

JOINT TRANSNATIONAL STRATEGY

REGION:

CENTRAL EUROPE

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1. Joint Transnational Strategy

1.1. Problem Description - The Challenges for Multimodal Transport

Multimodal Transport has always played an important role for the chemical industry, which is transporting more goods on this transport mode compared to other industries. But multimodal transport is in **strong competition with road transport**. Therefore, the price is the most important element for decision making of the companies. In the past years rail transport has become more expensive, whereas road transport has become cheaper (low diesel prices, more efficient trucks, introduction of Gigaliner etc.). In conclusion **multimodal transport is too expensive**. Often there is **no special motivation** to implement multimodal transport - because the importance of the related cost is so high.

The organisation of multimodal transport often **requires more time, more strategic planning and communication efforts**. Today, many companies have a very short term perspective in launching transport orders to logistic service providers. Just ordering a truck, who picks up the goods and drives them directly to the client is the easiest option. Organising multimodal transport requires more efforts in checking different connections, discussing transport options with logistic services providers and requiring a longer time window for the transport. In many companies there is little strategic planning and long term concepts for the organisation of the supply chain, where maybe all modes of transport are reflected. Often the logistic transports are managed by the sales department that launches calls on a very short notice. In this short timeframe, it is very difficult to organise multimodal transport at all. The sales department also has little knowledge about logistics and puts the price criteria as first priority for their decision.

Multimodal transport has the **disadvantage of the longer transit time in comparison to road**. By its nature in many cases multimodal transport will take longer. This additional time has to be respected during the transport planning. Extreme time sensitive deliveries will be difficult to get organised via multimodal.

Apart from the total duration of the transport it is much more important that the **transport arrives at the requested time**. Delays can distort the production process of the client and result in the payment of fines. Companies have often complained that transport delays are caused by constructions and insufficient conditions of the railway infrastructure. Ongoing larger constructions make it very difficult to organise reliable transports. An extreme example of the capacity problems of the infrastructure was the accident in Rastatt, where the most important North South Corridor between Germany and Italy was interrupted for several months and many multimodal transports could not be carried out.



In general there is the question if the **current capacity of railway infrastructure** is suitable to handle larger modal shifts as it is articulated from the political sphere. In several countries direct rail access points to company sites have been closed and also takeover tracks have been reduced. As passenger trains always have first priority on the tracks freight trains have to wait until they have passed. The current situation makes it more difficult for freight trains to follow their planned journey and often additional and longer stops have to be taken, which results in delays.

Production companies and LSP's also criticised the existence of **monopoles of state railway companies**, which results in high track prices or more difficult access to railway infrastructure and terminals. Also, the organisation of **Single Waggon Transport** is seen by many companies as being too expensive and too complicated and inflexible.

The **technological requirements for locomotives in international transport** are different, which makes it very difficult to drive with one locomotive alongside the whole journey. This results in the need to change locomotives at the boarder station. On the contrary locomotives that can run in different countries are much more expensive and the authorisation process is very costly and takes a long time.

Apart from the technological dimension, the **cross-border rail transport** is subject to additional requirements, because the locomotive driver has to master the mother languages of all the countries that he passes. In comparison to road transport, the truck driver only has to be able to operate in English - sometimes at a very basic level.

Rail transport is also operating in **different social framework conditions**. Most of the staff in rail companies is paid on the basis of tariff, which results in relatively high wages. Truck drivers have much lower wages. Especially for international transports, especially Eastern European transport companies can operate with very low wages on Western European territory.

Even if multimodal transport is recognised as environmental friendly mode of transport, the **reduction of CO2 emissions** is not an important motivation for companies. Many companies even do not measure the CO2 footprint of their transport operations. There is no legal requirement to do so and many chemical companies already contribute to the Emission Trading System in the framework of their production processes.



1.2. Chances and Opportunities for Multimodal Transport

The biggest advantage of multimodal transport is its **capacity to handle large quantities of goods**. Especially for the larger chemical companies and chemical parks it is essential to manage an immense volume of transport of incoming raw materials and outgoing products. The possibility to operate with 44t of truck gross weight in the subsequent transport is a clear advantage compared to the normal 40t.

Often it is argued, that these quantities cannot be transported by trucks as it would involve dozens of trucks to be loaded. Furthermore, companies see that **road transport has reached its limits**. There are a lot of traffic jams, caused by constructions and accidents. Another problem is the **lack of truck drivers**, which becomes more and more obvious. And this shortage of qualified employees will even get worse in the near future.

In chemical sites, it is also easier to load trains in comparison to trucks. Trains and waggons can be handled 24 hours a day in accordance to the production needs of the company. Also, operations during weekends are possible. Trucks have to be loaded when they arrive - often at the same time in the afternoon; the organizational effort is much higher and driving time restrictions have to be respected. Several companies have stressed that the integration of loading of trains with the final stages of the production process is an important dimension that brings strong advantages for multimodal transport. **Internal logistics inside chemical parks** with support of preloading and storage can help to flatten the workload of logistics processes. Furthermore, it helps to reduce storage capacities.

Multimodal transport has strong advantages, when it comes to **longer transport distances**. In the literature and policy papers often 300 km are mentioned as break even, when multimodal transport is more efficient than road transport. In reality this distance seems to be a bit larger. A very important condition is the existence of capable intermodal terminals close to the productions site and the target destination. Longer than 50 km transport by road to arrive at the terminal or to reach the client from the destination terminal results in much higher cost and time delays. Hence companies closely located to terminals are much better situated to organise multimodal transport. In all ChemMultimodal countries we see **positive development of terminals**, who are extending their capacities.

The existing terminals offer a **broad range of regular connections to different destinations in Europe**. From the company perspective, it is very important to have regular and reliable connections in order to be flexible to deal with changing transport requirements and to meet the delivery times defined by the client. The development of new multimodal connections depends in the first place on the collection of a critical mass of goods for the transport to the target destination. In the second place it is also necessary to organise the transport of similar transport volumes back to the origin. The transport of empty containers has to be avoided. This is a big challenge for the Logistics



Service Provider, as cost advantage of multimodal transport can only be achieved if both transport ways are equipped with goods.

If both major conditions for larger quantities and longer distances are met and a regular and reliable connection is established, multimodal transport can be better organised with a **lower price in comparison to road transport**. In reference to the motivation of companies, described in the previous chapter, this is the only way to change to multimodal transport in the real world.

Many companies see the **environmental advantage** of multimodal transport in view of lower CO₂ emissions. Multimodal transport causes only 26 g CO₂ per tkm in comparison with 62 g CO₂ per tkm¹ caused by road transport. Nevertheless, this fact alone is not sufficient to shift transport from road to multimodal as already explained in the previous chapter.

Furthermore, the **higher safety and security** is a clear advantage of multimodal transport. Especially for the transport of dangerous goods this dimension is very important. For certain very hazardous products, the transport on road is forbidden in many countries.

1.3. Common Vision for the future of Multimodal Transport

Based on the identified problems, challenges and chances and opportunities for the multimodal transport in the chemical industry, the ChemMultimodal Partners have a common vision for the future development:

1. There is an equal level playing field for road and rail transport, where all modes of transport are used according to their strengths. Unbalanced cost burdens between different modes should be avoided, external cost should be considered.
2. Multimodal transport is an economic successful mode of transport and can compete with road transport.
3. There is a high capacity of the rail transport and terminal infrastructure, which allows the organisation of more multimodal transport in the future.

¹ McKinnon / Piecyk (2011) page 22.



4. Combined Transport Terminals are well prepared to handle chemical and dangerous goods and offer special infrastructure and services (e.g. storage, cleaning, heating etc.)
5. Multimodal Transport is highly digitalised. All information about the status and location of transport is available for the company and LSP. All different stakeholders are interconnected in a transparent system.
6. Multimodal Transport is highly reliable. All transports arrive in time according to the planning. Delays are communicated early and managed efficiently.
7. Chemical companies have a very good knowledge about the benefits and requirements of multimodal transport.
8. Chemical companies always consider multimodal transport as possible option for transporting their goods and compare different alternatives, when collecting offers for new transports.
9. Chemical companies take the time and effort for the strategic planning of their transport under consideration of special requirements of multimodality.
10. There are easy-to-use and effective tools to obtain information about multimodal transport connections. Chemical companies frequently use these tools in their planning process.
11. Chemical companies and logistics service providers work closely together to implement multimodal transport, develop new connections and bundling volumes.
12. Chemical Industry Associations and Clusters provide a platform for joint discussion and networking of companies and LSP for promotion of multimodality.
13. Public Authorities provide support and funding for the promotion of multimodal transport, e.g. development of innovative logistic concepts, development of rail access for companies, extension of terminal capacities.
14. Chemical Companies are highly motivated to reduce CO₂ emission in their supply chain. They measure CO₂ footprints and communicate their results.



