- Supporting the smooth functioning of the market and restructuring of the sector and address the need for qualifications, skills, and quality jobs
- Greening the sector by reducing emissions and boosting innovation

The most obvious measure for improving the competitiveness of inland navigation to other modes of transport is the elimination of bottlenecks in waterway infrastructure. The PLATINA working group made a statement concerning the infrastructure:

“A strategic European IWT infrastructure development plan, incorporating EC transport policy objectives, should at least cover the following major challenges:

- To strengthen the competitiveness of IWT
- To lower the impact of mobility on the environment, make transport cleaner and green-er, reduce energy consumption, improve energy efficiency, and enhance security of energy supply by decreasing dependency on fossil fuels
- To optimize the use of existing infrastructure, making transport more efficient, improve mobility in urban and inter-urban transport, increase throughput and reduce congestion
- To improve traffic and transport safety and security
- To adjust the design and construction methods to climate change and future trends of bigger vessels
- To determine and apply the correct price for IWT considering the external costs induced by IWT.”

Thus, the European Commission published in a press release how important it is to remove bottlenecks. Bottlenecks in form of inadequately dimensioned locks, bridges or fairways and missing links should be eliminated. The Commission proposed to improve transport of water-borne freight by upgrading locks, bridges, and channels. Therefor the bottlenecks of the Euro-pean inland waterways had been discovered. This had been done for the following regions:

- The North-west (Rhine-Scheldt) European Network
- Northern-East-Western network
- South West-Eastern network (Rhine-Main-Danube and Danube)
- North-South network (Franc)

The transport data of these regions and the transport forecast 2025 had been analysed. The following specific bottlenecks and missing links with relevance for COMBINE had been found:

Route	O-D-Relation	Bottleneck	Country involved	Upgrade to Waterway class
Baltic Sea Central European Route	Danzig–Kozle/ Vienna	Odra (Szczecin – Widuchowa)	PL	n.a.
Baltic Sea Central European Route	Danzig–Kozle/ Vienna	Odra (Widuchowa – Kozle)	PL	n.a.
Baltic Sea Central European Route	Danzig–Kozle/ Vienna	Brzeg Dolny-Nysa Łużycka estuary	PL	III
Baltic Sea Central European Route	Danzig–Kozle/ Vienna	Gliwice Canal	PL	n.a.
Baltic Sea Central European Route	Hamburg– Pardubice/Vienna	Danube – Oder – Elbe	PL, CZ, DE, SK, AT	Vb
Baltic-Black Sea Route	Danzig-Kherson/ Odessa	Upper Wisla river (13.5km) Oświęcim – Kraków/Przewóz	PL	III
Baltic-Black Sea Route	Danzig-Kherson/ Odessa	Upper Wisla river (174.7km) Kraków –Przewóz- Sandomierz	PL	III
Baltic-Black Sea Route	Danzig-Kherson/ Odessa	Wisla (Biala Gora – Wlocalwek and Plock to War)	PL	n.a.
Baltic-Black Sea Route	Danzig-Kherson/ Odessa	Wisla (Bydgoszcz – Biala Gora, class II)	PL	n.a.
Baltic-Black Sea Route	Danzig-Kherson/ Odessa	Zeran Canal (Zeran – Zegrze Lake)	PL	n.a.
Baltic-Black Sea Route	Danzig-Kherson/ Odessa	Bug (Zegrze Lake – Brest)	PL	n.a.
Baltic-Black Sea Route	Danzig-Kherson/ Odessa	Nemunas Jurbarkas to Kaunas river depth	LT	V
Northern Coastal Route	Gibraltar – Arhangelsk – White Sea	Saimaa Canal from Vyborg (Russian Federation) to Kuopio/Joensuu	FI	Va
Northern Coastal Route	Gibraltar – Arhangelsk – White Sea	Keitele Canal connecting Lake Päijänne to Lake Keitele	FI	Via
Hanseatic Route	Rotterdam – Klaipėda	Odra and Warta / Notec / Bydgoski Canal (from Kostrzyn to Bydgoszcz	PL	II
Hanseatic Route	Rotterdam – Klaipėda	Odra Brzeg Dolny – Nysa Łużycka estuary – 260.0 km)	PL	III

To eliminate these bottlenecks and missing links is only the first part of the first measure to improve the competitiveness of inland navigation. The second part is to integrate inland waterway transports into logistic chains. To do this the infrastructure and the ports are necessary conditions. Hence the second part of the basic necessary condition are the (inland-)ports and the terminals. For the inland ports in Europe's core inland waterway network the ports have been evaluated. This should be done for the Baltic region as well. The major bottlenecks in ports are:

- Lack of space for growth of cargo handling and industrial activities directly related to IWT due to a lack of physical space or environmental restrictions

- Limited working hours of industries and terminals (e.g. due to noise regulations not possible to work during nighttime)
- Limited pre-/end-haulage movements (due to safety issues or hindrance to residents in the area), poor quality of roads connecting the cargo handling location with the main roads (e.g. small local roads crossing residential areas or city centers)
- Lack of funds for repair and maintenance of quays
- Lack of funds for dredging ports (high dredging costs especially if the soil is contaminated)
- Difficulties with maneuvering at narrow port entries resulting in time losses or damage to vessels or quays
- Lack of waiting areas for vessels, also in seaports. In seaports, due to limited capacity, in-land vessels compete with seagoing vessels. Often, the handling of seagoing vessels has higher priority than inland vessels obliging inland vessels to wait until deep-sea vessels are loaded/unloaded. Frequently, this even occurs if a seagoing vessel does not arrive at the planned time at the port (due to weather conditions, delays elsewhere in ports, etc.)
- City planning pressures and administrative burdens (permit labyrinth)

The improvement in the ports and terminals are not only an infrastructural improvement but also an improvement in the integration of waterway transport into logistic chains. Ports are the important intersection between different modes of transport. These basic measures, the improvement of the infrastructure and the ports and terminals, are the basis for improving the competitiveness of inland waterway transport.

Additionally, the use of the infrastructure should be optimised. This can be done with the help of River Information Systems (RIS). Optimising the use of the infrastructure with RIS has also been done by PLATINA. But it should be kept in mind that the RIS directive is only relevant for waterways of the class IV and higher classes. Hence even for this the infrastructure improvement mentioned above should be realised. The aim of RIS is described on the CESNI website:

“River Information Services (RIS) is the concept whereby information services in inland navigation support traffic and transport management in inland navigation, including interfaces with other modes of transport. Directive 2005/44/EC on harmonised river information services on the EU’s inland waterways (hereinafter referred to as the RIS Directive) requires Member States to implement RIS according to certain standards. The RIS are expected to improve safety, efficiency, and the environmental friendliness of inland navigation. The EU has taken a global approach that encompasses policy development, a legal framework, support for re-search and development and monitoring of implementation of the legislation.

The RIS Directive refers to the four key technologies: Inland Electronic Chart Display and Information System (Inland ECDIS), Notices to Skippers (NtS), Inland (AIS) and Electronic Reporting International (ERI). These technologies are based on technical and operational standards which were initially defined and are continuously updated by the RIS Expert Groups. The RIS Directive demands Member States to implement RIS according to these standards. A major contribution to the standardisation process has been the European Commission’s adoption through technical regulations of standards for Inland

ECDIS, Notices to Skippers (NtS), Vessel Tracking and Tracing (VTT) and Electronic Reporting International (ERI).

The standardisation and its harmonisation in European countries aim to better fulfil the RIS Objectives as follows:

- Enhancement of safety in inland ports and rivers,
- Enhance the efficiency of inland navigation - optimise the resource management of the waterborne transport chain by enabling information exchange between vessels, locks, bridges, terminals, and ports,
- Better and more effective use of the inland waterway infrastructure - providing information on the status of fairways,
- Environmental protection - providing traffic and transport information for an efficient calamity abatement process,
- Better integration of IWT into multimodal supply chains through accurate and timely information to support transport management.

The services included in the RIS concept are for example:

- Information on fairways to plan, execute and monitor voyages by boat masters and fleet managers (e.g. water levels, aids to navigation, fairway information, opening hours of locks etc). The information comprises geographical, hydrological, meteorological and traffic related data.
- Traffic information services comprise information on vessel positions to allow for tactical or strategic planning.
- Traffic management aims at optimising the use of the infrastructure as well as facilitating safe navigation especially at RIS Centres as well as at locks and bridges.
- Calamity abatement services (CAS) are responsible for registering vessels and their transport data at the beginning of a trip and updating the data during the voyage with the help of a ship reporting system. In case of an accident the responsible authorities can provide the data immediately to the rescue and emergency teams.
- Information for transport management includes estimated times of arrival (ETA's) provided by boat masters and fleet managers based on fairway information making it possible to plan resources for port and terminal processes. Information on cargo and fleet management basically comprises two types of information: information on the vessels and the fleet and detailed information on the cargo transported.
- statistics and customs services: the RIS improves and facilitates the collection of inland waterway statistical data in the Member States.
- Waterway charges and port dues: the travel data of the ship can be used to automatically calculate the charge and initiate the invoicing procedure.

RIS are servicing operational perspectives such as:

- Traffic-related information benefits all parties when it comes to safety.
- Transport-related information which focuses mainly on efficiency.

Based on the requirements of the RIS Directive, the RIS Standards were originally established according to a technical and operational approach. The technical Standards can possibly evolve to a RIS-user centered approach.”

The next general measure to improve the competitiveness of inland waterway navigation is to support the smooth functioning of the market and restructuring of the sector and address the need for qualifications, skills, and quality jobs. There for a European network had been found-ed: EDINNA (Educational network of inland waterway navigation schools and training insti-tutes). The EDINNA working group consist of the following members: EBU (European Barge Union), ESO (European Skippers Organisation), ETF (European Transport Workers Federation), Platina, Danube Commission, Commission Centrale pour la Navigation du Rhin, and EDINNA. This working group develops the STCIN (Concept for Standards of Training and Certification for Personnel in Inland Navigation). The STCIN is a bottom-op approach. The schools and the IWT sector developed STCIN together.

The last general measure is greening the sector by reducing emissions and boosting innovation. The memo of the European Commission shows how the commission wants to take part in greening the sector:

“Compared to other land-based modes of transport, inland waterways are energy-efficient, safe, almost congestion-free and silent. However, progress on reducing air pollutants has been out of tune with this otherwise favourable trend. Uptake of alternative fuels such as LNG may help the sector to catch up with other transport modes. The Commission will review the emission limits for new engines and explore further emission limits for existing ones. It will also amend the rules to allow the use of LNG as a fuel in inland navigation. The inland waterway transport regularly comes up with new services and develops new markets. However, the overall innovation rate is low and needs a strong boost. The Commission calls upon the sector to develop a roadmap for research, development, and innovation. The Commission will provide support for greening and innovation from the Horizon 2020 and the Connecting Europe Facility programmes and has tabled a proposal as part of the NAIADES II package to allow the sec-tor’s reserve fund to support investment in reducing emissions. Support action by the Commission can be complemented by dedicated programmes at the Member State level.”

This has been concretised in the PLATINA report about the technical support for an impact assessment on greening the inland fleet. There are four types of technical measures for greening the fleet:

- Infrastructure measures
- Ship-related technical measures
- Ship operational measures
- Organisational measures

There are different policy options to implement these measures:

(1) Regulation

- Compulsory emission standards for new engines
- More stringent emission standards for existing engines have so far not been implemented in Europe transport policy

(2) Economic instruments

- Emission taxation/fund, like the one in Norway, has granted significant parts of the budget for LNG and SCR projects
- Subsidy programmes to accelerate the introduction of new engines, DPF and SCR technologies. Such programmes have been implemented in Germany, Netherlands, and Belgium. The Dutch programme was evaluated as ineffective as the uncertainty regarding costs and system implementation were high and flanking measures were lacking.

(3) Voluntary agreements and initiatives

- Green award certification schemes can lead to the recognition of and motivation clean ships
- Covenants between industry and government
- Awareness and training initiatives for instance in smart steaming

What are the benefits of these measures? The Memo of the European Commission puts it in a nutshell:

“The whole European economy will benefit as inland waters will be better exploited. The inland waterway operators will benefit from a clearer legal framework, from improved operating conditions, from framework conditions that stimulate innovation and from the increased possibility to use budgets contributed by the sector to a reserve fund. At the same time, the industries and users of inland navigation will benefit from quality inland navigation services. European citizens will enjoy environmental and health-related benefits as inland navigation will become more attractive from an economic and environmental perspective.”

4.2.2 Measures for the improvement of the competitiveness of container transport by IWW

All the measures for the general improvement of the competitiveness of inland waterway transports will of course also improve the competitiveness of container transport by inland vessel. Especially the integration of inland navigation into logistic chains are important for a higher use of inland vessel for container transportation.

The competitiveness of inland navigation, especially the container transport by inland vessel depends on:

- The existence of high-quality waterways, terminals and the type and size of economic activity in the area.
- The related transport volumes and transport distances, allowing sufficient critical mass for IWT to provide frequent services and interconnections with other transport modes.

- The technical feasibility to transport various types of goods, independent of transport distance such as perishables, high value goods, etc.
- The local circumstances, such as the specific location of ports and terminals and the pre-end haulage time needed to serve distribution centres and/or production plants and the transshipment costs at the terminal.
- IWT sensitivity to the water level conditions. In low water situations the IWT operators do calculate low water surcharges to compensate for the loss of payload of vessels as result of reduced fairway depth.

To raise the modal share of inland waterway transport in intermodal chains the following elements should be fulfilled:

- Increasing the frequency of the services.
- Shorten the transport time in pre-end haulage operations between terminal and customer.

Major problems for raising the share of inland navigation in intermodal chains are:

- In many cases there are no direct waterway connections to major production plants and/or distribution centres;
- Expensive and time-consuming pre-end haulage and transshipment operations;
- IWT transport distance, which is often much larger than the transport distance by truck or rail (e.g. Antwerp – Metz);
- Consolidation of cargo requiring contracts with multiple clients and co-ordination with multiple parties in the intermodal transport chain;
- Specific barriers on stretches in the network that can emerge.

Beside this there is a policy option to strengthen the competitiveness of container transport by inland vessel. This is the funding of combined transport terminals as it is done in Germany. The German funding of terminals had been discussed as one funding option in PLATINA. The optimisation of the terminal network helps to shorten the transport time in pre-end haulage operations between terminal and customer. Hence it might also to raise the frequency of the container services by inland vessels.

4.2.3 Lessons for COMBINE

There is no specific funding scheme for combines transport foreseen. However, all general measures mentioned above will increase the competitiveness of inland navigation and thereby also the competitiveness of container transport by inland vessel. The infrastructure is the basis for all other measures. It is a necessary condition. The optimal use of the infrastructure can be reached with the help of RIS. To reach a good competitive condition the skills and labour force of inland navigation should be optimised. This is also a necessary condition.

In contrast to the above mentioned is greening the inland waterway transport not a necessary condition, but it will raise the reputation of inland navigation. This is especially important in the competition with the other modes of transport for container transportation.

Beside the infrastructure most important is the integration of inland navigation in logistic chains. Therefore, the terminals must be in a good condition and the terminal network must be tight.

5 Support Programs

The following section compiles the results of the surveys on the various promotional measures for Combined Transport in the Baltic Sea Region per analysed country. The analysis covers the BSR countries and three additional countries as benchmark (Austria, Belgium and Switzerland). Consolidated summary tables are also displayed in a separate section to compare the measures within the BSR and with the three reference countries.