1.4. Objectives and Priorities for the promotion of multimodal transport in the mid- and long-term perspective

Based on the formulated common vision the partners have set the following objectives and priorities for the ChemMultimodal project in the mid- and long term perspective.

Raise awareness, improve knowledge and capacity of chemical companies to plan and organise multimodal transport

The project partners work closely together with the chemical companies to provide information about the benefits and requirements for multimodal transports. Planning Guidelines will be developed and Regional Stakeholder Meetings and the Capacity Building Seminars will raise awareness and improve capacity of relevant staff responsible for planning and organisation of transport.

Increase the share of multimodal transport of chemical goods

In the framework of pilots the project partners will work together with several companies to identify existing road transports with potential for the change to multimodal transport. Recommendations will be developed on how to organise this transport with multimodal approach. The modal shift should be implemented in the lifetime of the project. It is the objective to increase the volume of multimodal transport of the particular company by 10%. 35 companies should be involved in the framework of 7 pilots in the partner countries.

Support the application of tools for better planning and increased transparency of multimodal transport

In the framework of the pilot project specific tools will be used to identify existing multimodal connections that can be used. Partners will jointly use this tool together with the companies and explain them how to use it on their own in the future.

Raise awareness for environmental benefits of multimodal transport and reduce CO2 Footprint of transportation in the chemical industry

Within the project the partners will raise awareness about the importance of multimodal transport for the reduction of CO2 emissions. A tool will be developed to easily calculate emission reductions of new multimodal connections. The realised modal shift promoted in the framework of the pilots should reduce the transport CO2 emissions of the particular company by 5%.



Improve cooperation and networking between chemical companies and logistics service providers

The project partners will bring together chemical companies and logistic service providers to initiate a discussion about increasing multimodal transports of chemical goods. The involved persons from both sides should intensify their cooperation in order to create sustainable relationships.

Promote the establishment of new regular multimodal connections from the production area of chemical industry to other national and European destinations

The joint discussion between companies and logistics service providers will be used to identify potential for bundling of transports from different companies. On the basis of the articulated needs from the industry, logistics service provider can propose the establishment of new regular multimodal connections to interesting client destinations for the chemical industry.

Improve framework conditions for multimodal transport of chemical goods - articulate the interest of chemical industry in regional, national and European transport policy

The ChemMultimodal Partners will contribute to the improvement of framework conditions for the multimodal transport of chemical goods. For this purpose they will articulate their interest towards regional, national and European transport policies. This includes policies towards the reduction of track fees, extension of transport infrastructure, funding for terminals, harmonisation of technical and social standards for transnational rail transport, etc.

Promote innovation and digitalisation of multimodal transport

The ChemMultimodal partners will promote innovation and digitalisation of multimodal transport in order to increase efficiency and transparency of the supply chain. For this purpose existing projects like “Combined transport 4.0” will be supported and the development of new innovation projects will be facilitated.

The following chapters contain a description of different policies and strategies for the promotion of multimodal transport at European, national and regional level. The partners will continue to follow the implementation of these policies and try to contribute from their perspective and with their experiences.



2. Description of European Policy / Strategy

Name:
White Paper Transport
Responsible Organisation:
European Commission
Other involved organisations:
Year of Drafting / Year of official issue:
2011
Timeline for the development of actions:
Implementation 2020-2030 Deadline for goals: 2050
Description of the main objectives and actions
<p><u>The White Paper - Roadmap to a Single European Transport Area - Towards a competitive and resource efficient transport system</u></p> <p>The White Paper published 2011 by the EU Commission formulates political goals to further develop the transport sector to an economic feasible, environmental sound and sustainable branch. For this reason the paper addresses several challenges:</p> <ul style="list-style-type: none"> ■ Scarcity of fossil fuels ■ future transport needs of the EU citizen ■ reduction of greenhouse gas emission to reach contribute to the climate change limit of 2 °C <ul style="list-style-type: none"> □ reduction of GHG 80-95% at 1990 levels by 2050 □ reduction of 20% at 2008 level by the transport sector □ overall reduction of 60% of the transport sectors GHG by 2050 with respect to 1990 <p>To gain a more efficient and sustainable transport sector, several action must be implemented according to the white paper: Improving energy efficiency performance, optimising the performance of multimodal logistics chains and using transport and infrastructure more efficiently through use of improved traffic management and information systems. Ten specific goals are deviated by those three objectives.</p> <p>To implement the vision of the white paper and to reach the objectives, an efficient</p>



framework is needed:

- a Single European Transport Area needs to be established to overcome obstacles and internal market barriers
- innovation is essential and must be supported to address modern challenges and to promote new technologies
- new efforts towards more competition and sustainability requires a reflection on characteristics of the transport network and must formulate precise investment

Single European Transport Area

A single European Transport Area to ease movements of citizen, to reduce transport costs and enhance sustainability of European transport, needs to be addressed with a **Single European Sky**, a **Single European Railway Area** and a **Blue Belt**. Important conditions to this vision are high quality jobs and working conditions to ensure a workforce of skilled employees. Transport security and transport safety are crucial and need to be supported by modern system and technology solutions. Also the quality, accessibility and reliability of transport services are important factors to contribute to a SETA.

Innovating for the future

Innovation for the transport sector are essential to meet modern challenges and the objectives of the climate goals. New and key technologies are needed to 'grow out' of oil and to replace it with more environmental sound fuels. Additionally those technologies are supposed to contribute to more efficiency, sustainability and user-friendly systems. A special innovation and deployment plan for the transport sector is supposed to be in close cooperation with the SET-Plan.

Modern infrastructure, smart pricing and funding

The White Paper clearly states that Europe needs a core network of transport, which carries out high transport volumes of freight and passengers using efficient multimodal combinations. Within such a network information technology tools should be widely deployed to simplify administrative procedures and other operating processes. Those objectives need substantial investments and funds. Financial support both from public and private are there for required. On the other side prices, e.g. transport charges and fees, as well as taxes needs to be restructured to meet a modern framework.

Possibilities to contribute or influence Policy / Strategy

The ChemMultimodal Project aims to promote multimodal transport in the chemical industry and contributes to the objective to shift transport from road to multimodal.



Name:
Amendment of the Combined Transport Directive (92/106/EEC)
Responsible Organisation:
European Commission
Other involved organisations:
Codecision Procedure with European Parliament and Council.
Year of Drafting / Year of official issue:
Still in process, First proposal expected in November 2017 - Final Approval in 2018
Timeline for the development of actions:
Revised directive will enter into force from 2019 onwards
Description of the main objectives and actions
<p>The Combined Transport Directive (92/106/EEC) had the objective to formulate a policy framework for the raising needs in transport with the enhancing European domestic market at the early 1990's. It was not a regulatory directive, but a support measure. The eligibility for cross-border CT is limited with strict limits on road legs and non-road legs. There are two types of measures for direct support:</p> <ul style="list-style-type: none"> ■ Measures safeguarding the freedom to provide the cross-border service. ■ Measures providing additional incentives <p>It formulated a definition of combined transport and how to implement combined transport in each member state. It aims to reduce the negative side-effects of goods transport on environment and on society by supporting the shift from long distance road transport to long distance rail, inland waterways and maritime transport as the latter cause less negative externalities.</p> <p>In an ex-post analysis of this directive, the Commission states that the directive is still important to support combined transport, but its effectiveness can be improved. Consequently a revision of the Combined Transport Directive was introduced to the 2017 Commission work programme.</p> <p>The Commission started an impact assessment on the amendment of the Combined Transport Directive and approved a consultation strategy under which it is carrying out several consultation exercises.</p> <p>First a public consultation was already carried out in 2014 and the current consultations build on its results and are addressing the issues that were not addressed in the 2014 consultation, most importantly the available policy options and their impacts.</p>



Up until April 2017 another public consultation was held. Everyone who is interested in this process were able to submit a questionnaire. Besides this public consultation a targeted consultation was held.