5.1 Denmark

Part I - Funding measures

Support (name)	Description	Type	Market segment	Classification
Environmental aid scheme for the transport of goods by rail 2018-2020.	The environmental compensation is fixed as the proceeds from the infrastructure charges that railway undertakings have to pay divided by the total number of net tonne kilometres transported minus the cost of fixed connections over the Great Belt and Øresund (bridges) and adjusted for any surplus or deficit in previous years.	Direct Grant	CT Road-Rail	Operational
Upgrade of state owned rail-road terminals	The capacity of the three state-owned Rail-Road terminals has been upgraded, both with respect to the area of the terminals and in one instance, at Padborg, also with respect to the equipment.	Financed directly by the owner and then in principle repaid by the operator through the lease agreement.	CT Road-Rail	Terminal infrastructure (e.g. for horizontal technologies)
Upgrade of port terminals	At both ports the state has co-funded the establishment of a new Rail-Road Terminal. In addition to the state the respective ports, which are considered municipal ports, have co-funded the remaining investments.	Co-financed between the state and the respective port.	Combined Transport in general (all forms): Rail-Road-Sea	Rail Infrastructure (first/last mile, hinterland access, access charges)

Part II – Non-funding measures

TOPIC Weights & Dimensions – ROAD AND COMBINED TRANSPORT (RAIL)	
Maximum length - Road Trains - Articulated vehicles	18.75 m 25.25 m (pilot test of European Modular System – EMS)
Maximum width	2.55m (2.60 m for reefer units)
Maximum mass	40t - under special conditions 44t for shorter intermodal transports and for EMS on selected parts of the road network 60t.
Implementation of Directive 2015/719	Yes. In DK this has been somewhat "over"-implemented, in the way that we allow 48 tonnes on lorries with 6 axles and 56 tonnes on lorries with 7 axles.
Special allowances for larger and heavier road vehicles	Yes: Following notification to the EU, a pilot test on EMS was initiated in Nov. 2008 for a three-year period. Following a detailed evaluation, completed in 2011, the pilot was extended. The network, which EMS' are allowed to use, has gradually been extended, from the state road network and main ports and terminals, to include many ports, terminals and even larger private logistical companies, located on different types of road network. See also above description with respect to weight loads for lorries with 6 and 7 axles.
Special authorization for Combined Transport	Yes, in principle lorries up to 44 tonnes are allowed for intermodal transports basically within 150 km. of distance
Implementation of Directive 92/106	Yes. This is not an issue in DK, for instance for a "tractor" with 3 axels and a semi-trailer also with 3 axels.

TOPIC Infrastructure compatibility (RAIL)	
Transportation of 4m-high semi-trailers	4 m is accepted - no maps with codified lines. Please see Network statement, at: https://uk.bane.dk/en/Railway-Undertaking/Network-Statements/Network-Statement-2020
Transport of containers and swap bodies with a height of 2 900 mm	Accepted - no maps with codified lines. For further details see: https://uk.bane.dk/en/Railway-Undertaking/Network-Statements/Network-Statement-2020
Are works for railway gauge improvement planned?	Yes - Network Statement: https://uk.bane.dk/en/Railway-Undertaking/Network-Statements/Network-Statement-2020
Maximum axle load for CT wagons	22.5m

Maximum combined transport length:	combined trains	835 m possible with the agreement of Banedanmark.
Maximum mass of combined transport trains:	mass of transport	Depends on the train characteristics (line, operations, types of locks).
Maximum speed for combined transport trains:	speed for transport	400 meters when the speed is above 120 km/h; - 600 meters when the speed is at most 120 km/h - 835 meters when the speed is 100 km/h

TOPIC Access to infrastructure		
Implementation of applicant	of	Yes
New/upgrade/renewal of network		Yes: roll out ERTMS on all state railway lines - all state railway lines will be equipped with ETCS Level 2, Baseline 3, including GSM-R, before the end of 2030.

5.2 Germany

Part I - Funding measures

Support (name)	Description	Type	Market segment	Classification
Richtlinie zur Förderung von Umschlaganlagen des Kombinierten Verkehrs (KV) nicht-bundeseigener Unternehmen (Schiene-Straße)	<p>The support programme provides financial assistance for investments by non-federally owned companies in the construction and expansion of CT transshipment facilities. Up to 80% of the eligible investment expenditure is paid as a non-repayable subsidy for the construction and expansion of CT transshipment facilities.</p> <p>Interested investors submit their applications for funding for rail/road or rail/rail CT facilities to the Federal Railway Authority, for waterway/road or waterway/waterway CT facilities to the Directorate-General for Waterways and Shipping.</p>	Direct Grant	CT Road-Rail	Terminal infrastructure (e.g. for horizontal technologies)

<p>Bundeschienen wegeausbaugesetz /Leistungs und Finanzierungsvereinbarung (LUV)</p>	<p>The Federal Railway Authority (EBA) is the licensing authority for federal grants for investments in rail infrastructure on the basis of statutory regulations or funding guidelines.</p> <p>The Federal Government finances new construction, expansion and replacement investments in the railway infrastructure of the Federal railways within the framework of the funds available in the federal budget. New construction and expansion measures are carried out in accordance with the requirement plan for the federal railways. For replacement investments in the existing network, federal funds are available under the Performance and Financing Agreement (LuFV). Most of the federal funds are granted on the basis of the Federal Railway Infrastructure Development Act (BSWAG). As a rule, these are non-repayable construction cost subsidies which the Federal Government provides in the form of full financing.</p>	<p>Direct Grant</p>	<p>CT Road-Rail</p>	<p>Terminal infrastructure (e.g. for horizontal technologies)</p>
<p>Exemption vehicle tax</p>	<p>Exemption from motor vehicle tax for those vehicles that are exclusively used for initial and terminal haulage, Refund of motor vehicle tax for vehicles used in piggyback transport</p>	<p>Tax allowance</p>	<p>CT Road-Rail</p>	<p>Fiscal support (reimbursement vehicle tax, exemption of vehicle tax...)</p>
<p>Exemption from driving ban</p>	<p>Exemptions from the driving ban on weekends and bank holidays and from the holiday driving ban (§ 30 Abs. 3 Straßenverkehrsordnung)</p>	<p>Others</p>	<p>CT Road-Rail</p>	<p>Operational (funding per km, support of processes, technology support)</p>
<p>Maximum permissible weight</p>	<p>Maximum permissible weight has been increased to 44 tonnes for initial and terminal road haulage (§ 1 der 53. Ausnahmeverordnung von den Vorschriften der Straßenverkehrs-Zulassungs-Ordnung).</p>	<p>Others</p>	<p>CT General</p>	<p>Operational (funding per km, support of processes, technology support)</p>

Access to terminals without discrimination	Free access to the rail network in Germany. Access to combined terminals whose construction has been supported through public funds has to be provided without discrimination.	Others	CT Road-Rail	Operational (funding per km, support of processes, technology support)
---	--	--------	--------------	--

Part II – Non-funding measures

TOPIC Weights & Dimensions – ROAD AND COMBINED TRANSPORT (RAIL)	
Maximum length - Road Trains - Articulated vehicles	- 18750 mm - 16500 mm
Maximum width	2550 mm
Maximum mass	40 tons
Implementation of Directive 2015/719	YES
Special allowances for larger and heavier road vehicles	YES
Special authorization for Combined Transport	Vehicle in intermodal traffic: 16.55 m [cf. Fifty-fifth Ordinance on Exemptions from the Requirements of the Road Traffic Licensing Regulations (55th Exemption Ordinance to the Road Traffic Licensing Regulations)]. Vehicle in intermodal transport: 44 t [cf. fifty-third regulation on exemptions from the provisions of the Road Traffic Licensing Regulations (53rd regulation on exemptions from the Road Traffic Licensing Regulations)]. The exceptional maximum weight is only allowed in combination with sea- or intermodal transportation, the distance in a straight line to the nearest port or intermodal terminal can never be more than 150 km.
Implementation Directive 92/106	CT YES + The implementation of the EU directive is the responsibility of the states. For CT in Germany, Directive 92/106/EEC is particularly noteworthy, which provides for the liberalisation of pre- and post-carriage in CT and tax relief for CT. It specifies the ceiling for the part of the journey made by road, by reducing it to 150 km or 20 % of the total distance, regardless of which modes of transport (rail, inland waterways or maritime transport) for those not on road section is used. At the same time it is ensured, that a certain degree of flexibility may be allowed due to specific geographical circumstances or operational constraints in the Member States.

TOPIC Infrastructure compatibility (RAIL)	
Transportation of 4m-high semi-trailers	YES - DB Netz: https://geovdbn.deutschebahn.com/isr
Transport of containers and swap bodies with a height of 2 900 mm	YES
Are works for railway gauge improvement planned?	YES
Maximum axle load for CT wagons	22,5 (25) tons
Maximum combined transport trains length:	740 m
Maximum mass of combined transport trains:	2000 tons
Maximum speed for combined transport trains:	120 (160) km/h

TOPIC Access to infrastructure	
Implementation of applicant	<p>YES + 18th "Authorised user".</p> <ul style="list-style-type: none"> (a) a railway undertaking; or an international grouping of railway undertakings; or (b) other natural or legal persons in particular (b) aa) competent authorities in the framework of the Regulation (EC) No 1370/2007, (c) bb) Shippers, forwarders and companies of combined transport which is subject to a public service or commercial Interest in acquiring rail capacity or capacity in service facilities in particular undertakings wishing to have goods transported by a railway undertaking, (d) (cc) the bodies referred to in Article 1(2) of the Regionalisation Act; and (e) (dd) the authorities referred to in Article 15(1).
New/upgrade/renewal of network	YES + Improvement of important nodes and approach towards 240 meter railway network

5.3 Lithuania

Part I - Funding measures

Support (name)	Description	Type	Market segment	Classification
MOKESČIO UŽ NAUDOJIMĄSI VALSTYBINĖS REIKŠMĖS KELIAIS VAŽIUOJANT DIDŽIAGABARIT ĖMIS IR (AR) SUNKIASVORĖ MIS TRANSPORTO PRIEMONĖMIS DYDŽIŲ IR ŠIO MOKESČIO MOKĖJIMO, ADMINISTRAVIMO IR PRIEŽIŪROS TVARKOS APRAŠAS	For the use of heavy goods vehicles, with or without a load, of more than 40 tonnes and for the carriage of one or more combined transport units (semi-trailers, swap-bodies and containers with a total maximum length not exceeding 45 feet) on main roads and other roads within a radius of 50 km from the territories of Klaipeda State Seaport, airports, railway and inland waterway stations where unloading and / or loading of combined transport units, - 44 t, drivers pay reduced fee.	Tax Allowance	Combined Transport Road-Rail	Operational (funding per km, support of processes, technology support)

Part II – Non-funding measures

TOPIC Weights & Dimensions – ROAD AND COMBINED TRANSPORT (RAIL)	
Maximum length	
- Road Trains	18,75 m
- Articulated vehicles	15,65 m
Maximum width	2,55/ 2,60 m
Maximum mass	40/44 tons
Implementation of Directive 2015/719	YES (https://eur-lex.europa.eu/legal-content/lt/TXT/?uri=CELEX:32015L0719)
Special allowances for larger and heavier road vehicles	-

Special authorization for Combined Transport	YES (For the use of heavy goods vehicles, with or without a load, of more than 40 tons and for the carriage of one or more combined transport units (semi-trailers, swap-bodies and containers with a total maximum length not exceeding 45 feet) on main roads and other roads within a radius of 50 km from the territories of Klaipeda State Seaport, airports, railway and inland waterway stations where unloading and / or loading of combined transport units, - 44 t, drivers pay reduced fee)
Implementation of CT Directive 92/106	-

TOPIC Infrastructure compatibility (RAIL)	
Transportation of 4m-high semi-trailers	YES
Transport of containers and swap bodies with a height of 2 900 mm	YES
Are works for railway gauge improvement planned?	YES (1435 mm gauge Rail Baltica)
Maximum axle load for CT wagons	22,5 tons
Maximum combined transport trains length:	Up to 1050 m
Maximum mass of combined transport trains:	Depends on the train characteristics (line, operations, types of locs)
Maximum speed for combined transport trains:	120 km/h

TOPIC Access to infrastructure	
Implementation of applicant	YES
New/upgrade/renewal of network	YES (electrification of some lines, construction of Rail Baltica 1435 mm gauge)

5.4 Latvia

Part I - Funding measures

Support (name)	Description	Type	Market segment	Classification
Transportlīdzekļa ekspluatācijas nodokļa un uzņēmumu vieglo transportlīdzekļu nodokļa likums / Law on the Vehicle Operation Tax and Company Car Tax	If a goods vehicle or trailer (semi-trailer) has participated in the combined carriage by rail in the territory of Latvia, the vehicle operation tax for such vehicle shall be reimbursed in proportion to the days which have been spent in combined carriage by rail in the territory of Latvia within the calendar year.	Tax allowance	Combined Transport in general (all forms)	Fiscal support (reimbursement vehicle tax)

Part II – Non-funding measures

TOPIC Weights & Dimensions – ROAD AND COMBINED TRANSPORT (RAIL)	
Maximum length - Road Trains - Articulated vehicles	- 18750 + 150 mm (for intermodal transport only) - 16500 + 150 mm (for intermodal transport only)
Maximum width	2550, but 2600 mm (for vehicles with the isothermal body or swap body, or vehicles transporting an isothermal container)
Maximum mass	40, but 42 tons (for a two-axle towing vehicle and a three-axle semi-trailer that, while conducting intermodal transport operations, carries one or several containers or swap bodies the total maximum length of which is up to 45 feet), and 44 (three-axle towing vehicle and a two-axle or three-axle semi-trailer that, while conducting intermodal transport operations, carries one or several containers or swap bodies the total maximum length of which is up to 45 feet).
Implementation of Directive 2015/719	YES. As amendments (https://likumi.lv/ta/id/291850-grozijumi-autoparvadajumu-likuma) to the Law on Carriage by Road (https://likumi.lv/ta/en/en/id/36720-law-on-carriage-by-road) and to the Road Traffic Regulations (https://likumi.lv/ta/en/en/id/274865-road-traffic-regulations)
Special allowances for larger and heavier road vehicles	YES. May exceed 52 t in mass, 30 m in length, 5 m in width, 5 m in height. According to Regulations Regarding Large Dimension and Heavyweight Carriage (https://likumi.lv/ta/en/en/id/208072-regulations-regarding-large-dimension-and-heavyweight-carriage) a permit has to be issued by State joint stock company Latvian State Roads. (https://lvceli.lv/atlaujas/)

Special authorization for Combined Transport	YES. See above.
Implementation CT Directive 92/106	YES. Procedures for Combined Commercial Carriage, Combined Self-Carriage or Combined Carriage with a Hired Vehicle, as well as Requirements for the Combined Transport Cargo Accompanying Document (https://likumi.lv/ta/id/74479-kartibakada-veicami-kombinetie-komercparvadajumi-kombinetie-pasparvadajumi-vai-kombinetie-parvadajumi-ar-iznomatu) basically repeat Articles 3 and 4 of the Directive regarding transport documents, and the right of hauliers to carry out, in the context of a combined transport operation between Member States, initial and/or final road haulage legs.