Context, summary of previous analysis and problems identified

Costs arise by negative externalities of transport by estimated at 4% of EU GDP in 2011. The large majority of these (72% of GHG emissions, 97% of accidents) is caused by the road sector, which dominates the freight transport market in EU. The EU transport policy has set a goal to reduce these effects by supporting a shift from long distance road transport to combinations of other modes of transport (multimodal transport).

At the same time, the users of freight transport services make their decisions in highly competitive global market with an obvious need to minimize costs and increase efficiency of delivery. The market, unfortunately, does not currently provide appropriate price signals to users to shift from long distance road transport to other modes of transport as social and environmental costs are not fully reflected in transport prices.

Different problems or disadvantages are in consequence with multimodal transport as compared to road only transport that make it difficult to compete with the long-distance road transport. Such disadvantages are:

- The network density of non-road modes is not comparable to that of road. As a consequence, multimodal transport results often in longer delivery times.
- Transport involving different modes requires transshipment as well as complex planning, both adding to longer delivery times and higher costs;

Problems identified

The existing Directive is 23 years old and as stated before, its effectiveness and efficiency is to be revisited. The industry has reported problems in several Member States as the transposition and implementation of the Directive is not homogenous.

As the Directive addresses specifically cross-border transport between Member States, the process of which depends on minimum differences between the legal systems. As a result of the consultation, a full potential is not used regarding this aspect.

The evaluation concluded in 2016 as well as the previous public consultation identified the following shortcomings with the current Directive:

1. The definition of combined transport is complex and somewhat ambiguous creating problems with the implementation. Furthermore, the definition is limited in scope.
2. The economic incentives (reimbursement of or exemption from road vehicle tax) foreseen are not effective.
3. Also different problems arise:



- The provisions relating to transport documents are outdated making it difficult for industry to prove and authorities to control eligibility.
- Non-effective incentives: narrow scope of support measures
- Lack of monitoring and no support review mechanism
- Lack of intermodal infrastructure

Website: https://ec.europa.eu/transport/themes/urban/consultations/2017-CTD_en

Possibilities to contribute or influence Policy / Strategy

ChemMultimodal Partners will analyse Commissions proposal in late 2017 and articulate joint position from chemical industry perspective in the decision making process. Contact to MEP Liberadzki has already been established. Partners will also communicate with national ministries of transport, that represent interest of member states in the Council.

Name:
Digital Transport and Logistic Forum
Responsible Organisation:
European Commission
Other involved organisations:
Year of Drafting / Year of official issue:
April 2015
Timeline for the development of actions:
The Forum will organise events and discussion platform in the next 2 years.
Description of the main objectives and actions
<p>The Juncker Commission decided to form a 'Digital Transport and Logistics Forum' (DTLF) (http://bit.ly/2sdljVH). It is in the framework of the two priorities for EU policies: 'Jobs, Growth and Investment' and 'A Connected Digital Single Market'.</p> <p>The Forum will aim at further supporting digitalisation of freight transport and logistics. It will include Member States and stakeholders from all transport and</p>



logistics communities and motivates for cooperation with the aim to identify challenges and areas where common action in the EU is needed. Recommendations shall be provided and implemented where it is appropriate. It has two major functions:

- Provides expertise and user requirements for the further digitalisation of transport and logistics and the possible preparation/implementation of EU legislation
- Does not take any binding decisions, but should formulate opinions or recommendations and support the Commission in formulating a strategy/roadmap

The DTLF will operate with the following structure: a plenary will meet two or three times a year; between plenary meetings, experts will meet in non-permanent technical working groups to address specific barriers to digitalisation of freight transport and logistics. The DTLF envisages in particular to address following topics:

1. Standardisation,
2. Creating a climate of trust : data protection and cybersecurity,
3. Recognition of e-transport documents by banks, authorities, insurances,
4. Access to data,
5. Infrastructure,
6. New business opportunities

Possibilities to contribute or influence Policy / Strategy

ChemMultimodal Partners will analyse thematic discussion of the forum and participate and contribute to relevant topics from perspective of the chemical industry.



3. National Policy / Strategy

3.1. Germany

Name:
Masterplan Schienengüterverkehr - Masterplan Rail Freight Transport
Responsible Organisation:
Federal Ministry of Transport and Digital Infrastructure
Other involved organisations:
Year of Drafting / Year of official issue:
2017
Timeline for the development of actions
The Masterplan foresees actions in the upcoming years. Especially after Federal Elections in September 2017 the uptake of measures in the new coalition agreement has to be monitored as the masterplan only formulates recommendations.
Description of the main objectives and actions
<p>The Master plan rail freight transport is the result of a political process that tries to formulate answers on how to support and enhance the rail freight transport. Objective is to guarantee a competitive and sustainable rail freight transport with high quality standards. For this reason</p> <ul style="list-style-type: none"> ▪ a high performance infrastructure is needed ▪ innovation potentials needs to be used ▪ the political framework for rail freight transport needs to be improved <p>Beside the political will and the formulation of a political vision for the rail freight transport, several actions are formulated.</p> <p><u>Plant and track prices</u></p> <p>The Federal Ministry of Transport and Digital Infrastructure plans to reduce the plant and track prices for rail freight transport by 350 Million Euro. The reason are the steadily growing costs for this transport sector that are reducing the competitiveness as a consequence.</p> <p><u>740-Metres-Net</u></p> <p>The potential for 740-Metres-Trains is considered in the Federal Transport</p>



Infrastructure Plan. Because they are considered to be standard for trans-European transport, the assessment by the ministry needs to be finished quickly to implement action in the Federal Transport Infrastructure Plan.

Big hubs

Big hubs in Hamburg, Cologne, Frankfurt, Ludwigshafen/Mannheim/Heidelberg/Karlsruhe, etc. are supposed to be extended. Actions are developed within the potential needs of the Federal Transport Infrastructure Plan.

Electrification

The Master Plan emphasizes the need for a special programme for the electrification of the rail freight transport. At the same time the ministry demands solution by shippers and automotive industries for pre and post transport.

Fees and Taxes

Especially the costs for rail freight transport increased over the past years. The plan recommends alleviation for rail transport companies, e.g. for their energy taxes or the EEG-fees.

Digitalisation and telematics

Digital services increase the attractiveness of rail freight, as well as improve efficiency, reliability and operational safety. The prerequisite for this is the expansion of the digital infrastructure and the modernization of DB Netz AG's IT system. The funds for this are to be provided by the ministry future investment program.

This future investment plan "Zukunft Schienengüterverkehr" is to support the digitization of rail vehicles at the beginning of the next legislature. The aim is to bundle research structures and to promote them in their respective development phases. In the current legislative period, regulations in the railway construction and operating regulations are to be amended so that new possibilities for condition-dependent maintenance can be used.

Automatization

The Masterplan rail freight transport is based on a stronger automation of the railway operation. The Federal Government intends to promote innovations in this area with the future investment plan from the next legislative period. The focus here is on shunting and coupling. For this purpose, an automated train formation system is to be tested at the Munich-Nord marshalling yard. Driver assistance systems and automatic couplings are also to be used.



Education

The politics as well as the transport sector support an enhancement of education offers to guarantee young academics and skilled employees for the rail freight transport. Initiatives, e.g. online job platforms, needs to be supported.

ETCS

The installation of the European train safety system ETCS is mandatory for new vehicles. Older locomotives must be modernized with ETCS when traveling on ETCS routes. This results in considerable additional costs. To support railways, the ministry will require an ETCS special investment program at the EU.

Hybrid-technologies

In order to close electrification gaps in the network as well as for shunting operations, the Masterplan aims to promote the use of electric hybrid locomotives in the next legislative period. The aim is to stimulate innovation in this area by "purifying" the national and international licensing regulations.

Combined Transport

Privileges for vehicles in the pre and post transport to the rail should make combined transport more attractive. For example, the exemption from the truck toll is mentioned. It is also conceivable to set up separate lanes and parking lots for electric trucks in the pre and post transport.

LuFV III

At the end of 2019 the performance and financing agreement II (LuFV II) expires. The Masterplan rail freight transport recommends that the future agreement funds are designed by demand, so that investment in digitalization exhaust efficiency potentials in the maintenance, operation and marketing of the infrastructure.

Acceleration of planning processes

Obstacles and the duration of planning processes should be reduced, so that the processes are simplified and accelerated.

Website / Download: http://www.bmvi.de/SharedDocs/DE/Anlage/Presse/085-dobrindt-masterplan-schienegueterverkehr.pdf?__blob=publicationFile

Possibilities to contribute or influence Policy / Strategy

German ChemMultimodal Partners carefully monitor implementation of recommendations of the Masterplan especially after the Federal Elections in September 2017. They will articulate the interest from chemical industry perspective in the legislative process.



3.2. Poland

Name:
STRATEGIA ROZWOJU TRANSPORTU DO 2020 ROKU (z perspektywą do 2030 roku)/ STRATEGY FOR THE DEVELOPMENT OF TRANSPORTATION TILL YEAR 2020 (with perspective till year 2030)
Responsible Organisation:
MINISTERSTWO TRANSPORTU, BUDOWNICTWA I GOSPODARKI MORSKIEJ/ MINISTRY OF TRANSPORT, CONSTRUCTION AND MARITIME ECONOMY
Year of Drafting / Year of official issue:
2013
Timeline for the development of actions:
2013-2020(2030)
Description of the main objectives and actions
<ul style="list-style-type: none"> ■ developing rail and point-to-line infrastructure on the AGTC network for better adaptation to intermodal transport; ■ development of multimodal platforms on the TEN-T network, tailored to the logistics of at least two modes of transport; ■ developing multi-modal functions of airports and seaports in the TEN-T network by linking them to road and rail transport; ■ improvement of operating parameters on inland waterways to integrate inland waterway transport into the intermodal transport supply chain. ■ modernization and revitalization of railway line and point infrastructure used in the transport system (located on the AGTC network); ■ modernization and expansion of existing intermodal transport terminals and construction of new terminals and the creation of regional logistic centers at large Polish urban agglomerations; ■ supplementary of existing multimodal nodes to road and rail connections of airports with road and rail transport; ■ improvement of operating parameters on inland waterways to integrate inland waterway transport into the intermodal transport supply chain. <p>http://mib.gov.pl/media/3511/Strategia_Rozwoju_Transportu_do_2020_roku.pdf</p>
Possibilities to contribute or influence Policy / Strategy



- EUROPE 2020 A European strategy for smart, sustainable and inclusive growth
<http://ec.europa.eu/eu2020/pdf/COMPLET%20EN%20BARROSO%20%20%20007%20-%20Europe%202020%20-%20EN%20version.pdf>

3.3. Hungary

Name of Policy / Strategy:
National Transport Infrastructure Development Strategy
Responsible Organisation:
Ministry of National Development
Other involved organisations:
Transport Development Coordination Centre, FŐMTERV Private Ltd., “Transport” Ltd., KTI Non-profit Ltd., TRENECON COWI Ltd., UNITEF-83 Private Ltd., UTIBER Ltd., UVATERV Private Ltd., VITECO Ltd.
Year of Drafting / Year of official issue:
2012-2013 / 2014
Timeline for the development of actions:
Integrated Transport Development Operative Programme 2014 - 2020 with priority development actions 2020 - 2030 Proposed development actions 2030-2050 Long-term (future) development actions
Description of the main objectives and actions
<p>Social objectives:</p> <ul style="list-style-type: none"> ■ Reduction of the negative effects to the environment, emerging the climate protection aspects ■ Improvement of health- and property security and safety (definite reduction of the number of victims in transport accidents) ■ Enhancement the effectiveness and growth of the economy ■ Improvement in employment ■ Improvement of the wellbeing and mobility conditions of the population ■ Reduction of territorial disparities ■ Improvement of social equitableness and equity



- Strengthening the international cooperation

Transport objectives:

- Strengthening the energy-efficient transport modes
- Strengthening the socially preferable public- and cargo transport structure
- Improvement of the transport services
- Improvement of the physical structure elements of transport

Website

/

Download:

<http://www.kormany.hu/download/b/84/10000/Nemzeti%20K%C3%B6zleked%C3%A9si%20Infrastrukt%C3%BAra-fejleszt%C3%A9si%20Strat%C3%A9gia.pdf>

Possibilities to contribute or influence Policy / Strategy

- Project proposals in the framework of the Integrated Transport Development Operative Programme
- Proposals for the improvement or possible modification of the Strategy at the revising period by the Logistics Coordination Forum (civil NGO)
- New concept proposal for the Strategy improvement (LCF)

3.4. Czech Republic

Name:
The Transport Policy of the Czech Republic for 2014-2020 with the Prospect of 2050
Responsible Organisation:
MINISTRY OF TRANSPORT, Czech Republic
Year of Drafting / Year of official issue:
2013
Timeline for the development of actions:
2014-2020 (2050)
Description of the main objectives and actions
<ul style="list-style-type: none"> ▪ harmonization of conditions on the transport market; ▪ modernization, development and revitalization of rail and water transport; ▪ improving the quality of road transport; ▪ limit the effects of transport on the environment and public health;



- operational and technical interoperability of the European rail system;
- development of the trans-European transport network;
- increasing of transport safety;
- performance charging for transport;
- rights and obligations of users of transport services;
- support for multimodal transport systems;
- development of urban, suburban and regional public transport within Integrated Transport System;
- focus research on safe, operationally reliable and environmentally friendly transport;
- use of state-of-the-art available technologies and global navigation satellites systems (GNSS);
- reducing the energy intensity of the transport sector and, in particular, its dependence on the hydrocarbon fuels

Website / Download:

<https://www.mdcz.cz/getattachment/Dokumenty/Strategie/Dopravni-politika-a-MFDI/Dopravni-politika-CR-pro-obdobi-2014-2020-s-vyhled/Dopravni-politika-CR-2014---2020.pdf.aspx>

<https://www.mdcz.cz/getattachment/Dokumenty/Strategie/Dopravni-politika-a-MFDI/Dopravni-politika-CR-pro-obdobi-2014-2020-s-vyhled/The-Transport-Policy-of-the-Czech-Republic-for-2014-2020.pdf.aspx>

Possibilities to contribute or influence Policy / Strategy

- E U R O P E 2 0 2 0 A European strategy for smart, sustainable and inclusive growth

<http://ec.europa.eu/eu2020/pdf/COMPLET%20EN%20BARROSO%20%20%20007%20-%20Europe%202020%20-%20EN%20version.pdf>



3.5. Italy

Name of Policy / Strategy:
Connettere l'Italia (Connecting Italy)
Responsible Organisation:
Technical mission structure
Other involved organisations:
Ministry of Infrastructure and Transport
Year of Drafting / Year of official issue:
2016
Timeline for the development of actions:
2016-2020
Description of the main objectives and actions
<p>1. Useful, streamlined and shared infrastructures</p> <ul style="list-style-type: none"> a. Unitary national planning; b. Programming and monitoring of interventions; c. Improve the design quality. <p>2. Modal integration and intermodality</p> <ul style="list-style-type: none"> a. Access to nodes and interconnections between networks; b. Rebalancing demand for sustainable modes of transport; c. Promotion of intermodality. <p>3. Enhancement of existing infrastructure</p> <ul style="list-style-type: none"> a. Programming of maintenance interventions; b. Improvement of service and security; c. Efficiency and technological upgrading. <p>All this actions are focused to achieve a +50% of rail transport by 2020.</p> <p>Website / Download: http://www.mit.gov.it/sites/default/files/media/notizia/2016-07/Strategie%20per%20le%20infrastrutture_2016.pdf</p>
Possibilities to contribute or influence Policy / Strategy
Federchimica participates in the Technical Working Group of the Ministry of infrastructure and Transport



3.6. Austria

Name of Policy / Strategy:
Plan for the overall Austrian Transport volumes (Original title: Gesamtverkehrsplan für Österreich)
Responsible Organisation:
Federal Ministry of Transport, innovation and Technology
Other involved organisations:
Austrian Chamber of Commerce Austrian Federal Chamber of Labour Federation of Austrian Industries Central Association of Freight Forwarding and Logistics Union vida Logistikum Steyr of the University of Applied Sciences Upper Austria Institution for Transport and Logistics at the University of Economic and Business Vienna
Year of Drafting / Year of official issue:
2012 / 2014
Timeline for the development of actions:
2025: Increase of railway share in terms of modal split is targeted with 40 %.
Description of the main objectives and actions
<ul style="list-style-type: none"> ■ “Zielnetz 2025+” embodies the strategic measures for maintaining, improving and extending the current railway infrastructure elaborated by the OEGB (Austrian railway operator). One specific goal thereby is to foster the shift from freight transport on the roads to the railways. Purpose is to increase the share of goods transported on the road up to 40 %. This means that by 2025 40 % of transport executed should happen via train. In order to remain an efficient and sustainable mean of transport the volumes transported need to reach at least 250.000 tons. ■ Further measures are to be taken for establishing an easier access to airports and inland waterway harbours. This should strengthen the position of such modes of transport. ■ Intermodal transshipment points are to be modernized in order to make this type of transport more attractive.