TOPIC Infrastructure compatibility (RAIL)	
Transportation of 4m-high semi-trailers	YES, if a special wagon (platform) is used (Model 13-6987); suitable for the whole 1520 mm gauge system; http://ncko.pf/).
Transport of containers and swap bodies with a height of 2 900 mm	YES, everywhere.
Are works for railway gauge improvement planned?	No.
Maximum axle load for CT wagons	25 tons
Maximum combined transport trains length:	850 – 1000 m
Maximum mass of combined transport trains:	Depending on line up to 6000 tonnes
Maximum speed for combined transport trains:	90 km/h

TOPIC Access to infrastructure	
Implementation of applicant	YES. Regulation on the allocation of railway infrastructure capacity of the public railway (https://likumi.lv/ta/id/283926-publiskas-lietosanas-dzelzcela-infrastrukturas-jaudas-sadales-noteikumi).
New/upgrade/renewal of network	YES. Modernisation of Section Sarkandaugava – Mangaļi – Ziemeļblāzma in Riga Railway Network (https://www.ldz.lv/lv/r%C4%ABgas-dzelzce%C4%Bca-mezgla-posma-sarkandaugava-manga%C4%BCi-zieme%C4%BCbl%C4%81zma-moderniz%C4%81cija) to be completed in 2023; and Building interoperable rail system in the Baltic countries (https://www.ldz.lv/lv/EISI-CEF-projekti ; CEF project code 2018-EU-TM-0078-M) to be completed by the end of 2023.

5.5 Poland

Part I - Funding measures

Support (name)	Description	Type	Market segment	Classification
Intermodal Discount	25% reduction on access rate for all trains with CT wagons (full or empty)	Discount on infrastructure access	Combined Transport in general forms	Rail Infrastructure (first/last mile, hinterland access, access charges)
Infrastructure and The Environment	"Priority III Development of TEN-T network and multimodal transport Priority V Development of rail transport in Poland"	Direct Grant	Combined Transport in general forms	Rail Infrastructure (first/last mile, hinterland access, access charges) Terminal infrastructure (e.g. for horizontal technologies) Digitalisation (smart systems, IoT, Industry 4.0, artificial intelligence) Rolling stock & Assets (intermodal loading units) Research and innovation (studies, demonstrators)

				Fiscal support (reimbursement vehicle tax, exemption of vehicle tax...)
Operational Programme Eastern Poland	Development of rail network efficiency	Direct Grant	Combined Transport Road-Rail	Rail Infrastructure (first/last mile, hinterland access, access charges)
Connecting Europe Facility - CEF	Development of linear and point infrastructure in TEN-T network	Direct Grant	Combined Transport Road-IWW"	Rail Infrastructure (first/last mile, hinterland access, access charges)

Part II – Non-funding measures

TOPIC Weights & Dimensions – ROAD AND COMBINED TRANSPORT (RAIL)	
Maximum length - Road Trains - Articulated vehicles	- 18750 mm
Maximum width	2550 – 2600 (reefer only) mm
Maximum mass	44 tons (3axle unit + 3axle trailer) in CT operations 42 tons (2axle unit + 3axle trailer) in CT Operations 40 tons (standard)
Implementation of Directive 2015/719	NO
Special allowances for larger and heavier road vehicles	NO
Special authorization for Combined Transport	44 tons (3axle unit + 3axle trailer) in CT operations 42 tons (2axle unit + 3axle trailer) in CT Operations
Implementation CT Directive 92/106	NO

TOPIC Infrastructure compatibility (RAIL)	
Transportation of 4m-high semi-trailers	High cube exemption, public route database not available
Transport of containers and swap bodies with a height of 2 900 mm	yes High cube exemption, public route database not available
Are works for railway gauge improvement planned?	Not observed
Maximum axle load for CT wagons	Depending on line, up to 22,5 tons
Maximum combined transport trains length:	Depending on line, approx 600 m
Maximum mass of combined transport trains:	3000 tons
Maximum speed for combined transport trains:	Depending on line (main corridors modernized for 160 km/h - theoretical value), real speed up to 60-90 km/h, national average ca. 45 km/h (including waiting time), till 2016 - 25 km/h.
TOPIC Access to infrastructure	
Implementation of applicant	Yes, according to Dz.U. 2003 nr 86 poz. 789
New/upgrade/renewal of network	Improvement of rail accessibility to TEN-T ports - Gdynia and Gdansk – underway.

5.6 Sweden

Part I - Funding measures

Support (name)	Description	Type	Market segment	Classification
Miljökompensation för godstransporter på järnväg	<p>In June 2020, the Swedish government proposed additional support of 200 million SEK for environmental compensation to railway companies. This proposal needs to be approved by EU which is expected in September, at the earliest. The environmental compensation concerns goods transports during second half of 2020 (July 1 - December 31, 2020) Apply latest February 2021</p> <p>Who can apply? Those with the right to organize traffic on the Swedish railway system.</p> <p>The total compensation amount is split proportionally on performed goods transports, i.e. the applicants share of already performed rail transports under the period.</p>	Direct grant	Combined Transport Road-Rail	Operational (funding per km, support of processes, technology support)
Miljökompensation för överflyttning av gods till sjöfart	<p>Concerns moving goods transportation from road to water. Detailed projects with clear environmental benefits and that is has commercial profitability after project end. The support is planned to be 50 million SEK per year over the period 2020-2022.</p> <p>The Swedish Transport Administration is planning for a new application period. However, currently waiting for the approval decision of an extension of the ecobonus program 2020-2022 from the EU commission.</p>	Direct grant	Combined Transport Road-IWW	Research and innovation (studies, demonstrators)

Part II – Non-funding measures

TOPIC Weights & Dimensions – ROAD AND COMBINED TRANSPORT (RAIL)	
Maximum length - Road Trains - Articulated vehicles	- 24000 mm (25250 under special requirements) - 24000 mm (truck)
Maximum width	2600 mm (truck)
Maximum mass	74 tons (limited to certain roads) (Currently under revision to be further extended for the national road network. Still uncertainties on municipal and regional roads.)
Implementation of Directive 2015/719	NO, currently being investigated. https://www.regeringen.se/regeringsuppdrag/2019/07/uppdrag-att-utredning-hur-artikel-10d-i-europaparlamentets-och-radets-direktiv-eu-2015719/
Special allowances for larger and heavier road vehicles	See above.
Special authorization for Combined Transport	NO (There are field tests ongoing with longer vehicle combinations (<35000 mm). These field tests are not limited to combined transport, but also includes long-distance road transports within Sweden.)
Implementation of Directive 92/106	YES. (https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/yrkestrafikforordning-2012237_sfs-2012-237)

TOPIC Infrastructure compatibility (RAIL)	
Transportation of 4m-high semi-trailers	Loading Gauge A is applied for main parts of the state rail infrastructure. Maximum height = 4,65 metres. https://njdbwebb.trafikverket.se/SeTransportnatverket
Transport of containers and swap bodies with a height of 2 900 mm	Yes, https://njdbwebb.trafikverket.se/SeTransportnatverket
Are works for railway gauge improvement planned?	Work ongoing.
Maximum axle load for CT wagons	STAX 32,5 tonnes, most commonly 25 tonnes.
Maximum combined transport trains length:	630 (some rail parts up to 750 meters).

Maximum mass of combined transport trains:	Depends on train characteristics.
Maximum speed for combined transport trains:	Usually 100 km/h

TOPIC Access to infrastructure	
Implementation of applicant	YES
New/upgrade/renewal of network	ERTMS, new high-speed lanes for passenger transport, new mainlines alongside eastern coastline north of Stockholm, large maintenance package on existing infrastructure enforced by Swedish Government.

5.7 Austria

Part I - Funding measures

Support (name)	Description	Type	Market segment	Classification
Fördermaßnahmen für den Kombinierten Verkehr (Steuerliche Maßnahmen), Begünstigung Kraftfahrzeugsteuer (tax incentives)	<p>"In the field of motor vehicle tax (BGBl. No 449/1992, Kraftfahrzeugsteuergesetz 1992, last amended by BGBl. I No 103/2019) the following preferential treatment was introduced:</p> <p>§ Section 2(1)(14): Exempt from motor vehicle tax are all motor vehicles and trailers with a maximum permissible gross weight of more than 3.5 tonnes which are registered in a domestic registration procedure and which are used in a calendar month exclusively in pre-carriage and onward carriage for combined road/rail transport for delivery and collection to/from the nearest technically suitable terminal of containers of at least 20 feet in length, interchangeable bodies or trailers carried by rail. § Section 2(3): On application, a 15 % reduction of the</p>	Tax allowance	Combined Transport Road-Rail	Operational (funding per km, support of processes, technology support)

	monthly road tax will be granted for each rail transport up to a maximum of 100 % of the annual road tax if the motor vehicles and trailers over 3.5 tonnes maximum permissible gross weight registered in a domestic registration procedure use the Rolling Highway in Germany or perform unaccompanied combined transport with semi-trailers."			
Innovations förderprogramm für den kombinierten Güterverkehr	Wagons, Fiscal support, Research, In order to make combined transport more competitive with road transport, the programme will in particular promote new technologies and systems to improve the supply of combined transport.	Direct Grant & Other (Interest rate subsidy)	Combined Transport in general (all forms)	Operational (funding per km, support of processes, technology support)
Regulatory measures to support CT, exemption from driving ban	<ul style="list-style-type: none"> - Exemption from weekend and holiday driving ban <p>Ordinance of the Federal Minister of Public Economy and Transport on Exceptions to the weekend and public holiday driving ban, BGBl. no. 855/1994, as amended by BGBl. II no. 119/2007)</p> <ul style="list-style-type: none"> - Exemption from the driving ban to facilitate summer travel <p>VO Basis: § 42 Para. 5 Road Traffic Regulations 1960 as amended by BGBl. I No. 39/2013</p> <ul style="list-style-type: none"> - Exemption from the truck winter driving ban in Tyrol from 4 January to 14 March 2020, the driving ban on heavy goods vehicles will be extended to a total of 11 Saturdays from 7 a.m. to 3 p.m. on the A 12 Inntal motorway and A 13 Brenner motorway. - Exemption from the night driving ban 	Regulatory measure	Combined Transport in general (all forms)	Operational (funding per km, support of processes, technology support)

	(Ordinance of the Federal Minister of Public Economy and Transport on Exceptions to the ban on night driving, last amended by BGBl.II No. 76/2007"			
"Programme to support the development of connecting railways and terminals for intermodal transport".	<p>Main focus for CT: Terminal infrastructure Support for the development of connecting railways:</p> <p>Construction of new connecting railways: aid of max. 40% of the eligible costs</p> <p>Investment costs up to max. € 2.5 million</p> <p>Expansion of existing ASB: max. 40% up to max. € 2 million</p> <p>Existing investments in ASB plants: max. 40% up to max. 300,000 €</p> <p>Support for intermodal transport terminals:</p> <p>Construction of new intermodal terminals: max. 30% of the eligible investment costs up to a maximum of € 2.5 million</p> <p>Expansion of existing transshipment facilities: max. 30% up to max. € 2.5 million</p> <p>Stock investments in intermodal terminals : only for mobile handling equipment! max. 25% up to max. 300.000€"</p>	Direct Grant	Combined Transport Road-Rail	Rail Infrastructure (first/last mile, hinterland access, access charges)
Förderprogramm Schienengüterverkehr, funding programme rail freight transport	The program offers subsidies for different rail freight services in AT: single wagonload traffic, accompanied combined transport and unaccompanied combined transport. On a yearly basis non-refundable grants were given to the rail freight operators according to subsidy-contracts and train path applications. The operational funding	Direct Grant	Combined Transport Road-Rail	Operational (funding per km, support of processes, technology support)

	is executed by SCHIG (Schieneninfrastruktur-DienstleistungsgesmbH)			
Gesamtverkehrsplan AT Infrastrukturausbau und Zielnetz 2025+, strategic infrastructure planning and rail network 2025+	With the overall transport plan for Austria, the bmvit presents its strategies for Austrian transport and mobility policy. The overall transport plan for Austria formulates objectives and strategies of a comprehensive transport policy until 2025. The target network 2025+ is a comprehensive overall concept with concrete implementation steps for the railway infrastructure in Austria.	Direct Grant	Combined Transport in general (all forms)	Rail Infrastructure (first/last mile, hinterland access, access charges)

Part II – Non-funding measures

TOPIC Weights & Dimensions – ROAD AND COMBINED TRANSPORT (RAIL)	
Maximum length	
- Road Trains	- 18750 mm
- Articulated vehicles	- 16500 mm
Maximum width	2600 mm
Maximum mass	40 tons
Implementation of Directive 2015/719	YES + In addition to increasing the permissible total weights of two- and three-axle trucks or articulated lorries that are equipped with alternative drive types by a maximum of one ton each, the weight of five- and six-axle vehicles (three-axle vehicles with two- or three-axle semitrailers) has become more multimodal. Transports redefined at up to 42 or 44 tons. At the same time, the distance radius was limited to a maximum of 150 kilometers.
Special allowances for larger and heavier road vehicles	NO
Special authorization for Combined Transport	Vehicle engaged in combined transport: 44 t; initial and final road hauls in combined transport to/from the nearest technically suitable terminal in Austria.
Implementation Directive 92/106	CT YES + On the dimensions and weights of motor vehicles and the reference therein to the definition of CT

TOPIC Infrastructure compatibility (RAIL)	
Transportation of 4m-high semi-trailers	YES
Transport of containers and swap bodies with a height of 2 900 mm	YES
Are works for railway gauge improvement planned?	YES
Maximum axle load for CT wagons	22,5 tons
Maximum combined transport trains length:	750 m
Maximum mass of combined transport trains:	1500 tons
Maximum speed for combined transport trains:	120 km/h

TOPIC Access to infrastructure	
Implementation of applicant	YES
New/upgrade/renewal of network	YES

5.8 Belgium

Part I - Funding measures

Support (name)	Description	Type	Market segment	Classification
Aide fédérale au transport combiné et trafic diffus 2017-2020	<p>scope: between Belgian ports, national and interport</p> <p>national connections / connection within the same port: 28€ per unit + 0,14 * number of km</p> <p>intermediate port transport: 14€ per unit + 0,07 * number of km</p> <p>greater distance = more subsidy</p> <p>100% CT on the Belgian network, support only for rail transport of intermodal loading units</p> <p>operators / RUs only</p>	Direct Grant	Combined Transport Road-Rail	Operational (funding per km, support of processes, technology support)
Advies 66.340/3 van 10 juli 2019 overeen ontwerp van besluit van de Vlaamse Regering „betreffende een vijfjarige subsidieregeling ter bevordering van de hinterlandconnectiviteit van de Vlaamse zeehavens via bundeling van spoorvolumes	<p>bundling in hub, shuttle trains between the hub and maritime terminals</p> <p>for bundling: 500€ per train (existing, frequency increase or new) for a period of two years</p> <p>for Shuttle connections: 500€ per train (frequency increase, new) for 1 year</p> <p>for railway operators only"</p>	Direct Grant	Combined Transport Road-Rail	Operational (funding per km, support of processes, technology support)
Advies 66.341/3 van 10 juli 2019 overeen ontwerp van	<p>"* support for consolidation of containers in the port area and outside the port</p> <p>* 30% of the transport costs"</p>	Direct Grant	Combined Transport Road-IWW	Operational (funding per km, support of processes,