The activities cover the following areas:

■ Education and training

Improvement and standardization of teaching and learning content for drivers, trainers and logisticians across all modes of transport

■ Subsidies

State grants and monetary incentives to develop or promote certain innovative technologies or to increase the use of the desired means of transport and modes of transport (relocation)

■ Research and development

Development of new technologies for freight transport and logistics within long-term innovation and research planning

■ Infrastructure

More efficient use of existing infrastructure

■ Institutionalized communication - cooperation

Improve the communication of stakeholders within the area of freight transport and logistics

■ Institutionalized communication - marketing

External communication of freight and logistics; Provide a positive overall picture as well as portray the comprehensive functions and benefits of the industry

■ Internationalization

Transversal coordination, regulation and communication between European countries, in particular in the field of waterway transport and combined transport, to promote a common approach and uniform rules

■ Basic conditions, legal regulations and standards

Harmonization of legal provisions and bundling of competences, in particular to increase the predictability of companies and to enable fair competition

■ Technology

Use of modern technologies and optimally coordinated use of vehicles to improve the environmental impact as well as the personal working conditions



- Travel costs

Design of the Austrian toll system

Area rail

1. Basics for the integration of rail into local and intermittent spatial planning

Design of a handbook with the target group "regional planners" to facilitate the integration of the rail system into local and regional planning, in particular also in the planning of freight centers / GvZ / economic parks, etc. Observation and anchoring of the rail transport as part of the economic development of spaces. In the same design intensity as it is currently available within the road transport sector.

2. Participatory design and development

Preparation and mediation of the planned developments of the domestic infrastructure networks in the upcoming years. ("What infrastructural developments can be expected at regional level in the upcoming years?") In addition, the presentation, discussion and communication of the expected developments in national as well as European legal areas is mentioned in the plan.

3. Cross-border cooperation

Intensification of cross-border cooperation by the aid of the financing of regional projects with the objective of preserving rail freight transport, in particular in the new Member States of the European Union through co-operation / know-how transfer / promotion. Strengthening the offerings of cross-border, cooperative rail freight transports in cross-border individual road transport as well as in the general cargo area by rail transport companies with the support of the policy.

Area Inland Waterways

1. Support of Inland Waterway- and Project Management

Support to the Danube states for waterway and project management. A best practice approach in the waterway management of the Danube is effectively implemented.

2. Participation in research on European inland waterway logistics

Implementation / support through EU co-financed projects; Definition of thematic areas, which will be dealt with more intensively in future EU projects. Due to its best-in-class position, research activities in the field of inland waterway transport are actively pursued by Austria.



Website / Download (only available in German language): http://infrastruktur.oebb.at/de/unternehmen/fuer-oesterreich/zukunft-bahn-zielnetz-2025+ https://www.bmvit.gv.at/verkehr/gesamtverkehr/gvp/downloads/gvp_gesamt.pdf
Possibilities to contribute or influence Policy / Strategy

3.7. Slovakia

Name of Policy / Strategy:
Strategic plan of transport infrastructure development of Slovakia to year 2020 Strategic plan of transport infrastructure development to year 2030
Responsible Organisation:
Ministry of transport and construction of the Slovak republic
Other involved organisations:
Transport research institute ZILINA
Year of Drafting / Year of official issue:
2016 / 2017
Timeline for the development of actions:
2030
Description of the main objectives and actions
http://www.telecom.gov.sk/index/index.php?ids=1 - Strategy 2020
Possibilities to contribute or influence Policy / Strategy
Strategy was for comments and annotation in chemical association. Our output was for multimodal transport and financing model for repairing of road net. We cooperate on logistic strategy of chemical companies and LSP per working group of association.



4. Regional Policy / Strategy

4.1. Saxony-Anhalt

Name:
Logistic Concept Saxony-Anhalt
Responsible Organisation:
Ministry for Regional Development and Transport Saxony-Anhalt
Year of Drafting / Year of official issue:
2012
Timeline for the development of actions
Description of the main objectives and actions
<p><u>Framework and Objectives</u></p> <p>The logistical concept of Saxony-Anhalt is a contribution for mastering modern challenges in the fields of logistics. It reviews recent developments in Saxony-Anhalts logistic, e.g. freight transport with the different modes road, rail and inland waterways and combined transport. Additionally it highlights essential logistics needs of different industries, for example chemical industry, energy industries and mechanical and plant engineering.</p> <p>The concept aligns with several actions and policies at different polity levels. At the EU level the Action Plan Freight Transport Logistics is a foundation for a conceptual implementation of sustainable improvements for the freight logistics for rail and waterway transports. Additionally, a High Level Group for Logistics was initiated at EU level. Representatives of the transport and logistics sector are discussing future challenges and giving recommendation of actions for policy makers regarding improvements for frame conditions and competitiveness.</p> <p>At the national level the Action Plan Freight Transport and Logistics is supporting the regional activities. It is derived from the EU action plan and highlights different priorities, e.g. environmental safety, employment and education and technologies. It aims to contribute for an improved competitiveness and efficient export and import hubs. Those action are combined with the participation of Saxony-Anhalts representatives at several political initiatives.</p> <p><u>Actions</u></p> <p><u>Trans-European Transport Infrastructure and Pan-European Corridors</u></p> <p>The TEN corridors are import infrastructures for the exporting economy in Saxony-Anhalt, especially with its chemical sector. Saxony-Anhalt therefor tries to show the</p>



importance of the Elb-corridor and to promote its connection of the Scandinavian countries with the southern countries of Europe.

Implementing investment in the TEN is an essential need for Saxony-Anhalt that is carried out e.g. with the VDE 8 (German Unity Transport Project 8). Additionally the enhancement of pipeline connection is a crucial priority for promoting competitiveness for the chemical sector. The concept highlight several other actions for improving and promoting infrastructure in Saxony-Anhalt and Central Germany.

Inland Waterways

Saxony-Anhalt takes account for the improvement of inland waterway e.g. with the VDE 17. The Elb corridor is a main factor for connecting Central-Eastern-Europe. Action for inland waterways are supposed to take account for inland ports. This includes the expansion of port-related traffic axes as well as traffic congestions and the elimination of capacity bottlenecks in ports.

Railway

A main focus of the concept is railway transport. Therefor the corridor east is supported with establishing logistic centres and analysis of bottlenecks and transport emergence are carried out. E.g. the modernisation of the formation yard in Halle that begun in 2012.

Combined Transport

The CT in Saxony-Anhalt is an essential approach to have a balanced use of each transport mode and to promote the economic attractiveness of logistics location. Five tri-modal ports and the new bi-modal Terminal in Schkopau as well as in Leuna and Bernburg are part of an existing and enhancing network.

For shifting freight transport to a combined transport a There are especially in the chemical industry considerable potentials for the shifting of transport by rail, as more than 95% of the chemical goods are currently being transported to the Eastern European markets on the road. The ChemLog project identified a potential shift potential of around 3 million tonnes per year (around 10% of the total transport volume) from 2015 onward. By the year 2025, about 4 million tonnes could be shifted per year. The terminals in Central Germany do not have sufficient handling capacities for these future transport potentials. A terminal extension, including a new terminal in southern Saxony-Anhalt, is urgently needed for the chemical industry in order to meet the long-term strong demand for the East. The establishment of a logistics hub in Central Germany, connecting existing terminals, is there for a great opportunity.

The Logistics Concept Saxony-Anhalt furthermore highlights different aspects that are associated with the logistics branch.

Networks, Technologies and Research

- Linking of local networks with the Maritime logistics networks
- Network formation in Central Germany
- Promotion on the basis of location New technologies in transport and logistics



- Promotion of research and development In the area of transport and logistics

Education

- School education
- Apprenticeship and qualification
- Academic education
- Further actions

Environmental and climate protection

- Usage of low emission and safe transport modes
- Noise protection
- Traffic control
- Creating a sustainable and resource efficient logistics

Support of the transport business by using the EU funding programme Marco Polo

Website / Download: https://mlv.sachsen-anhalt.de/fileadmin/Bibliothek/Politik_und_Verwaltung/MLV/MLV/Broschueren/2011_2012/Logistik_2012_verkl.pdf

Possibilities to contribute or influence Policy / Strategy

The ChemMultimodal Partners will contribute to the defined actions related the chemical logistics. Furthermore an update of the concept should be envisaged.