<p>besluit van de Vlaamse Regering „betreffende een vijfjarige subsidieregeling ter bevordering van de hinterlandconnectiviteit van de Vlaamse zeehavens via bundeling van binnenvaartvolumes</p>				<p>technology support)</p>
<p>Nouveau plan wallon 2014-2020</p>	<p>Subsidy scheme for investments commitment to increase frequency or new</p> <ul style="list-style-type: none"> - min. 25,000€ of investments costs - max. subsidies: 30% (SME) or 25% (large) / 500,000€ <p>accepted investments: transshipment equipment, land, arrangement</p> <p>Subsidy for technical adaptations of inland ship</p> <ul style="list-style-type: none"> - only for new equipment - min. 12,500€ of investments costs <p>max. subsidies: 30% / 200,000€</p> <p>accepted investments: captain at least for two years / specific type of motorisation</p> <p>Subsidy for regular transport services of containers by inland</p> <ul style="list-style-type: none"> - for operators only <ul style="list-style-type: none"> * 12€ for 20', 20€ for 30', 36€ for 40' and 40€ for 45' * max. 20% (large), 30% (SME) 	<p>Direct Grant</p>	<p>Combined Transport Road-Rail & Combined Transport Road-IWW</p>	<p>Operational (funding per km, support of processes, technology support)</p> <p>Terminal infrastructure</p> <p>Research and innovation (studies, demonstrators)</p>

	<p>* Subsidy for consultancy (modal shift Combined Transport)</p> <p>* 50% of the total amount or max. 12,500€ per company"</p>			
--	---	--	--	--

Part II – Non-funding measures

TOPIC Weights & Dimensions – ROAD AND COMBINED TRANSPORT (RAIL)	
Maximum length - Road Trains - Articulated vehicles	- 18,75 m - 15,5 m (extension of 15 cm for 45' containers)
Maximum width	2550 – 2600 mm (reefer only)
Maximum mass	44t for tractor with two axles + semi-trailer of three axles (pneumatic suspension) 43t for tractor with two axles + semi-trailer of three axles (mecanic suspension) 39 t for tractor with two axles + semi-trailer of two axles 44t for tractor with three axles + semi-trailer of two axles or three axles
Implementation of Directive 2015/719	YES (AR du 31 juillet 2017 modifying AR 15 mars 1968) https://www.etaamb.be/fr/arrete-royal-du-31-juillet-2017_n2017012008.html
Special allowances for larger and heavier road vehicles	Wallonia: pilot project (01-01-2017 - 30-09-2025) - 25,25m + 60 tonnes Flanders: test phase (2014): same Brussels: some routes - same
Special authorization for Combined Transport	NO
Implementation CT Directive 92/106	YES - single Act - 25 NOVEMBRE 1992. - Arrêté royal portant le règlement général relatif au transport rémunéré de choses par véhicules automobiles) modified by 20 MAI 1997 (Arrêté royal modifiant l'arrêté royal du 25 novembre 1992 portant le règlement général relatif au transport rémunéré de choses par véhicules automobiles) - see https://ec.europa.eu/transport/sites/transport/files/themes/strategies/studies/doc/2015-01-freight-logistics-lot2-combined-transport.pdf

TOPIC Infrastructure compatibility (RAIL)	
Transportation of 4m-high semi-trailers	4m is accepted - INFRABEL: publication of maps with codified lines (https://infrabel.be/fr/networkstatement)
Transport of containers and swap bodies with a height of 2 900 mm	Accepted - same map

Are works for railway gauge improvement planned?	NO
Maximum axle load for CT wagons	22,5 tons
Maximum combined transport trains length:	650 m - 750 m possible with the agreement of INFRABEL
Maximum mass of combined transport trains:	Depends on the train characteristics (line, operations, types of locs)
Maximum speed for combined transport trains:	200 km/h (faster is possible but with reduced axle load)

TOPIC Access to infrastructure

Implementation of applicant	YES 30 AOUT 2013. — Loi portant le Code ferroviaire (1): definition of applicant, full access to train path + services from the IM"
New/upgrade/renewal of network	YES - 740m long freight trains - electrification of some railway sections (Mol-Dutch border) - ETCS - Ports and the hinterlands"

5.9 Switzerland

Part I - Funding measures

Support (name)	Description	Type	Market segment	Classification
NEAT (Neue Eisenbahn-Alpentransversale), NRLA	It is a Swiss construction project for faster north-south rail links across the Swiss Alps. It includes base tunnels several hundred metres below the existing apex tunnels along two axes, the Gotthard and the Lötschberg.	Direct Grant	Combined Transport Road-Rail	Rail Infrastructure (first/last mile, hinterland access, access charges)
STEP, strategic development program	<p>The proposal on the financing and development of railway infrastructure (FABI) ensures that the operation, maintenance and development of railway infrastructure will continue to be financed by a railway infrastructure fund (BIF). The development of the railway infrastructure is carried out in regular stages within the framework of the Strategic Development Programme (STEP).</p> <p>In the STEP development stages, transport services for passenger and freight transport will be developed on the basis of the results of a needs analysis. These will make it possible to eliminate the emerging capacity bottlenecks. These improvements and capacity increases require the construction of additional railway infrastructure.</p>	Others	Combined Transport in general (all forms)	Rail Infrastructure (first/last mile, hinterland access, access charges)
Güterverkehrserlagerungsgesetz, GVVG, Goods Traffic Transfer Act	The Goods Traffic Transfer Act provides that the number of journeys by domestic and foreign lorries and semi-trailers through the Swiss Alps must be lowered from 1.4 million in 2000 to 650,000 per year. Various instruments have been approved and implemented to achieve this (see next programmes)	Tax allowance	Combined Transport Road-Rail	Operational (funding per km, support of processes, technology support)

<p>Service-related charge for heavy goods road vehicles (RPLP)</p>	<p>RPLP is intended to cover the infrastructure costs not covered by other services or charges and the external costs of heavy goods vehicles, which they cause damage to the environment, health, etc. The burden of the HVF may not exceed the costs caused by heavy goods traffic. In addition, according to the land transport agreement with the EU, the HGV may not exceed a weighted average of CHF 325 for a journey from border to border (reference route Basel - Chiasso 300 km). The HVF applies to journeys by lorries weighing 3.5 tonnes or more. It is calculated on the basis of the maximum permissible gross weight, the kilometres driven in Switzerland and the emission category of the towing vehicle. Vehicles with modern, clean engines pay less than old vehicles. The HVF is levied by the Federal Customs Administration (FCA)"</p>	<p>Others (regulatory measure)</p>	<p>Combined Transport in general (all forms)</p>	<p>Operational (funding per km, support of processes, technology support)</p>
<p>Subsidies for transalpine UCT and RoLa</p>	<p>Fiscal support, based on § 8 GVVG in accordance to article 15 GüTV, The subsidies are paid by means of orders for transport services to the so-called combined transport operators, who offer the services on the market and bear the commercial risk. In accordance with Article 15 of the Freight Transport Ordinance of 25 May 201611 (GüTV), the Federal Government orders a specific combined transport offer (trains and consignments) for one year at a time. The same framework conditions apply to all combined transport operators. Differentiated according to destination and departure area, the compensation per shifted programme is based on uniform maximum rates. This will further reduce the still existing cost disadvantages of rail</p>	<p>Direct Grant</p>	<p>Combined Transport Road-Rail</p>	<p>Operational (funding per km, support of processes, technology support)</p>

	compared to road and at the same time make the process more transparent.			
Investment contributions to the construction, expansion and renewal of CT transshipment facilities and sidings (according to Freight transport Regulation)	<p>Federal Government will make investment contributions to the construction, expansion and renewal of CT transshipment facilities and sidings. It can also grant loans for the construction of port facilities for combined transport. Abroad, only financial support for the extension and new construction of CT transshipment facilities is possible. The Federal Government ensures non-discriminatory access to the combined transport facilities it supports.</p> <p>Private investors, operators and owners can submit an application for investment contributions to the Federal Government. Applicants must bear at least 40% of the costs themselves. Special provisions apply to CT transshipment facilities of national transport policy importance and facilities abroad. The funding principles are regulated in the Freight Transport Ordinance and are further explained in a guide for applications for investment grants."</p>	Direct Grant	Combined Transport Road-Rail	Rail Infrastructure (first/last mile, hinterland access, access charges)

Part II – Non-funding measures

TOPIC Weights & Dimensions – ROAD AND COMBINED TRANSPORT (RAIL)	
Maximum length	
- Road Trains	- 18750 mm
- Articulated vehicles	- 16500 mm
Maximum width	2600 mm
Maximum mass	40 tons
Implementation of Directive 2015/719	YES +To determine the maximum permissible dimensions for certain road vehicles in domestic and cross-border traffic in the Community and to determine the maximum permissible weights in cross-border traffic

Special allowances for larger and heavier road vehicles	NO
Special authorization for Combined Transport	The maximum permissible weight of these vehicles is increased to 44 tonnes if used in non-accompanied combined transport (containers, swap-bodies, semi-trailers) for haulage towards or from a terminal or a Swiss port. 30 kilometer radius from the terminal is specified as the maximum first/last mile distances.
Implementation Directive 92/106	CT

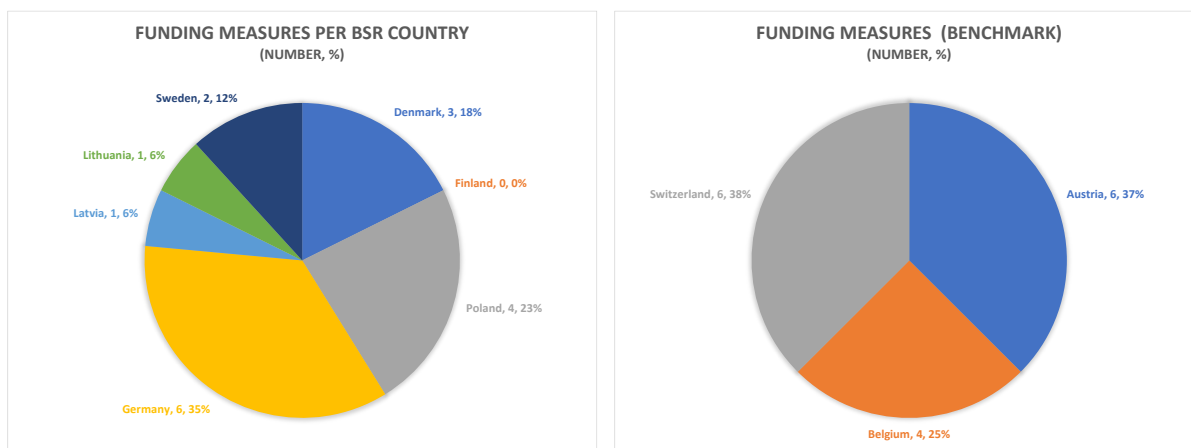
TOPIC Infrastructure compatibility (RAIL)

Transportation of 4m-high semi-trailers	It is already possible to transfer semi-trailers with a 4-metre corner height onto trains on the Lötschberg route and in the Gotthard and Ceneri base tunnels, but there are obstacles to this on the approach routes to the Gotthard tunnel. Therefore, the Swiss Confederation has awarded contracts for the modification of a number of tunnels, platform roofs and catenaries. This will allow semi-trailers with a 4-metre corner height to be transported along the entire length of the Swiss north-south axis by 2020. "
Transport of containers and swap bodies with a height of 2 900 mm	YES
Are works for railway gauge improvement planned?	YES
Maximum axle load for CT wagons	22,5 tons
Maximum combined transport trains length:	750 m (1500)
Maximum mass of combined transport trains:	2500 tons (4000)
Maximum speed for combined transport trains:	120 km/h
Implementation of applicant	YES
New/upgrade/renewal of network	YES

5.10 Consolidated results

5.10.1 Funding Measures

The total number of identified funding measures in the analysed BSR countries is 17. The following figure shows the share per country: very large disparities exist in the BSR as some countries do not support at all Combined Transport (such as Finland) whereas other countries offer a large variety of measures such as Germany (6 various schemes) and Poland (4 support programmes). The benchmark analysis covers for the three selected countries (Belgium, Austria and Switzerland) nearly the same amount as for all BSR countries. The shares for these countries are quite identical.



The following table details the measures by type of segment. Most of the countries (5 out of 7) propose measures for Combined Transport for all forms of Combined Transport services and also specifically for the Road-Rail Combination (4 out of 7). The combination Road-Inland Waterway is foreseen in two countries (Poland, Sweden). The same logic can be applied for the countries selected as benchmark.

	Market Segment			
	N° of Funding Measures	Combined Transport in general (all forms)	Combined Transport Road-Rail	Combined Transport Road-IWW
<i>BSR Countries</i>				
Denmark	3	x	x	
Finland	0			
Poland	4	x	x	x
Germany	6	x	x	
Latvia	1	x		
Lithuania	1	x		
Sweden	2		x	x
<i>Non BSR Countries</i>				
Austria	6	x	x	
Belgium	4		x	x
Switzerland	6	x	x	

The measures have been structured according to nine different categories. The following table provides an overview by BSR country and benchmark countries. In the BSR the most common type is programmes for operational support (4 countries) and terminal infrastructure (3 countries). Two countries offer financial programmes to invest rail infrastructure. The fiscal support, as foreseen by the CT Directive 92/106 is only implemented in two countries (Germany and Latvia). Support measures like digitalisation, rolling stock and assets are only proposed in Poland whereas Sweden promotes research and innovation. For the benchmark countries most of the support measures focus on operations, rail and terminal infrastructure. Belgium proposes a specific programme on research and innovation (market analysis and studies).

	National Funding Schemes for Combined Transport									
	Number of measures	Operational	Rail Infrastructure	Terminal infrastructure	Digitalisation	Rolling stock (wagons)	Assets (ILUs)	Research and innovation	Fiscal support	Others
<i>BSR Countries</i>										
Denmark	3	x	x	x						
Finland	0									
Poland	4		x	x	x	x	x			
Germany	6	x		x					x	
Latvia	1								x	
Lithuania	1	x								
Sweden	2	x						x		
<i>Non BSR Countries</i>										
Austria	6	x	x							
Belgium	4	x		x				x		
Switzerland	6	x	x							

Most of the BSR countries (Denmark, Poland, Germany, Sweden) have developed subsidy programmes based on direct grants (financial transfer to the operators) whereas tax allowance is planned in three countries (Germany, Latvia, Lithuania). Under 'others', co-financing, terminal owner-lease relationship, interest rate and regulatory measure have been mentioned.

	Type of Measure				
	N° of Funding Measures	(1) Direct Grant	(2) Tax allowance	(3) Loan	(4) Other
<i>BSR Countries</i>					
Denmark	3	x			x
Finland	0				
Poland	4	x			x
Germany	6	x	x		x
Latvia	1		x		
Lithuania	1		x		
Sweden	2	x			
<i>Non BSR Countries</i>					
Austria	6	x	x		x
Belgium	4	x			
Switzerland	6	x	x		x

5.10.2 Non-Funding Measures

The following tables provide an overview of all measures per selected topic (weights & dimensions, infrastructure, access to infrastructure).