Name:
“Logistikbeirat Sachsen-Anhalt” (Logistics Advisory Board Saxony-Anhalt)
Responsible Organisation:
Logistik-Initiative Sachsen-Anhalt
Year of Drafting / Year of official issue:
2007
Timeline for the development of actions
Continuously
Description of the main objectives and actions



The “Logistikbeirat” is a high level advisory board coordinated by the Ministry of Regional Development and Transport which brings together several companies of the transport and logistics branch in Saxony-Anhalt. The Logistics Advisory Board of the State of Saxony-Anhalt is represented by logistics companies, forwarders, associations, as well as stakeholders from science and research and has been developed into an indispensable link to the logistics industry. The Advisory Board is now looking back on almost ten years of successful activity.

Its purpose is to advise the federal government in issues regarding logistics and transport and to furthermore support the positive developments in Saxony-Anhalt.

Members of the Logistics Advisory Board are:

- Mitteldeutsche Eisenbahn GmbH, Vorsitzender des Beirates
- Magdeburger Hafen GmbH
- Konzernbevollmächtigter der Deutschen Bahn für ST, SN, TH
- InfraLeuna GmbH
- Flughafen Leipzig/Halle GmbH
- Finsterwalder Transport und Logistik GmbH
- Hafen Hamburg Marketing e.V.
- relaxdays GmbH
- Fraunhofer Institut für Fabrikplanung und -automatisierung IFF
- IHK Halle-Dessau
- MIBRAG mbH
- Otto-von-Guericke Universität Magdeburg
- IHK Magdeburg
- Hafenbetrieb Aken GmbH

Website / Download: <http://www.logistik-sachsen-anhalt.de/ueber-uns/logistikbeirat>

Possibilities to contribute or influence Policy / Strategy

The Logistic Advisory Board is an important platform to discuss challenges and barriers to logistics at high political level. Under Leadership of the Minister for Transport specific interest from the industry can be communicated to Federal level. Special actions have been undertaken to develop position against the strong raise of track fees for dangerous goods. Managing Director of Chemical Park Operator Mr. Günther is member of the council and represents interest of chemical sector.



Name:
“Logistikinitiative Sachsen-Anhalt” (Logistics Initiative Saxony-Anhalt)
Responsible Organisation:
Ministry for Economic and Science and Digitalisation Saxony-Anhalt Ministry for Rural Development and Transport Saxony-Anhalt
Other involved organisations:
Investment and Marketing Agency Saxony-Anhalt
Year of Drafting / Year of official issue:
Started in 2010
Timeline for the development of actions
Ongoing
Description of the main objectives and actions
<p>The two ministries of Saxony-Anhalt have agreed to establish an initiative regarding challenges in the fields of logistics. To master, especially, the challenges of the trimodal hub for the European ports and the hinterland, the Logistic Initiative has been formed.</p> <p>Its objectives are:</p> <ul style="list-style-type: none"> ■ to combine science and research and economy ■ promoting the logistics location Saxony-Anhalt in cooperation with different clusters and initiatives ■ to make an overall and extensive knowledge transfer feasible ■ establishing a platform for the logistics ■ reduce obstacles for economic growth ■ promoting innovation and new technologies <p>To create synergy effects for existing companies and to enhance value-added-chains, the Logistics Advisory Board Saxony-Anhalt supports the action of the Logistics Initiative Saxony-Anhalt. Two specific action were implemented:</p> <p><u>Data Base for industrial and business sites - INPOSA</u></p> <p>In cooperation with the IMG - Investitions und Marketinggesellschaft Sachsen-Anhalt mbH, potential investors have the opportunity to search for compatible sites for their investments.</p>



Establishing a Web-platform

Another action in the framework of the initiative was to promote the distribution of relevant information and to create a platform for an open access to news, developments, workshop and other information. The website www.logistik-sachsen-anhalt.de contributes to the promotion of the logistics location Saxony-Anhalt. The website is updated regularly. It offers access to information regarding the different modes of transport, combined transport, logistics news, research, logistics market and sites in Saxony-Anhalt.

Website / Download: <http://www.logistik-sachsen-anhalt.de>

Possibilities to contribute or influence Policy / Strategy

ChemMultimodal Partners will report about activities and results from the project to the logistic initiative to strengthen communication and marketing of the industry location Saxony-Anhalt with very good framework conditions for logistics - with special focus on multimodality.

Name:
Regionale Innovationsstrategie Sachsen-Anhalt Leitmarkt Mobilität und Logistik Regional Innovation Strategy Saxony-Anhalt Lead Market Mobility and Logistics
Responsible Organisation:
Ministry for Economy, Science and Digitalisation Saxony-Anhalt
Other involved organisations:
Year of Drafting / Year of official issue:
2014
Timeline for the development of actions
2014-2020
Description of the main objectives and actions
<u>Regional Innovation Strategy Saxony-Anhalt</u>
<u>General Objectives</u>
Saxony-Anhalt has adopted the “Regional Innovation Strategy Saxony-Anhalt 2014-2020 on 18th February 2014, to strengthen innovation capacity of companies as well as the potential of innovation of science, research and development by facilitation of better collaboration.
Based on existing competences in the field of science and economy in Saxony-Anhalt 5 important leading and growth markets were chosen in order to be able to face the



future global challenges and mega trends like the demographic change or the climate change. The Lead Markets with future potential in Saxony-Anhalt are:

- Energy, Mechanical and Plant Engineering and Ressource Efficiency
- Health and Medicine
- Mobility and Logistics
- Chemistry/BioEconomy
- Food and Agriculture

For the implementation of the Regional Innovation Strategy Saxony-Anhalt the following principles were formulated in order to improve the position of the country as an innovative science and economy site within international competition in the Lead Markets:

1. Increase of the location profile of Saxony-Anhalt by focusing of regional innovation policy to the Lead Markets, by investments of high quality and the use of cluster and innovation networks.
2. Integration of innovations a cross different Lead Markets for different horizontal challenges.
3. Mobilising, developing and promoting of the innovation potentials in the corporate landscape by outreach transfer and low-threshold services.
4. Targeted expansion of the science landscape and further professionalization of the knowledge and technology transfer between the research institutes and companies in order to achieve an innovative leap.
5. Development and efficient use of business orientated research infrastructure.
6. Improving the competitiveness of existing productions sites by investments as well as by the increase of the existing innovation potential.
7. Support of the business culture by broad awareness raising in the education sector and by the promotion of start-ups.
8. Securing of the qualified labour force in the country by investments in an efficient education system, extra-occupational qualification, supporting of young people and by increasing childcare provision.
9. Internationalisation of the innovation policy: Integration of the local production and services in international value chains, increase of the export potentials by innovations, involvement in international networks.
10. Consistent gender mainstreaming.
11. Bundle the financial instruments: cross departmental use of funds as well as the increased raising of project funding out of the national and international funding programmes.
12. Continuous development and success monitoring of the Regional Innovation Strategy.

Every Lead Market is broken down with specialised profiles, topics and projects, which have a really particular relevance for innovative growth in Saxony-Anhalt.

Leading Market Mobility and Logistics

It is necessary to develop a mobility and logistics market that is competitive and



compatible with future developments. There is a need to enhance sustainable, environmental sound and smart transport and logistics systems. As part of the RIS Saxony-Anhalt the Leading Market Mobility and Logistics has a specific aim. It should develop holistic, intelligent and sustainable solutions for mobility and logistics and Saxony-Anhalt should become system supplier for green mobility. Different strategic goals guarantee the implementation:

- Profiling to a leading production and research location for drive technologies and energy carriers as well as intelligent systems
- Development of innovative approaches to traffic management and the establishment of appropriate services and services, derived from the framework for intelligent transport systems (IVS), the establishment of intelligent transport systems - research and innovation in transport and mobility in the implementation of the ITS- indication
- "Smart mobile energy" is a label for sustainable, low-emission mobility
- Ensuring transport growth and improving the sustainability of goods transport, in particular through energy-efficient and innovative transshipment techniques, transport technologies and logistical interfaces
- Development and increased use of climate friendly means of transport

Website / Download: <http://bit.ly/2swJJsP>

Possibilities to contribute or influence Policy / Strategy

The ChemMultimodal Partners will analyse possibilities to promote the development of innovative projects for the promotion of multimodal transport in the chemical sector under involvement of companies and research institutes.

Name:
Richtlinie Multimodale Schnittstellen Directive Multimodal Interfaces
Responsible Organisation:
Ministry for Regional Development and Transport
Other involved organisations:
Year of Drafting / Year of official issue:
20.02.2017
Timeline for the development of actions
20.02.2017 - 30.06.2021
Description of the main objectives and actions



Directive on the granting of grants and principles for granting allocations for the promotion of R&D, cooperation and joint projects - Development of logistical interfaces and Handling of combined transport

Objective

The aim of the directive is to promote innovation by companies in Saxony-Anhalt, with a focus on smart connections and enhancement of the development of multimodal handling infrastructure as well as innovative handling systems which would optimise existing infrastructure and interfaces.

Subject for promotion

Projects are eligible, if they are aligned with experimental development and industrial research for the development of new and innovative technological processes and systems. Eligible are:

- Single projects
- Cooperation projects
- Joint projects

They need to address precisely defined challenges of a scientific or technological nature. Promoted are innovative and sustainable

- Multimodal handling systems
- Handling equipment as well as handling infrastructure
- Transport technologies as well as technological equipment
- Logistics information and operating systems

Entitled to submit are:

- Companies of the private business
- Operators of combined transport sites
- Logistics service providers
- R&D institutions in Saxony-Anhalt with profit actions
- R&D institutions in Saxony-Anhalt with no profit actions
- Public bodies in the frame of cooperation and joint projects
- Public universities in Saxony-Anhalt in joint projects

There exists several aspects for the eligibility, e.g.:

- It needs to fit in the frame of the RIS Saxony-Anhalt



- The donee needs to have its location in Saxony-Anhalt
- The promoted technical process or system needs to be focus on application and is Expected to have a sustainable operative foundation
- ...

Kind, scope and extend of the promotion

Art. 25 (2) b,c and (5) b,c General group exemption regulation (AGVO)

- Up to 50% for industrial research
 - Up to 25% for experimental development
- for each project and done.

Art. 25 (6) a General group exemption regulation (AGVO) raising the funds up to 80% of eligible costs

- By 10% for medium sized companies
 - By 20% for small companies
 - Up to 15% Art. 25 (6) b General group exemption regulation (AGVO)
- for each project.

R&D institutions

- With basic funding up to 80%
- Without basic funding up to 90%

Public universities can receive up to 100% of the eligible costs.

Website / Download: <http://bit.ly/2rdNn6Z>

Possibilities to contribute or influence Policy / Strategy

ChemMultimodal partners will present funding opportunities of the directive and promote development of projects that support multimodality in Saxony-Anhalt.



4.2. Masovia (Poland)

Name:
Strategia Rozwoju Województwa Mazowieckiego do 2030 roku Development Strategy of the Mazowieckie Voivodship 2030. Mazovia as an Innovative Region
Responsible Organisation:
Zarząd Województwa Mazowieckiego Board of the Mazowieckie Voivodship
Other involved organisations:
Year of Drafting / Year of official issue:
2013/2014
Timeline for the development of actions
2014-2020
Description of the main objectives and actions
<p>Strategic goal: Improving accessibility and territorial cohesion, implementing orderly spatial development.</p> <p>Policy directions and actions in the Development Strategy of the Mazowieckie Voivodship - space and transportation (p. 14):</p> <ul style="list-style-type: none"> ■ Increasing regional transport accessibility ■ Intraregional cohesion - focusing on the economically lagging subregions ■ Developing environmentally sustainable and accessible forms of transport ■ Preventing excessive suburbanization and promoting orderly spatial development ■ Streamlining the transit system <p>The strategic priority in terms of transport will be providing conditions encouraging the choice of sustainable modes of transport, ones having the least negative impact on space, the environment and health. On an international scale, an important task will be the development of TEN-T infrastructure, including the Warsaw transport node, and developing air transport.</p> <p>Rail transport development will play a crucial role on the regional level. The potential of this mode of transport should be increased through modernizing and building new infrastructure (railway lines and stations) as well as improving the standards of maintenance. Renovation works are necessary on dilapidated local and regional lines, so that a coherent system of rail</p>



links can be developed. Trains should achieve speeds of 160 (passenger)/120 (freight) km/h on TEN-T lines and 100-120 km/h on regional lines.

Transport of cargo should be increasingly intermodal. Loading points and logistics centers should therefore be developed near rail junctions. Multimodal transport should also make use of the potential of the Vistula river in terms of water transport. Rail bypasses should be repaired and upgraded so as to ensure effective transport of cargo by rail. (p. 19-20)

Additionally there is also Policy directions and actions in the Development Strategy of the Mazowieckie Voivodship for environment and energy described on pages 16 and 22-23).

Website / Download:

http://www.mbpr.pl/user_uploads/image/PRAWE_MENU/STRATEGIA%20ROZWOJU%20WOJE_WODZTWA%20MAZOWIECKIEGO%20DO%20ROKU%202030/SRWM%20SKR%20ANG.pdf

Possibilities to contribute or influence Policy / Strategy

STRATEGY FOR THE DEVELOPMENT OF TRANSPORTATION TILL YEAR 2020 (with perspective till year 2030)

4.3. Usti (Czech Republic)

Name:
STRATEGY FOR THE DEVELOPMENT OF THE URBAN REGION UNTIL 2027 Development Program of the Usti Region 2014-2020
Responsible Organisation:
Usti Region
Year of Drafting / Year of official issue:
2017 2013
Timeline for the development of actions
Until 2027 2020
Description of the main objectives and actions



Thorough goals and coming-outs

Improving transport connections and improving internal transport connectivity

Concrete measures:

- Realization of external transport connection and completion/modernization of axis roads (especially D6 and D7, roads I/13 and I/27, high-speed railway Prague - Dresden with a branch to Most, modernization of regional railway lines)
- Construction of residences bypasses on the roads of the first class and on the overloaded roads of the second class
- Modernization, resp. revitalization of railway lines, especially with regard to the needs of the Usti region's transport service and potential in the field of freight transport
- Implementation of the Smart Region/Smart Cities concept in the area of transport and mobility (electromobility, car and bicycle transport, etc.)
- Finishing of the cycle roads in Usti region, support for the construction of cycle-infrastructure for the purpose of getting into work, schools or offices
- Construction of transfer terminals incl. parking P + R and B + R, shift of public transportation stops to more convenient transport locations
- Promoting the development of water transport while minimizing negative environmental impacts

The measures overlapping frame 2017-2027

- Completion of high-speed railway Prague - Dresden
- Construction of the track (Prague -) Nova Ves - Most (incl. stop in Louny)

Website / Download:

<http://www.kr-ustecky.cz/regionalni-rozvoj/ds-99662/p1=206906>

Possibilities to contribute or influence Policy / Strategy

Regional Development Strategy of the Czech Republic 2014-2020



4.4. Novara-Piedmont (Italy)

Name:
PRMT - Piano Regionale per la Mobilita' e il Trasporto
Responsible Organisation:
Piedmont Region
Other involved organisations:
Year of Drafting / Year of official issue:
2016/2017
Timeline for the development of actions
From 2017 on. No deadline is foreseen, and the target year of the strategies included in the Plan is 2050.
Description of the main objectives and actions
<p>In the final part of 2016 the Piedmont Regional Government choose a new PRMT, to update the situation marked with the previous Plan, dated 2010. This new strategical instrument is now under the attention of the Regional Council, asked to the final and official adoption within summer 2017.</p> <p>The Plan will rule all the aspects concerning the mobility and transport of people and goods involving Piedmontese territory.</p> <p>The main issues concerning the transport of goods have an important focus on intermodality and multimodality, according to the recent national policy described above. In particular, the PRMT says that “the integration of the different patterns of the services, and the multimodality are the strategic keys to overtake the existing critical flows, but nowadays the intermodal way of transport is not much used in the Region, apart from the metropolitan area of Turin. Recent data show that Piedmontese companies prefer road to rail for the delivery of their goods, mainly because it is cheaper. But it is not to be neglected that the Piedmontese railway is affected by quite important lack of structures that has to be faced in order to increase the competitiveness and reliability in rail transportation. Nevertheless, the system of logistics in Piedmont show a good set-up, with 7 intermodal hubs active”. In particular, the Plan underlines the relevance of Novara one, able to deal with important volumes of intermodal traffic of goods (5 mln t/year). In partnership with Lombardy and Venetian Regions, Piedmont intends to invest some 60 Mln Euros in the next years to remove some bottlenecks in its territory.</p> <p>The new PRMT aims to come to the target year 2050 with some important results:</p> <ul style="list-style-type: none"> ■ 60% reduction of the carbon footprint compared to year 1990.