Weights & Dimensions

Country	ROAD TRANSPORT FEATURES					CT-related features		
	Max. length road trains	Max. length articulated vehicles	Max. width for road vehicles	Max. Mass	EU Directive 2015/719: implementation	Scheme for larger and heavier road vehicles	Dimensions and weight in CT	CT Directive 92/106 implementation
ISO code	in m	in m	in m	in tonnes	YES/NO + description	YES/NO + description	YES/NO + rules	YES/NO + rules
SE	24 (25.250 under special requirements)	24 (truck)	2.6	74 (limited to certain roads)	YES	YES	NO	YES. (https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/yrkestrafikforordning-2012237_sfs-2012-227)
FI	34.5		2.6	76				
PL	18.75		2.55 - 2.6 (reefer only)	40	NO	NO	44 (3axle unit + 3axle trailer) in CT operations	NO
LV	18.75 + 150 (for intermodal transport only)	16.50 + 15 cm (for intermodal transport only)	2.55, but 2.60 for vehicles with the isothermal body or swap body, or vehicles transporting an isothermal container)	40	YES	YES (ay exceed 52 t in mass, 30 m in length, 5 m in width, 5 m in height.	42 for a two-axle towing vehicle and a three-axle semi-trailer 44 for a three-axle towing vehicle and a two-axle or three-axle semi-trailer	YES
LT	18.75 (20.75 for car transport)	15.65	2.55/2.60	40/44	YES (https://eur-lex.europa.eu/legal-content/lt/TXT/?uri=CELEX:32015L0719)		YES (44 on main roads and other roads within a radius of 50 km from the territories of Klaipeda State Seaport, airports, railway and inland waterway stations	
DK	18.75	Pilot EMS 25.25 m.	2.55 / 2.60 for refers.	40 and for EMS on selected parts of the road network 60.	Yes. 48 lorries with 6 axles and 56 on lorries with 7 axels.	Yes EMS pilot	Yes, in principle lorries up to 44 tonnes are allowed for intermodal transports basically within 150 km. of distance.	Yes
DE	18.75	16.5	2.55	40	YES	YES	Vehicle in intermodal traffic: 16.55 m and 44 t - only allowed in combination with sea- or intermodal transportation, the distance in a straight line to the nearest port or intermodal terminal can never be more then 150 km	YES - 150 km or 20 % of the total distance, regardless of which modes of transport (rail, inland waterways or maritime transport)
BE	18.75	15.5 (extension of 15 cm for 45' containers)	2 550 - 2 6000 (reefer only)	44t for tractor with two axles + semi-trailer of three axles (pneumatic suspension) 43t for tractor with two axles + semi-trailer of three axles (mecanic suspension)	YES	Wallonia: pilot project (01-01-2017 - 30-09-2025) - 25,25m + 60 tonnes Flanders: test phase (2014): same Brussels: some routes - same	NO	YES
CH	18.75	16.5	2.6	40	YES	NO	44 if used in non-accompanied combined transport from a terminal or a Swiss port. 30 kilometer radius	
AT	18.75	16.5	2.6	40	YES	NO	Vehicle engaged in combined transport: 44 t; initial and final road hauls in combined transport to/from the nearest technically suitable terminal in Austria.	YES

For the BSR the following main elements can be extracted:

- The maximum length of road trains fluctuates between 18.75m (EU basic requirement applied in all countries) to 24m, 25.50m and even 34.5m (Finland).

- The maximum length of articulated vehicles varies between 16.50m (EU requirement) to 24m and 25.50m (EMS pilot test in Denmark for example).
- The maximum width of 2.55m and of 2.60m (reefer units) are the same in all countries.
- The maximum mass of road vehicles (road only) strongly differs between the countries: 40t up to 60t (EMS on selected routes in Denmark) and 76t in Finland.
- All BSR States except Poland have implemented the Directive 2015/719 with some major adaptations in Denmark (additional weight for vehicles with 6 or 7 axles)
- For Combined Transport operations, additional weight is allowed (42t or 44t depending on the number of axles) and under some conditions: radius of 50 km (Lithuania), 150 km (Denmark, Germany)

For the benchmark countries, the three Member States are fully applying the EU Regulation on weights and dimensions + CT Directive: 18.75m and 16.5m as length, 2.55m and 2.60m for the width and 44t in case of Combined Transport Operations. In Belgium and Germany, test trials with longer and heavier trucks (various combinations and weights) have been initiated on some specific routes. In Austria and Switzerland such trials have not been planned.

Infrastructure Compatibility

The following main infrastructure parameters can be pointed out (see table next page):

- The transport of any types of loading units (4m-high semi-trailers and high-cube containers included) are allowed in all BSR countries.
- The routes on which these loading units can be really operated are in most of the cases not displayed on maps. In some rare cases, these routes are mirrored on maps published in the network statements (Germany, Belgium).
- The codification of lines are not done systematically in all BSR countries. In some cases the codification is even not known.
- According to the RINF Regulation the IMs are obliged to publish information on the CT profiles into this Register. In most of the countries, this activity has not been finalised at all. In some countries, it is not possible as the lines are not codified at all.
- The maximum axle load for CT wagons is most common set to 22.5t (higher values are permitted under special operational conditions).
- The total admissible train length is not yet harmonised in the BSR. Depending on the countries, the train length may vary between 630m and 1,050m.
- The maximum speed for CT trains is also not consistent in the BSR as it can vary from 90km/h to 160km/h. In Belgium even 200 km/h is allowed but with reduced axle load.

TOPIC 'INFRASTRUCTURE COMPATIBILITY'

code	4m-high semi-trailers	containers and swap bodies with a height of 2 900 mm	map with all codified lines for Combined Transport	CT profiles in the RINF database ?	Planning of works	Maximum axle load for CT wagons	Maximum combined transport trains length:	Maximum speed for combined transport trains:
ISO code	TEXT ONLY	YES/NO + description	YES/NO + description	YES/NO	YES/NO + description	in tonnes	in metres	in km/h
SE	Loading Gauge A is applied for main parts of the state rail infrastructure. Maximum height = 4,65 metres. https://njdwebb.trafikverket.se/SeTransportnatverket	Yes, https://njdwebb.trafikverket.se/SeTransportnatverket	NO, only the full view of the main railway infrastructure: https://njdwebb.trafikverket.se/SeTransportnatverket	work ongoing	work ongoing	STAX 32,5 tonnes, most commonly 25 tonnes	630 (some rail parts up to 750 meters)	normally 100
FI	no information received							
PL	High cube exemption, public route database not available	yes High cube exemption, public route database not available	NO, not codified	NO, not codified	Not observed	depending on line, up to 22,5t	depending on line, approx 600m	depending on line (main corridors modernized for 160 km/h - theoretical value), real speed up to 60-90 km/h, national average ca. 45 km/h (including waiting time), till 2016 - 25 km/h
LV	YES, if a special wagon (platform) is used (Model 13-6987); suitable for the whole 1520 mm gauge system; http://infko.pf/	YES everywhere.	No.	No.	No.	25	850 - 1000	90
LT	YES	YES			YES (1435 mm gauge Rail Baltica)	22,5	up to 1050 m	120
DK	4 m is accepted - no maps with codified lines. Please see Network statement, at: https://uk.bane.dk/en/Railway-Undertaking/Network-Statements/Network-Statement-2020	Accepted - no maps with codified lines. For further details see: https://uk.bane.dk/en/Railway-Undertaking/Network-Statements/Network-Statement-C412020	No	NO	Yes - Network Statement: https://uk.bane.dk/en/Railway-Undertaking/Network-Statements/Network-Statement-2020	22,5	835 m possible with the agreement of Banedanmark.	- 400 meters when the speed is above 120 km/h; - 600 meters when the speed is at most 120 km/h; - 835 meters when the speed is 100 km/h
DE	YES - DB Netz: https://geovdbn.deutschebahn.com/isr	YES	YES + https://geovdbn.deutschebahn.com/isr	YES	YES	22,5 (25)	740	120 (160)
BE	4m is accepted - INFRABEL: publication of maps with codified lines (https://infrabel.be/fr/networkstatement)	Accepted - same map	YES	YES - exact routing - CT profiles not yet available	NO	22,5	650 m - 750 m possible with the agreement of INFRABEL	200 km/h (faster is possible but with reduced axle load)
CH	It is already possible to transfer semi-trailers with a 4-metre corner height onto trains on the Lötschberg route and in the Gotthard and Ceneri base tunnels, but there are obstacles to this on the approach routes to the Gotthard tunnel. Therefore, the Swiss Confederation has awarded contracts for the modification of a number of tunnels, platform roofs and catenaries. This will allow semi-trailers with a 4-metre corner height to be transported along the entire length of the Swiss north-south axis by 2020.	YES	NO	YES	YES	22,5	750 (1500)	120
AT	YES	YES	NO	YES	YES	22,5	750	120

Access to infrastructure

TOPIC 'ACCESS TO INFRASTRUCTURE'		
code	concept of applicant	rail system improvements
ISO code	YES / NO + rules	YES / NO + description
SE	YES	ERTMS, new high-speed lanes for passenger transport, new mainlines alongside eastern coastline north of Stockholm, large maintenance package on existing infrastructure enforced by Swedish Government
FI		
PL	yes, according to Dz.U. 2003 nr 86 poz. 789	improvement of rail accessibility to TEN-T ports - Gdynia and Gdansk - underway
LV	YES Regulation on the allocation of railway infrastructure capacity of the public railway (https://likumi.lv/ta/id/283926-publikas-lietosanas-dzelzcela-infrastrukturas-jaudas-sadales-noteikumi)	YES Modernisation of Section Sarkandaugava – Mangali – Ziemeļblāzma in Riga Railway Network (https://www.ldz.lv/lv/r/%C4%ABgas-dzelzce%C4%BCa-mezgla-posma-sarkandaugava-manga%C4%BCi-zieme%C4%BCd%C4%81zma-moderniz%C4%81cija) to be completed in 2023; and Building interoperable rail system in the Baltic countries (https://www.ldz.lv/lv/EISI-CEF-projekti ; CEF project code 2018-EU-TM-0078-M) to be completed by the end of 2023.
LT	YES	YES (electrification of some lines, construction of Rail Baltica 1435 mm gauge)
DK	Yes.	Yes- Already in 2009 it was decided politically to roll out ERTMS on all state railway lines. Due to technical challenges, the roll out has been delayed and more expensive than firstly envisaged. It is expected that all state railway lines will be equipped with ETCS Level 2, Baseline 3, including GSM-R, before the end of 2030. In addition to this, the Femern Belt. Fixed link together with its hinterland connections should be mentioned. The current plan is to open the tunnel together with the updated hinterland connections mid 2029.
DE	YES + 18th "Authorised user": (a) a railway undertaking; or an international grouping of railway undertakings; or (b) other natural or legal persons in particular aa) competent authorities in the framework of the Regulation (EC) No 1370/2007, bb) Shippers, forwarders and companies of combined transport which is subject to a public service or commercial Interest in acquiring rail capacity or capacity in service facilities in particular undertakings wishing to have goods transported by a railway undertaking, (cc) the bodies referred to in Article 1(2) of the Regionalisation Act; and (dd) the authorities referred to in Article 15(1).	YES + Improvement of important nodes and approach towards 240 meter railway network
BE	YES 30 AOÛT 2013. — Loi portant le Code ferroviaire (1): definition of applicant, full access to train path + services from the IM	YES - 740m long freight trains - electrification of some railway sections (Mol-Dutch border) - ETCS - Ports and the hinterlands
CH	YES	YES
AT	YES	YES

- An easy and non-discriminatory access to railway infrastructure capacity has been facilitated by the adoption of the so-called 'applicant' concept, which allows not only railway undertakings but also other interested parties such as CT operators, shippers... to reserve capacities for their trains. In all analysed BSR countries, the concept has been implemented.
- The list of submitted main railway improvements demonstrate the needs of the railway system to upgrade the current infrastructure with the main aim to free up new capacities for rail freight in general and CT in particular. The impacts of the TEN-T and RFC Regulations with the adoption of specific funding national programmes are playing a key role in railway infrastructure redesign.

5.10.3 Country sheets

As described in introductory chapter, it was decided to design more elaborated information sheets per country. For this task the support of a professional consultant was needed in order to design the detailed template and to initiate the necessary data. The aim is not only to develop country sheets for the BSR but to cover also the entire European Union + some countries such as Switzerland.

The produced template (see annex) includes more than 200 fields and 300 data elements. The data record has been split into 10 different sections:

- Source of Info for quality control aspects
- Country and year of reference
- Transport volumes (level of amplitude)
- Operators (Combined Transport, Transport Terminals, Railway Undertakings, Rail Infra Managers and Capacity Allocation Agency)
- Rail Freight corridors
- Government Actors (Administration, Cabinet, Regulator, Competition authority)
- List of regulation related to CT

- National transport strategies
- Financial supporting schemes
- Non-financial supporting schemes







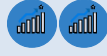





For the data collection, UIRR was supported by the subcontractor, the consortium partners and its national association peers in various countries. All results and country sheets are enclosed as separate Excel files.evaluation & selection

6 ASSESSMENT & SELECTION OF THE MEASURES

The following matrix summarize the results of the light impact assessment of the identified funding and non-funding measures. All individual assessments are enclosed.

6.1 Impacts of the Financial Support Measures

The funding measures have been classified in four main categories: (1) CT Terminal Investments, (2) Tax relief for vehicles used in CT operations, (3) Railway infrastructure investments and (4) Operational support. For each of them, five criteria have been selected to evaluate the impacts of these measures and an overall assessment (high, medium and low) is attributed per item.

Type of measure	Effectiveness (CT growth)	Environmental Efficiency	Cost-benefit Efficiency	Transferability	Global
CT Terminal investments				YES	HIGH
Tax relief for vehicles (CT)				YES	LOW
Railway investments (infrastructure)				YES	MEDIUM
Operational support				YES	MEDIUM

The first category (CT terminal investments) is considered as impacting highly the effectiveness, the environmental and cost-benefit efficient. A large majority of the BSR countries offer this option to build new facilities or upgrade existing ones.

The second category (tax relief) was considered as very effective in the initial years of CT developments (directly linked to the CT Directive 92/106) but are nowadays outdated and not very effective. Alternative measures should be considered.

The third category (railway investments) has a significant impact on the effectiveness of CT and on the environmental efficiency. The costs for new or upgrading railway lines are considered as quite

significant compared to the overall benefits. Such measures are overall assessed as medium and should be accompanied with clear rules in order to avoid distortions between the actors.

The fourth category (operational measures) are still considered as key components for Combined Transport to balance the current unfair framework conditions between the various transport modes. The evaluation of the impacts of such measures vary from one country to the other, in particular due to the fact that the financial support is not always allocated directly to the concerned stakeholder (sometimes the operational fundings are transferred to the railway undertakings and not directly to the users of the CT services such as shippers or freight forwarders. Some financial initiatives address the transfer of semi-trailers onto rail, which according to WP2, is a growing market for CT in the BSR.

6.2 Impacts of the Non-financial measures

The non-financial support measures have been divided in three elements: (1) Weights & Dimensions, (2) Access to infrastructure and (3) Operational Measures. The following table summarizes the evaluation results per element.