- 50% shiftment from road to rail for the delivery of goods on a minimum distance of 300 km, compared to year 2013.

To monitor the implementation of the Plan, Piedmont Region foresees intermediate checks in 2020 and 2030.

Website / Download:

<http://www.regione.piemonte.it/trasporti/dwd/PRMT/PRMT.pdf>

Possibilities to contribute or influence Policy / Strategy

The Province of Novara, as public body of wide range, and in its quality of project partner of ChemMultimodal, will keep in touch with the Regional authorities, constantly informing them about project activities and results. The more our results will be relevant, the more it will be possible to try to influence the regional strategies in transport of dangerous goods.

4.5. Upper-Austria

Name:
Strategic Economic an Research Programme - Innovative Upper Austria 2020
Responsible Organisation:
Business Upper Austria - OÖ Wirtschaftsagentur GmbH
Other involved organisations:
Regional Government of Upper Austria, Ministry of Education and Research and Ministry of Economy OÖ Innovations !!! Holding Upper Austrian Research GmbH
Year of Drafting / Year of official issue:
2014
Timeline for the development of actions
2014 - 2020
Description of the main objectives and actions
CORE STRATEGIES
To attract the best scientific and business minds , Upper Austria must further develop as a region and improve its competitive advantages.



- A strong economic agency contributes to the creation and security of jobs and the improvement of prosperity and social security in Upper Austria.
- Upper Austria is committed to **strengthen science and research** as a basis for future economic development.

INDUSTRIAL MARKET LEADERSHIP

- Sustainable jobs can only be created if **knowledge** is converted into marketable **products and services**. Research and development in Upper Austria should therefore be promoted primarily in areas in which Upper Austrian companies excel.
- **Knowledge-based business models** and an export-oriented **industrial sector** are particularly important to Upper Austria. Accordingly, in order to be competitive in the long-term, Upper Austria must invest in the development of more efficient, **adaptable production systems of the future in combination with new knowledge-based services**.
- Global societal challenges form the framework for the identification of **niches**, in which longterm **technological leadership** must be pursued.
- A critical factor in achieving competitive advantage is the **speed** of the diffusion of new technology and their application in novel processes and products. Measures to accelerate this process should thus be adapted to the latest developments. The entire innovation chain must then be considered a priority. Proven approaches include innovative models of technology transfer and further development of clusters, as well as intelligent funding of projects and regional structures. New approaches must be worked out to solve the greatest societal challenges in the context of open innovation and the increasing significance of creative communities.

INTERNATIONALISATION

- The **international orientation** of the **education, research and business sectors** must be **strengthened** and the recognition of Upper Austria as a business and research region improved. Through international cooperation with other regions, long-term strategic alliances are to be formed.
- **The activities of local companies with regard to internationalisation are to be supported**. At the same time the attraction of both **excellent international researchers** and high-profile global companies and the establishment of research headquarters of international corporations in Upper Austria must be promoted.

FUTURE AND EMERGING TECHNOLOGIES

- Preconditions (e.g. based on strategic intelligence) must be established, in order to **recognise global future trends** and accommodate them using new technologies and strategies.
- Furthermore, awareness of the importance of research and development in society must be strengthened through a sustainable improvement in the image of engineers



and researchers in order to counteract skepticism towards technology.

Entrepreneurial and research spirit should be encouraged in secondary and tertiary education.

FIELDS OF ACTIVITIES

- Industrial production processes
- Energy
- Health | Ageing Society
- Food | Nutrition
- Mobility | Logistics

MOBILITY | LOGISTICS

The “Mobility | Logistics” field of activity demonstrates marked strengths in the corporate sector, specifically in the areas of vehicles, drive train concepts and complementary services. The necessary key technologies and core competences are similar to those in the field of Industrial Production Processes and therefore a technology-based front-runner strategy would appear to be feasible.

The range of companies outside the core area is multifaceted. Optimised logistics solutions and a strong position in related technical know-how are vital to Upper Austrian competitiveness. significantly to overcoming the societal challenges addressed in other fields of activity. In addition, new and intelligent mobility and logistics solutions can contribute. All in all, technology- and research-based development is to be promoted in line with an explicit front-runner strategy, in order to sustainably secure the competitiveness of a field that is key to Upper Austria’s economy. At the same time, innovative and intelligent approaches to production logistics and new forms of mobility, which are more commonly found in non-industrial sectors (e.g. at University of Applied Sciences Steyr or University Linz), as well as complementary ICT fields, are to be further developed synergistically and then used in the core area as a source of impetus and an idea pool.

STRATEGIC OBJECTIVES

1a In 2020, Upper Austria will be a region with energy- and resource-efficient, multi-modal mobility and logistics systems, which will optimally meet the requirements for the movement of people and goods. Intelligent communications and traffic control systems as well as the optimisation of supply networks will play a central role.

1b Strengths in vehicle and drive train concepts (lightweight construction and innovative drive train systems, etc.) will also be extended by 2020 along with solutions in the field of production-related logistics.



EDUCATIONAL POLICY OBJECTIVES

2a In 2020, Upper Austria will be an internationally attractive educational region in the areas of mobility and logistics. A systematic approach to mobility in education will be taught using measures suited to the further development of basic and continuing interdisciplinary education.

TOPICS/MEASURES

- Expansion of university course offerings in the area of drive train technologies and compound materials (innovative lightweight construction in the automotive and aerospace industries)
- Focused development (JKU/FH) through endowed professorships in the fields of lightweight construction, etc.
- Networking and internationalisation of logistics education

RESEARCH POLICY OBJECTIVES

3a By 2020, Upper Austria will have established and expanded internationally visible research competences in the fields of mobility and logistics that are coordinated with business and industry.

3b Upper Austria will support interdisciplinary research and the development of innovative solutions in the fields of mobility and logistics systems, multi-modality, intelligent traffic systems and infrastructure.

3c Upper Austria will promote interdisciplinary research and the development of innovative solutions for efficient vehicle and drive systems and their components with special focus on resource efficiency and lightweight construction.

TOPICS/MEASURES

Central research topics in the “Mobility | Logistics” field of activity are ICT, logistics management, mechatronic systems and materials. Within these research areas, the following topics and measures are defined as focal points:

- Mobility and transport
- Logistics management/supply chain management
- Drive train and vehicle technologies
- Lightweight structures

ECONOMIC POLICY OBJECTIVES

4a By 2020, Upper Austria will be making a significant contribution to the overall competitiveness of the economy and its linkages to international markets, thereby securing the manufacturing region through new forms of mobility and logistics concepts, the promotion of suitable infrastructure, and the support of demand-oriented mobility



options.

4b In 2020, Upper Austria will have established itself as an “international logistics region” through the creation of reliable framework conditions as well as advanced location and traffic planning, and will thus support entrepreneurship and venture creation, the further development and settlement of companies.

TOPICS/MEASURES

- Sustained multi-modality
- Optimisation of sustainable logistics processes and transport logistics
- Technology-based logistics concepts
- Promotion of new drive train technologies and vehicle concepts for use in business, industry & society
- Development of business region/attraction of companies
- Further development, joining and alignment of the activities of relevant clusters towards objectives in the Mobility | Logistics field
- Integration into international logistics platforms and networks
- Increase in innovation competence and internationalisation of companies, especially with regard to SMEs
- Support for company founders and young entrepreneurs
- Support for lead companies, headquarters and SMEs in specific niches with high growth potential through specific offers in cooperation with partners in the innovation system

Website / Download: <http://www.ooe2020.at>

Possibilities to contribute or influence Policy / Strategy

i.e. Activities from ChemMultimodal project



5. References

A. McKinnon, M. Piecyk, Measuring and Managing CO2 Emissions of European Chemical Transport, Logistics Research Centre Heriot-Watt University EDINBURGH, UK, 2011.