Type of measure	Effectiveness (CT growth)	Environmental Efficiency	Cost-benefit Efficiency	Transferability	Global
Weights & Dimensions (intermodal compliance)			N/A	YES	HIGH
Access to infrastructure			N/A	YES	MEDIUM
Operational measures			N/A	YES	LOW

The first category is considered to have a significant impact on the CT development under the condition that the weights and dimensions are fully intermodal compliant and standardized in Europe (length of road vehicles, equipment, intermodal loading units, total admissible weights...). In contrary, a non-harmonised approach would have a huge impact on a reverse modal shift (from rail/inland waterway to road). The road operators strongly believe that all changes enabling heavier and longer vehicles result in fewer vehicles on the road and less mileage and would have a positive impact on the overall emission levels in the transport sector. The weight compensation for intermodal operations (44t-rule for specific transport)

The second category relates to the facilitation of accessing the railway infrastructure (terminal + network). An efficient measure is to further implement the concept of 'open access' terminal which defines clearly the rules for accessing such a facility (directly connected to the Directive 2012/34 and its Implementing Regulation on access to service facilities). Even if all countries have adopted the concept of applicant; the railway operators and/or customers do not really use this opportunity to have

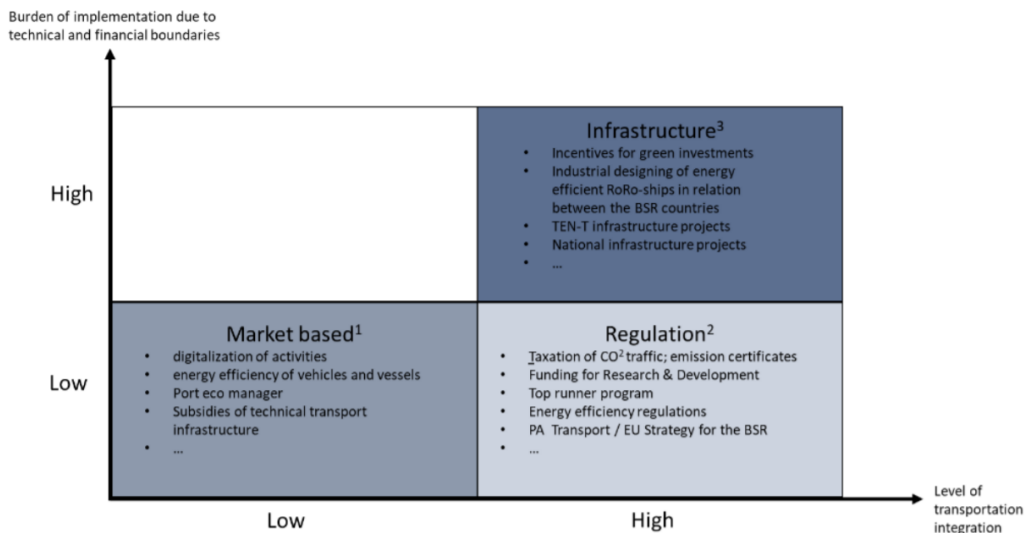
a direct access to the train path market. It has also been mentioned that the success to transfer freight from road to rail is to make rail more flexible. The lead time for setting up a rail transport is still much too long. Often the transport provider has the capacity and available train drivers / staff, but it takes too long to receive the permit to access the railway. In case of short notice requests, customers are almost always forced to use road transportation instead of rail.

The impacts of the third category – operational measures without funding – have been evaluated as low even if in the past those measures had much more positive impacts on the development on CT (for example exemptions of driving bans for drivers active in CT services).

6.3 Selection of the most relevant measures

The cargo flow analysis (see task 2.1 report ‘overview of the combined transport market in the BSR’) has demonstrated that a significant road traffic exists with the BSR countries but also externally with other European countries. It proves that Combined Transport could play an essential role in the greening of transport, as expected at European level (with the newly adopted Green Deal) but also at national level (with the publication of national plans on logistics and transportation). In the same report, it was recommended to identify measures for ILU equipment and for operations at terminal and to compare the legal environment concerning road vehicles and their possible combinations (length + weight).

The benchmark analysis (see task 3.1 report ‘Combined Transport Terminals Benchmark analysis’) pointed out among others recommendations on public accessibility of the rail network (with the support of incentives) and to help the terminal operators to develop new, innovative and green solutions in terms of energy consumption (supporting electrification of terminal’s equipment).



¹ Measures to fill existing gaps in processes and result in incremental benefits

² Measures with potential for shifting change and possible to implement

³ Breakthrough measures in terms of impact, but relatively impossible to implement given to current technology/budget constraints

The Combined Terminal Strategy (see report on activity 3.3) gives insights into a strategic approach to push forward the interregional CT development within the European Union and the Baltic Sea region. This report provides an initial overview of the CT with a focus on the terminals and tries to develop policy measures at the level of the EU and the Baltic Sea. The discussed and presented measures are seen as strategic for further development to ensure the positioning of a sustainable and efficient CT landscape. The measures follow a comprehensive approach to strengthen terminal development.

The report on High-Capacity-Transports (longer and heavier vehicles) clearly stated that HCT-transports on road should act as a complementary solution to improve intermodal transport chains, specifically for first and last mile distances. The results should be viewed as enablers to improve the efficiency of intermodal transport arrangements and in a longer extent help contribute to climate goals within the transport sector. By shifting road transports to HCT-arrangements, there are opportunities to optimize road transports as well as simultaneously developing other transport modes respectively.

The study on the importance of first/last mile for Combined Transport in the Baltic Sea Region (see final report on activities 4.1.1 and 4.1.2) is an important contribution to widen the understanding of the different cost elements included in combined transport. By exemplifying the different cost drivers of a combined transport, with a specific emphasis on first/last mile transport and making these readily available, the results can be used as an important input to the discussion on how to induce more combined transport on the market.

Based on all the results from the various previous activities (market analysis, terminal benchmark, CT terminal strategy, first/last mile operations) and on the analysis of the current existing funding and non-funding schemes in the BSR within WP5, the following key areas of actions should be considered to promote further Combined Transport in the BSR:

- The financial support to the creation and/or to the upgrade of terminals with adequate equipment technologies (e.g. semi-trailer) should be intensified in the BSR. The legal aspects of terminal operations should also be further investigated and the publication of information by all terminal operators in the BSR should be improved.
- Intermodal customers need to invest in special equipment (intermodal loading units) in order to transfer the goods from road to alternative modes such as rail and inland waterway. Incentives should be implemented to facilitate the purchase and/or the leasing of such equipment and to incite these customers for an intermodal modal shift. As the market demand for shifting semi-trailers onto rail strongly increases in the BSR, the craneability of semi-trailers might be a prerequisite to facilitate the transfer of this type of loading units.
- A stable framework related to the weights and dimensions of commercial road vehicles is an absolute necessity for the promotion and development of Combined Transport in Europe and in particular for the BSR where some important discrepancies exist in the current existing road combinations.
- A harmonised set of operational, technical and legal rules for Combined Transport should be elaborated in order to achieve a significant decrease of the carbon dioxide emissions in the transport sector and to reach the objectives of the recently published Green Deal Programme.

7 RECOMMENDATIONS OF MEASURES

According to the cargo flow analysis performed in work package 2, the current internal BSR CT traffic (in this case with focus on unaccompanied CT) is estimated at around 440.000 TEU (with 99% involving Germany), which represents less than 5% of the total European cross-border unaccompanied CT. The external BSR CT traffic is evaluated at about 680,000 TEU which is around 7% of the total current European cross-border unaccompanied CT.

The cargo flow analysis has demonstrated that a significant road traffic exists with the BSR countries but also externally with other European countries. It proves that Combined Transport could play an essential role in the greening of transport, as expected at European level (with the newly adopted Green Deal) but also at national level (with the publication of national plans on logistics and transportation). The UIC/UIRR 2020 Report on Combined Transport shows evidences that Combined Transport is the most dynamic rail freight segment and accounts in Europe for nearly 50% of all tonne-kilometres transported on rail.

To significantly increase the market share of Combined Transport in the BSR, supporting and accompanying measures should be part of the BSR overall strategy on Combined Transport. Three different actions areas have been identified: (1) legal & policy review, (2) digitalization & knowledge platforms and (3) additional studies & research needs.

(1) Legal & Policy Review

Since several years, the Commission takes legal and policy initiatives to create the Single Railway area to promote a European interoperable network on the entire territory of the European Union and to support the modal shift to rail and other transport modes. Based on the selection of the most important measures (see previous chapter), the BSR should contribute to the revision of the following key Regulations and Directives

a) Revision of the TEN-T Guidelines

The Trans-European Network (TEN) is an EU-defined high-level transport network and instrument for the standardization of transport systems. In the long term, cross-border connections are to be improved, weak links are to be national networks, and connecting peripheral regions and combining and interconnecting the different modes of transport through better interoperability. TEN is an umbrella term which summarizes the activities of the EU in the areas of the transport infrastructure (i.e., TEN-T), the telecommunications infrastructure, (i.e., eTEN), and energy infrastructure (i.e., TEN-Energy). For all transport modes key parameters have been identified for the core and comprehensive network of the TEN-T.

The revision of the TEN-T Guidelines Regulation offers an ideal opportunity for the European legislator to enact the changes needed on the European Union level and in particular to integrate the requirements of the BSR in particular the following elements should be integrated in order to render railway and transshipment infrastructure more competitive for intermodal transport:

- Clarification of the TEN-T technical parameters for the railway infrastructure: concept of electrification, terminal requirement to be part of the CNC, loading gauge, track speed, gross weight
- Review of the railway line codification for the 4-meter loading gauge (very relevant for the transfer of semi-trailers): mandatory requirement for regular line gauge codification
- Introduction of parameters to guide the upgrading of transshipment terminals: the three factors should be revised in particular the CNC terminal status should be automatically acquired if the annual transshipment performance reaches a certain volume of units (e.g. 40,000 units) and the listing of terminals in the annex of the Regulation (no need if the automatically integration principle is applied – otherwise for any new terminals – need legislative action)
- Introduction of the “freight preferred railway line” category: to encourage the cheaper and faster modernisation of conventional railway lines that predominantly cater to the needs of freight trains. This can guarantee a competitive track access charge for freight trains.

b) Revision Rail Freight Corridor (RFC) Regulation

The Regulation concerning a European Rail Network for Competitive Freight (Regulation EU 913/2010) entered into force on 9 November 2010. Article 19 (2) of Regulation (EU) 913/2010 concerning a European rail network for competitive freight requires the Management Boards of the RFCs to monitor the performance of rail freight services on their respective freight corridors and publish the results once a year. On each RFC, specific advisory boards have been designed and created: the Railway Advisory Group (RAG) and the Terminal Advisory Group (TAG).

The planned revision of the RFC Regulation is an opportunity to integrate additional elements to improve the overall performance of the corridors in particular for intermodal transport using railway as main long-haul transport:

- Transparency: standardised websites and site maps for all RFCs, as single European Rail Freight Corridor homepage focusing on BSR, improved reporting towards the stakeholders by the Management Board, improved KPIs on all RFCs...
- Organisation and governance: reinforce the standing of the Corridor Managing Directors, composition and operation of Railway Advisory Groups, reinforce the role of RAG/TAG in governance, organisation or biannual public meetings
- Tasks and competences of RFCs: adequate capacities for the PMOs, creation of small-scale fund for quick-win projects, classification of train paths, traffic management

c) Combined Transport Directive

Combined Transport is promoted within the European Union (EU) through the Combined Transport (CT) Directive (Council Directive 92/106/EEC). The Directive seeks to promote Combined Transport operations through the elimination of authorisation procedures and quantitative restrictions for Combined Transport operations, it clarifies the non-application of road cabotage restrictions on road legs, and provides financial support through fiscal incentives for certain Combined Transport

operations. In order to be eligible for the provisions within the CT Directive, the movement of goods must meet a number of specific criteria as regards type of load units and distances.

The European Commission adopted a package of proposals to make the EU's climate, energy, land use, transport and taxation policies fit for reducing net greenhouse gas emissions by at least 55% by 2030, compared to 1990 levels. In the EU's roadmap a revised proposal for a Directive on Combined Transport has been scheduled for 2021. The Commission is currently drafting a proposal to fix the legal framework for intermodal transport for the next decades. It is essential that the parties involved in the development of intermodal transport in the BSR actively contribute to the fixing of harmonised rules for the European Union. The proposal of the Commission should propose to the Member States a high level of flexibility regarding the temporary compensation measures allowing the Member States or a region like BSR to design and develop the adequate financial or non-financial measures. BSR would be in the position to develop its own intermodal action plan with specific supporting measures.

d) Weights & Dimensions

In Europe, heavy goods vehicles, buses, and coaches must comply with certain rules on weights and dimensions for road safety reasons and to avoid damaging roads, bridges, and tunnels. Directive (EU) 2015/719 sets maximum dimensions and weights for international traffic, also ensuring that Member States cannot restrict the circulation of vehicles which comply with these limits from performing international transport operations within their territories.

The Directive also aims at avoiding that national operators benefit from undue advantages over their competitors from other Member States when performing national transport. These rules are complemented by the requirements for type-approval of commercial vehicles laid out in Regulation 2018/858 which sets the framework for putting vehicles such as light-duty and heavy-duty vehicles, buses, and trailers on the market.

The Commission intends to start a revision of this important piece of legislation in 2022 namely in integrating the cross-border operations of heavier and longer road vehicles. This could lead to a significant reverse modal shift if intermodal is not well accompanied by strong support measures (e.g. all road vehicles combinations must be technically and operationally compatible with intermodal operations on rail or inland waterway). All intermodal actors, especially those involved in the BSR where the dimensions of road vehicles may clearly differ, should actively contribute to a well-balanced framework between pure road transport and intermodal alternatives.

(2) Information & Knowledge Portals in the BSR

One of the aims of the COMBINE project is to promote intermodal transport through better best practices and knowledge of the intermodal sector in the BSR. A need for information is definitely needed by the sector and by the Authorities. An information & knowledge portal on the intermodality in the BSR should be envisaged as one-stop-shop for any interested parties. The current website of the COMBINE project could be used as a starting point and should be enhanced with new functionalities.

For the integration and consolidation of terminal related data, it is recommended that all BSR terminals for Road-Rail should be invited to upload their data onto the Rail Facilities Portal (www.railfacilitiesportal.eu). This platform is currently managed and operated by RNE and UIRR and is considered by the sector as single point of entry for all service facilities in Europe which offer railway connections (imposed by the Implementing Regulation on access to rail-related service facilities).

(3) Studies and additional research

The project COMBINE should be seen as an important milestone for the development of combined transport in BSR. It has been demonstrated that a huge potential for CT exists and that some pragmatic solutions have been proposed for terminals (benchmark, transshipment technologies, strategy), for first/last mile operations, benefits of longer/heavier trucks even for CT,... We strongly believe that this initiative should be further pursued by carrying out additional research on the following topics:

- **Intermodal Loading Unit:** a study should be conducted to analyse the current ILU mix in the BSR and to determine the best loading unit related to the transport goods. A particular attention should be addressed to the transport of semi-trailers. The question of the craneability should be further investigated. The potential in-depth analysis could be based on the results of the preliminary study carried out within the COMBINE project (see enclosed slides).
- **Cabotage rules:** the Combined Transport community has been closely following the developments of the trialogue deal reached by the EU Commission concerning Mobility Package 1. While the entire Mobility Package 1 seems OK, there are growing concerns that the new provision included by the deal-makers, which would grant the right to Member States to suspend Article 4 of the Combined Transport Directive, will significantly impact the competitiveness of the Combined Transport industry. A study – partially covered by the COMBINE project (see attached) – has described concisely the risk and potential negative impacts on the Combined Transport industry of the planned regulatory changes. Within the BSR, this study should be complemented and further debated with the national ministries.
- **Digitalisation:** the digital transformation of Combined Transport is in process with the aim to facilitate the design and development of innovative solutions for the market. In this context, it would be helpful to develop a digital roadmap for the BSR addressing the key actions to be
- **Greening of the transport sector in the BSR:** In December 2020, the European Commission published its 'Sustainable and Smart Mobility Strategy' together with an action plan comprising 82 initiatives drafted to guide the work that will be performed in the next four years. This strategy aims to lay the foundation for the EU transport system in order to achieve its green and digital transformation and make it more resilient to future crises, in alignment with the requirements of the Green Deal. According to these requirements, the objective is to reach a 90% cut in emissions by 2050, delivered by a smart, competitive, safe, accessible and affordable transport system. Overall, the vision of the "Smart and sustainable mobility" strategy is summarized by three main objectives (an irreversible shift to zero-emission mobility, achieving seamless, safe and efficient connectivity, a more resilient single European transport area for inclusive

connectivity). It is recommended, as for the digitalization, to elaborate a detailed greening roadmap for the BSR taking into account the preliminary analysis of the additional activity performed within the project on sustainability review, whose main aim was to find out the means to transform the UN agenda on sustainable goals into practical and implementable solutions for BSR.

8 CONCLUSIONS

The project COMBINE aims at enhancing all forms of combined transport (CT) in the Baltic Sea region (BSR) and to make freight transport more efficient and environmentally friendly. It is of vital importance that the framework conditions and the supporting measures between the transport modes are stable, faire and non-discriminatory.

The first aim of this report was to compare and evaluate the current existing measures to support the development of CT with a clear distinction between the financial initiatives from the non-funding actions. Based on this assessment, the second objective was to propose recommendations for a more harmonised approach in the legal and policy approach in the BSR for Combined in all forms with a focus on the Road-Rail combination, which has been considered in the cargo flow analysis as the most promising CT segment for the future development of CT in the BSR.

The analysis of the funding measures has provided evidences that the situation within BSR is extremely contrasted. In several countries, subsidy schemes have been elaborated whereas in some Member States very few or even no schemes are proposed. Most of the measures address financial schemes for operational and infrastructure investments (rail, terminals) for all forms of Combined Transport. The study of the non-funding measures on the three identified topics (weights & dimensions, infrastructure compatibility and access to Infrastructure) has shown some significant differences in the BSR in particular on the acceptance of heavier and longer road vehicles and key railway parameters such as train length and weight. Even if all BSR countries accept the transportation of any types of loading units (maritime containers, swap bodies, semi-trailers), the need to upgrade the railway infrastructure and to codify all the lines according to a commonly agreed profile (e.g. P400 for the transport of semi-trailers).

From the light evaluation exercise, the following topics have selected as potentially impacting the most the further development in the BSR: (1) intensification of the financial support to the creation and/or to the upgrade of terminals with adequate equipment technologies (e.g. semi-trailer), (2) the necessity for the intermodal customers to further invest in special equipment (intermodal loading units) supported by incentives the purchase and/or the leasing of such equipment (in particular for the semi-trailers that should be obliged to be craneable) and (3) an enhanced European harmonised legal framework for Combined Transport in terms of weights and dimensions, operational, technical and temporary compensation measures for Combined Transport.

To significantly increase the market share of Combined Transport in the BSR, supporting and accompanying measures should be integrated in a global strategy on the development of Combined Transport in the BSR. Three different actions areas have been identified: (1) legal & policy review (revision of the TEN-T and Rail Freight Corridor Regulation, draft of new CT Directive, the

planned revision of the weights & dimensions Directive, (2) digitalization & knowledge platforms (the need of the creation of a knowledge center for CT in BSR based on the current COMBINE website and (3) additional studies & research needs (intermodal loading units, cabotage rules, digitilisation and greening of the transport sector).

In order to achieve the climate goals as defined in the Sustainable and Smart Mobility Strategy of the Commission, the COMBINE consortium strongly believes that Combined Transport in all forms will play an essential role in a drastic reduction of the CO₂ emissions in the freight transport sector. The CT community, represented by UIRR, has recently adopted at its last General Assembly in May 2021, a new vision and strategy: zero-Carbon emission Combined Transport is the solution for well performing longer distance surface freight logistics in a carbon-neutral Europe.

The activities and results performed in this work package have contributed to the identification of potential measures that would significantly impact the development of CT. The Baltic Sea Region, as high potential for further CT growth, shall take the necessary actions and measures to support efficiently the greening of land transport through active promotion of Combined Transport.

Annex A – Surveys (funding and non-funding measures)

Guidelines for completing the template on 'Existing funding schemes'

Aim:	Collect all funding schemes per BSR Member State promoting Combined Transport in the BSR
Coverage	All forms of Combined Transport except accompanied transport and air-road, air-rail
BSR Member State	Insert the official name of the BSR Member State (in English)
COMBINE - Partner's name	Insert the name of the partner and the contact person details (name, phone, email) which has been responsible for completing the survey
Name of programme	Insert the official name of the programme (in national language and in English if available)
Approval by European Commission	Is the programme officially approved by EC? (1) Yes (2) No
Area coverage	insert the coverage of the funding schemes with one of the following options (use the number): (1) National (2) Regional (3) Local/Urban (4) Others (please specify)
Institution	Insert the entity responsible for the funding scheme (full name or acronym, in national language and if existing in English. Multiple entries possible)
Type of measure	Use the following possibilities for the identification of the type of measure (multiple selection is allowed, use the number): (1) Direct Grant (2) Tax allowance (3) Loan (4) Others (please specify)
Market Segments	Use one of the following options to differentiate the funding programme according to the Combined Transport market segments (use the number): (1) Combined Transport in general (all forms) (2) Combined Transport Road-Rail (3) Combined Transport Road-IWW
Total funding scheme	Insert the total volume of the program (in €)
Funding period	Insert the applicable funding period (date from-to)
Classification criteria	Use the following options to classify the identified measures (multiple selections are possible) (use the number) (1) Operational (funding per km, support of processes, technology support) (2) Rail Infrastructure (first/last mile, hinterland access, access charges) (3) Terminal infrastructure (e.g. for horizontal technologies) (4) Digitalisation (smart systems, IoT, Industry 4.0, artificial intelligence) (5) Rolling stock (wagons) (6) Assets (intermodal loading units) (7) Research and innovation (studies, demonstrators) (8) Fiscal support (reimbursement vehicle tax, exemption of vehicle tax...) (9) Others (please specify)
Description of the measure	Describe for each incentive/classification the funding principle and indicate the level of contributions (for example Xc€ for vehicle tax)
Linkk/website	Insert the URL (if available) where the funding programme can be consulted
Contact Point	Insert the official contact point for the programme (if available)
Email	Insert the official email address of the contact point (if available)

COMBINE - WP 5 - Framework conditions for Combined Transport (regulatory / support programmes)													
COLLECTION OF EXISTING FUNDING SCHEMES													
IBER MEMBER STATE (name)													
COMBINE - PARTNER'S NAME + CONTACT PERSON + EMAIL													
IC	Name of programme	EC Approval	Area coverage	Institution	Type of measure	Market segments	Total funding scheme (in €)	Funding period	Classification	Description of measure	Link/website	Contact point	Email
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													

Guidelines for completing the template on 'Non Existing funding schemes'

Aim:	Collect all non funding schemes per BSR Member State promoting Combined Transport in the BSR
Coverage	All forms of Combined Transport except accompanied transport and air-road, air-rail
Topics to be covered	The following topics have been selected as a first approach: (1) Weights & Dimensions (comparison between road, rail and inland waterway) (2) Infrastructure compatibility (current railway profiles) (3) Access to infrastructure
BSR Member State	Insert the official name of the BSR Member State (in English)
COMBINE - Partner's name	Insert the name of the partner and the contact person details (name, phone, email) which has been responsible for completing the survey

Note: all the support tips have been incorporated directly in the template.

COMBINE - WP 5 - Framework conditions for Combined Transport (regulatory / support programmes)

COLLECTION OF EXISTING NON-FUNDING SCHEMES

BSR MEMBER STATE (name)

COMBINE - PARTNER'S NAME + CONTACT PERSON + EMAIL

TOPIC 'WEIGHTS AND DIMENSIONS'

Road transport features

Maximum length for road trains	in mm	
Maximum length for articulated units	in mm	
Maximum width for road vehicles	in mm	
Maximum mass for road vehicles and articulated loading units	in tonnes	
Is the EU Directive 2015/719 on maximum road vehicles dimensions implemented and applied?	YES/NO + description	
Availability and issue scheme for special allowances for larger and heavier road vehicles than permitted by the EU Directive 2015/719 ?	YES/NO + description	

Combined transport features

Any special treatment as far as maximum dimensions and weight is concerned in force for vehicles used in combined transport?	YES/NO + rules	
Is the CT Directive 92/106 implemented ? What are the main principles ?	YES/NO + rules	

TOPIC 'INFRASTRUCTURE COMPATIBILITY'

Is the railway infrastructure adapted to the transportation of 4m-high semi-trailers ? Exact routes ? Database?	TEXT ONLY	
Is rail transport of containers and swap bodies with a height of 2 900 mm on standard railway car ? Exact routes ? Database ?	YES/NO + description	
Does the railway infrastructure manager publish a map with all codified lines for Combined Transport ?	YES/NO + description	
Does the railway infrastructure manager exchange the CT profiles in the RINF database ?	YES/NO	
Are works for railway gauge improvement planned?	YES/NO + description	
Maximum axle load for CT wagons:	in tonnes	
Maximum combined transport trains length:	in metres	
Maximum mass of combined transport trains:	in tonnes	
Maximum speed for combined transport trains:	in km/h	

TOPIC 'ACCESS TO INFRASTRUCTURE'

Note: all questions related to the access to terminal infrastructure will be addressed within WP3 (under the coordination of DTCH). All results will be included in this part.

Is the concept of "applicant" (EU Directive 2012/34: "applicant" means a railway undertaking or an international grouping of railway undertakings or other persons or legal entities, such as competent authorities under Regulation (EC) No 1370/2007 and shippers, freight forwarders and combined transport operators, with a public-service or commercial interest in procuring infrastructure capacity ;) implemented to allow Combined Transport Operators to reserve directly a train path to the Infrastructure Manager ?	YES / NO + rules	
Any important improvements of the rail system planned and decided on? Which ones ? When does the work start/finish?	YES / NO + description	

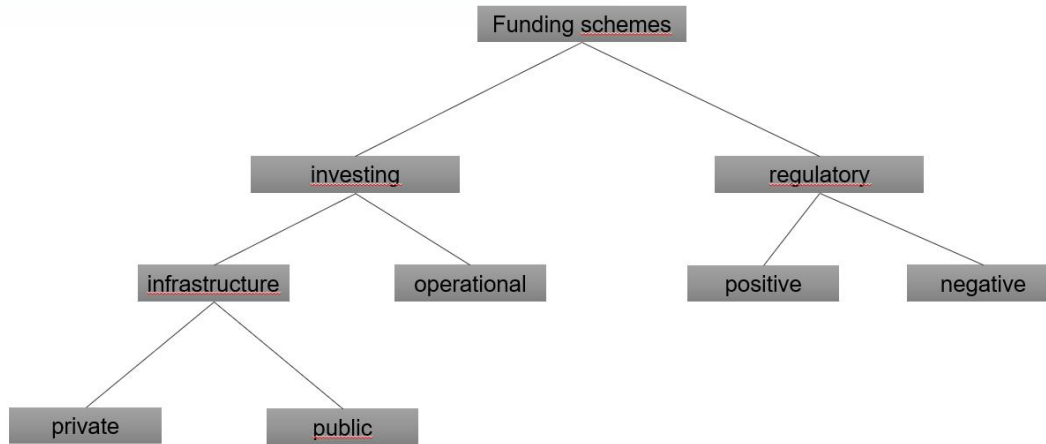
Annex B – Evaluation (approach)

COMBINE Project - Guidelines for completing the survey on 'Evaluation of funding and non-funding schemes'

Aim:	Evaluate all the collected funding schemes for each BSR Member State (see attachment)
Business Partner	Insert the official name of the Business Partner filling in the evaluation template
COMBINE - Partner's name	Insert the name of the partner and the contact person details (name, phone, email) which has been responsible for completing the evaluation scheme
PART FOR BUSINESS PARTNER	
Impacts	<i>The Impact is evaluated from 1 (low) to 5 (high)</i>
Impact Criteria	<p>Effectiveness: How strongly has the funding measure influenced CT growth in your Country ?</p> <p>Environmental Efficiency: How do you rate the CO2 savings potential of the funding measure or how much CO2 could be saved by the funding measure?</p> <p>Cost-benefit Efficiency: How do you rate the relationship between investment and output?</p>
Transferability	How do you assess the transferability of the funding measure to other countries/regions?
Justification	Please justify your scoring impact per criteria
PART FOR PROJECT PARTNER	
Category of Measure	Please specify the category of the measure (investing or regulatory)
Sub Category of Measure	Please specify the subcategory of the measure - Investing: infrastructure or operational - Regulatory: positive or negative
Description of Funding/ Non-Funding Scheme	Please describe shortly the measure (with or without funding)

Categorization: existing combined transport funding schemes

COMBINE

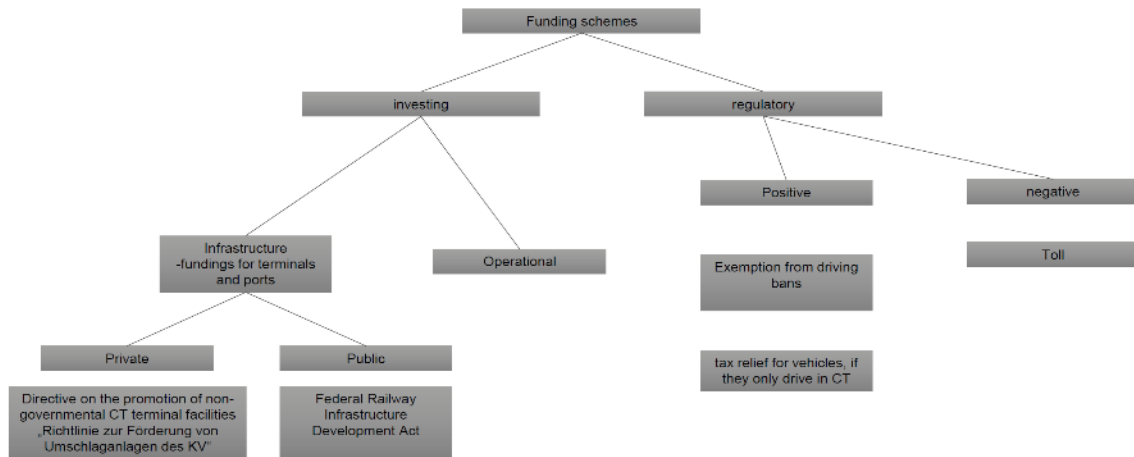


EUROPEAN REGIONAL DEVELOPMENT FUND



Example: funding schemes Germany

COMBINE



EUROPEAN REGIONAL DEVELOPMENT FUND



COMBINE Project - Evaluation of funding and non-funding schemes

LITHUANIA

BUSINESS PARTNER
COMBINE - PARTNER'S NAME + CONTACT PERSON + EMAIL

Virtana
 LTS Cargo, Irena Gindgaudis, irena.gindgaudis@virta.lt

TO BE FILLED IN BY PROJECT PARTNER

TO BE FILLED IN BY BUSINESS PARTNER

Measure		Description of Funding/ Non-Funding Scheme	Effectiveness (CT growth) How strongly has the funding measure influenced CT growth in your Country	Impact (from 1 to 5)		Cost-benefit Efficiency How do you rate the relationship between investment and output?	Transferability How do you assess the transferability of the funding measure to other countries/regions?	Justification
Category of Measure	Sub Category of Measure			Environmental Efficiency (CO2 Reduction) How do you rate the CO2 savings potential of the funding measure?	How do you rate the CO2 savings potential of the funding measure?			
Regulatory	Positive	For the use of heavy goods vehicles, with or without a load, of more than 40 tonnes and for the carriage of one or more combined transport units (semi-trailers, swap bodies and containers with a total maximum length not exceeding 45 feet) on main roads and other roads within a radius of 50 km from the territories of Klaipėda State Seaport, airports, railway and inland waterway stations where unloading and / or loading of combined transport units, -44 t, drivers pay reduced fee.	3	3		Other countries apply this measure and even at a greater extent	Partially effective measure	

BUSINESS PARTNER
COMBINE - PARTNER'S NAME + CONTACT PERSON + EMAIL

DSV Lithuania
 LTS Cargo, Irena Gindgaudis, irena.gindgaudis@virta.lt

TO BE FILLED IN BY PROJECT PARTNER

TO BE FILLED IN BY BUSINESS PARTNER

Measure		Description of Funding/ Non-Funding Scheme	Effectiveness (CT growth) How strongly has the funding measure influenced CT growth in your Country	Impact (from 1 to 5)		Cost-benefit Efficiency How do you rate the relationship between investment and output?	Transferability How do you assess the transferability of the funding measure to other countries/regions?	Justification
Category of Measure	Sub Category of Measure			Environmental Efficiency (CO2 Reduction) How do you rate the CO2 savings potential of the funding measure?	How do you rate the CO2 savings potential of the funding measure?			
Regulatory	Positive	For the use of heavy goods vehicles, with or without a load, of more than 40 tonnes and for the carriage of one or more combined transport units (semi-trailers, swap bodies and containers with a total maximum length not exceeding 45 feet) on main roads and other roads within a radius of 50 km from the territories of Klaipėda State Seaport, airports, railway and inland waterway stations where unloading and / or loading of combined transport units, -44 t, drivers pay reduced fee.	2	1		Other countries apply this measure and even at a greater extent	ineffective measure	

BUSINESS PARTNER
COMBINE - PARTNER'S NAME + CONTACT PERSON + EMAIL

Hoptrans
 LTS Cargo, Irena Gindgaudis, irena.gindgaudis@virta.lt

TO BE FILLED IN BY PROJECT PARTNER

TO BE FILLED IN BY BUSINESS PARTNER

Measure		Description of Funding/ Non-Funding Scheme	Effectiveness (CT growth) How strongly has the funding measure influenced CT growth in your Country	Impact (from 1 to 5)		Cost-benefit Efficiency How do you rate the relationship between investment and output?	Transferability How do you assess the transferability of the funding measure to other countries/regions?	Justification
Category of Measure	Sub Category of Measure			Environmental Efficiency (CO2 Reduction) How do you rate the CO2 savings potential of the funding measure?	How do you rate the CO2 savings potential of the funding measure?			
Regulatory	Positive	For the use of heavy goods vehicles, with or without a load, of more than 40 tonnes and for the carriage of one or more combined transport units (semi-trailers, swap bodies and containers with a total maximum length not exceeding 45 feet) on main roads and other roads within a radius of 50 km from the territories of Klaipėda State Seaport, airports, railway and inland waterway stations where unloading and / or loading of combined transport units, -44 t, drivers pay reduced fee.	2	1		Other countries apply this measure and even at a greater extent	ineffective measure	

BUSINESS PARTNER
COMBINE - PARTNER'S NAME + CONTACT PERSON + EMAIL

DB Schenker Lithuania
 LTS Cargo, Irena Gindgaudis, irena.gindgaudis@virta.lt

TO BE FILLED IN BY PROJECT PARTNER

TO BE FILLED IN BY BUSINESS PARTNER

Measure		Description of Funding/ Non-Funding Scheme	Effectiveness (CT growth) How strongly has the funding measure influenced CT growth in your Country	Impact (from 1 to 5)		Cost-benefit Efficiency How do you rate the relationship between investment and output?	Transferability How do you assess the transferability of the funding measure to other countries/regions?	Justification
Category of Measure	Sub Category of Measure			Environmental Efficiency (CO2 Reduction) How do you rate the CO2 savings potential of the funding measure?	How do you rate the CO2 savings potential of the funding measure?			
Regulatory	Positive	For the use of heavy goods vehicles, with or without a load, of more than 40 tonnes and for the carriage of one or more combined transport units (semi-trailers, swap bodies and containers with a total maximum length not exceeding 45 feet) on main roads and other roads within a radius of 50 km from the territories of Klaipėda State Seaport, airports, railway and inland waterway stations where unloading and / or loading of combined transport units, -44 t, drivers pay reduced fee.	1	1		Other countries apply this measure and even at a greater extent	ineffective measure	

BUSINESS PARTNER
COMBINE - PARTNER'S NAME + CONTACT PERSON + EMAIL

A. Griekus autotransporto įmonė
 LTS Cargo, Irena Gindgaudis, irena.gindgaudis@virta.lt

TO BE FILLED IN BY PROJECT PARTNER

TO BE FILLED IN BY BUSINESS PARTNER

Measure		Description of Funding/ Non-Funding Scheme	Effectiveness (CT growth) How strongly has the funding measure influenced CT growth in your Country	Impact (from 1 to 5)		Cost-benefit Efficiency How do you rate the relationship between investment and output?	Transferability How do you assess the transferability of the funding measure to other countries/regions?	Justification
Category of Measure	Sub Category of Measure			Environmental Efficiency (CO2 Reduction) How do you rate the CO2 savings potential of the funding measure?	How do you rate the CO2 savings potential of the funding measure?			
Regulatory	Positive	For the use of heavy goods vehicles, with or without a load, of more than 40 tonnes and for the carriage of one or more combined transport units (semi-trailers, swap bodies and containers with a total maximum length not exceeding 45 feet) on main roads and other roads within a radius of 50 km from the territories of Klaipėda State Seaport, airports, railway and inland waterway stations where unloading and / or loading of combined transport units, -44 t, drivers pay reduced fee.	1	1		Other countries apply this measure and even at a greater extent.	ineffective measure	

GERMANY									
BUSINESS PARTNER									
BUSINESS PARTNER'S NAME / CONTACT PERSON / ADDRESS									
TO BE FILLED IN BY PROJECT PARTNER									
Name	Category of Measure	Sub Category of Measure	Description of Funding Non-Funding Scheme	Effectiveness (T growth)	Environment/Efficiency (CO2 Reduction)	Cost Benefit Efficiency	Transferability	Justification	
Guidance for the development of combined transport (CT) of non-ferrous metal companies (2nd call)	Investing	Infrastructure	Financial assistance for investments by non-ferrous metal companies in the construction and expansion of CT transport facilities (up to 80% of the eligible investment expenditure)	4	3	4	good	More handling facilities in CT to reduce the weight of the goods and thus to a significant cost reduction for CT.	
Federal Rail Infrastructure Act / Service and Financing Agreement (SFA)	Investing	Infrastructure	The Federal Government finances new construction, expansion and replacement investments in the railway infrastructure within the framework of the funds available in the federal budget.	2	4	4		Any expansion of the rail infrastructure also benefits CT. However, it does not represent a targeted support measure for CT.	
Exemption from driving ban	regulatory	Positive	Exemption from the driving ban on weekends and bank holidays and from the holiday driving ban (SFA No. 3, § 6a StBA/Bahnverkehrsvertrag)	4	2	4	good	The carriage/pack carriage represents an important part of the rail freight transport.	
Minimum permissible weight	regulatory	Positive	Minimum permissible weight has been increased to 48 tonnes for long and medium haul (weight) § 6a StBA, Antriebsverfahren für Güterzüge (Antriebsverfahren für Güterzüge) (SFA No. 3, § 6a StBA/Bahnverkehrsvertrag)	5	2	5	good	The higher load of the train increases transport efficiency.	
access to terminals without discrimination	regulatory	Positive	Free access to the rail network in Germany. Access to combined terminals whose construction has been supported through public funds has to be provided without discrimination.	5	4	4	good	Increasing the range of destinations increases competitiveness.	
BUSINESS PARTNER'S NAME / CONTACT PERSON / ADDRESS									
TO BE FILLED IN BY PROJECT PARTNER									
Name	Category of Measure	Sub Category of Measure	Description of Funding Non-Funding Scheme	Effectiveness (T growth)	Environment/Efficiency (CO2 Reduction)	Cost Benefit Efficiency	Transferability	Justification	
Guidance for the development of combined transport (CT) of non-ferrous metal companies (2nd call)	Investing	Infrastructure	Financial assistance for investments by non-ferrous metal companies in the construction and expansion of CT transport facilities (up to 80% of the eligible investment expenditure)	4	4	4	4		
Federal Rail Infrastructure Act / Service and Financing Agreement (SFA)	Investing	Infrastructure	The Federal Government finances new construction, expansion and replacement investments in the railway infrastructure within the framework of the funds available in the federal budget.	2	3	3	3		
Exemption from driving ban	regulatory	Positive	Exemption from the driving ban on weekends and bank holidays and from the holiday driving ban (SFA No. 3, § 6a StBA/Bahnverkehrsvertrag)	4	4	4	5		
Minimum permissible weight	regulatory	Positive	Minimum permissible weight has been increased to 48 tonnes for long and medium haul (weight) § 6a StBA, Antriebsverfahren für Güterzüge (Antriebsverfahren für Güterzüge) (SFA No. 3, § 6a StBA/Bahnverkehrsvertrag)	2	2	4	2	The overall potential is rather low, as only a few CT are at the weight limit.	
access to terminals without discrimination	regulatory	Positive	Free access to the rail network in Germany. Access to combined terminals whose construction has been supported through public funds has to be provided without discrimination.	4	4	4	5		



LATVIA									
BUSINESS PARTNER									
COMBINE - PARTNER'S NAME + CONTACT PERSON + EMAIL									
TO BE FILLED IN BY PROJECT PARTNER					TO BE FILLED IN BY BUSINESS PARTNER				
Measure				Impact (from 1 to 5)			Transferability		Justification
Name	Category of Measure	Sub Category of Measure	Description of Funding/ Non-Funding Scheme	Effectiveness (CT growth)	Environmental Efficiency (CO2 Reduction)	Cost-benefit Efficiency	How do you assess the transferability of the funding measure to other countries/regions?		
				How strongly has the funding measure influenced CT growth in your Country	How do you rate the CO2 savings potential of the funding measure or how much CO2 could be saved by the funding measure?	How do you rate the relationship between investment and output?			
Guideline for the Federal Rail Infrastructure Act / Service and Financing Agreement (LUFV)	investing	Infrastructure	Financial assistance for	4	4	5	5		easy transfer possible if funds are available
	investing	Infrastructure - funding for terminals and ports; public	The Federal Government finances new construction, expansion and replacement investments in the railway infrastructure of the Federal railways within the framework of the funds available in the federal budget.	2	3	2	2		Rail infrastructure is developed very diff
Exemption vehicle tax	regulatory	Positive	tax relief for vehicles, if they only drive in CT	3	1	3	3		Easy transfer possible
Exemption from driving ban	regulatory	Positive	Exemptions from the driving ban on weekends and bank holidays and from the holiday driving ban (§ 30 Abs. 3 Straßenverkehrsordnung)	3	1	2	3		Easy transfer possible
Maximum permissible weight	regulatory	Positive	Maximum permissible weight has been increased to 44 tonnes for initial and terminal road haulage (§ 1 der St. Ausnahmeverordnung von den Vorschriften der Straßenverkehrs-Zulassungs-Ordnung).	3	2	3	2		depends on the infrastructure
access to terminals without discrimination	regulatory	Positive	free access to the rail network in Germany. Access to combined terminals whose construction has been supported through public funds has to be provided without discrimination.	2	2	2	4		is already implemented in Germany too
BUSINESS PARTNER									
COMBINE - PARTNER'S NAME + CONTACT PERSON + EMAIL									
					Baltic Logistic Solutions, https://www.bs.lv/				
					Latvian Logistics Association, Egons Mudulis, egons.mudulis@gmail.com				
TO BE FILLED IN BY PROJECT PARTNER				TO BE FILLED IN BY BUSINESS PARTNER					
Measure			Impact (from 1 to 5)			Transferability			Justification
Category of Measure	Sub Category of Measure	Description of Funding/ Non-Funding Scheme	Effectiveness (CT growth)	Environmental Efficiency (CO2 Reduction)	Cost-benefit Efficiency	How do you assess the transferability of the funding measure to other countries/regions?			
			How strongly has the funding measure influenced CT growth in your Country	How do you rate the CO2 savings potential of the funding measure or how much CO2 could be saved by the funding measure?	How do you rate the relationship between investment and output?				
Regulatory	Positive	If a goods vehicle or trailer (semi-trailer) has participated in the combined carriage by rail in the territory of Latvia, the vehicle operation tax for such vehicle shall be reimbursed in proportion to the days which have been spent in combined carriage by rail in the territory of Latvia within the calendar year.	1	2	2	3		No service available. In case it existed as Rail Baltica envisages - useful for BLS if semi-trailer can be put on rail platform in 30-40 min.	
Regulatory	Positive	Max. length road trains: 18750 + 150 (for intermodal transport only); Max. length articulated vehicles: 16500 + 150 (for intermodal transport only); Max. Mass: 40, but 42 (for a two-axle towing vehicle and a three-axle semi-trailer that, while conducting intermodal transport operations, carries one or several containers or swap bodies the total maximum length of which is up to 45 feet); and 44 (three-axle towing vehicle and a two-axle or three-axle semi-trailer that, while conducting intermodal transport operations, carries one or several containers or swap bodies the total maximum length of which is up to 45 feet).	3	1	3	3		For BLS no big use, unless heavy goods like drinks are transported. However, rather useful for manufacturers.	
Regulatory	Positive								
BUSINESS PARTNER									
COMBINE - PARTNER'S NAME + CONTACT PERSON + EMAIL									
					Cido, http://www.cido.lv/en				
					Latvian Logistics Association, Egons Mudulis, egons.mudulis@gmail.com				
TO BE FILLED IN BY PROJECT PARTNER				TO BE FILLED IN BY BUSINESS PARTNER					
Measure			Impact (from 1 to 5)			Transferability			Justification
Category of Measure	Sub Category of Measure	Description of Funding/ Non-Funding Scheme	Effectiveness (CT growth)	Environmental Efficiency (CO2 Reduction)	Cost-benefit Efficiency	How do you assess the transferability of the funding measure to other countries/regions?			
			How strongly has the funding measure influenced CT growth in your Country	How do you rate the CO2 savings potential of the funding measure or how much CO2 could be saved by the funding measure?	How do you rate the relationship between investment and output?				
Regulatory	Positive	If a goods vehicle or trailer (semi-trailer) has participated in the combined carriage by rail in the territory of Latvia, the vehicle operation tax for such vehicle shall be reimbursed in proportion to the days which have been spent in combined carriage by rail in the territory of Latvia within the calendar year.	1	4	4	4		No service available, but could bring CO2 reduction and be economically beneficial on longer routes like Tallinn - Kaunas if time is compatible to road transport.	
Regulatory	Positive	Max. length road trains: 18750 + 150 (for intermodal transport only); Max. length articulated vehicles: 16500 + 150 (for intermodal transport only); Max. Mass: 40, but 42 (for a two-axle towing vehicle and a three-axle semi-trailer that, while conducting intermodal transport operations, carries one or several containers or swap bodies the total maximum length of which is up to 45 feet); and 44 (three-axle towing vehicle and a two-axle or three-axle semi-trailer that, while conducting intermodal transport operations, carries one or several containers or swap bodies the total maximum length of which is up to 45 feet).	2	2	2	3		Transferring the measure to other countries might open some possibilities, however, common measures in the 3 Baltic countries market usually come slowly and hard.	

