



TRADE AND TRANSPORT IN THE CZECH REPUBLIC AND THE COUNTRIES OF SOUTH-EAST EUROPE

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***Apstarct:** The FLAVIA logistic corridor project involves partners from Austria, the Czech Republic, Germany, Hungary, Poland, Romania and Slovakia. Improving logistic flows among the involved regions will contribute to the integration of markets in the enlarged European Union. FLAVIA will bring together experienced stakeholders in the field of new intermodal transport services to develop trans-national action plans, concepts and suggestions. Key stakeholders from the whole FLAVIA corridor with logistic background will support the objectives of the project as associated partners. Together they build a triple helix of logistics knowledge competence, government and inter-/multimodal transport industry. All integrated actors are interested in an increased accessibility of the regions and improved trade and transport relations along the FLAVIA corridor.*

***Key words:** Intermodal transport, Logistics market, Corridor, Czech Republic.*

INTRODUCTION

Project FLAVIA covers seven countries from Germany on the north to Romania on the south. Aims of this action and main goals were in identification of FLAVIA corridor as regards intermodal market especially rail and inland waterway area. This aim was achieved through:

- description of demographic and economic development and indicators with the view of FLAVIA project area on the basis of data gathered from each country. Important conclusions will come from analysis of aggrieved markets (intermodal, logistics and waterway transport). There will be also described projects which were or are supported by EU and their efficiency for FLAVIA. Significant for FLAVIA will be a subchapter about national support of intermodal transport in each country, because that information isn't matter of common knowledge abroad.

- Identification of needs of logistics market players with the view of FLAVIA project area on the basis of existing studies and through the updated data's,

- identification of needs of logistics market players with the view of FLAVIA project area. The market players will be asked about weak points in the legislature, support or missing equipment of intermodal market. Their opinions will be summarized for FLAVIA area and some conclusions will be done,

- preparation of a map of logistics centres, intermodal terminals and ports supplemented by main transport flows on the basis of previous sub-actions.

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1. DEVELOPMENT OF THE LOGISTICS MARKET UNTIL YET

Czech logistic market used to be before 1989 oriented on East according to Comecon agreement. Strong position had railroad transport; therefore husky network of marshalling yards have been build. The situation changed after the Velvet revolution in 1989. The Iron Curtain has been broken and new markets were open up for Czech suppliers and haulers. Eastward oriented railroad network wasn't able to keep pace with western development. Redundancy of employers and out of date management meant a comparative disadvantage for railroad. Volumes of road transport were growing at the expense of railroad transport. Present situation is that railroad transport is used for long-hauls in shuttle trains (coal, containers, limestone, iron ore, wood or tank cars). Present share of railroad transport is 23 %. Road transport has 76.5 %. Rest 0.5 % has inland waterway transport. The reasons of present situation will be explained consequently.

Infrastructure: First problem of Czech logistic market is in quality of infrastructure. The quality of infrastructure has been increasing, but the demands are higher. Operators have problems with bottlenecks through whole land and terminal owners feel problem in the connection between their terminals and motorway network. There is lack of capacity. In road transport is the most problematic area of lack of alternatives to the highway D1 Prague – Brno - Ostrava, which is the busiest road in the Czech Republic. This highway must also undergo a major refurbishment (Prague – Brno), which means loading of the lower classes roads. It needs a completion of the motorway R35 between Hradec Králové and Olomouc and links with the highway D11 Praha – Hradec Králové. Part of the traffic would be moved to the relation Prague - Hradec Králové - Olomouc – Ostrava.

Market and competition: Liberalization of railroad market is on paper for a long time, but in fact there exist many close ties and shortcuts for some subjects. The subventions of intermodal transport are attractive, but suitable just for operators not for terminal owners. Therefore terminals are often owned by operators. In this case it would be appropriate to attract the whole intermodal transport system for the target customer. If there will be an attractive price, the whole system will be attractive.

Rolling stock and transshipment equipment: The share of price and quality looks good for all categories. Problem is in age of rolling stock and transshipment equipment. They are obsolete and its renewal costs a lot of money with small rate of subventions.

Terminals: Waterway terminals are major problem in Czech Republic. They are situated just on the river Labe on the north of a country and its usability for FLAVIA corridor is low, because of low capacity of river Labe on Czech area. Another problematic question is level of interoperability. That is growing year by year. Pilot project on railroad runs on part of the European ETCS (European Train Control System corridor) E - Dresden – Prague – Brno – Vienna – Budapest – Bucharest – Constanta.

Advantages and disadvantages of the Czech logistics market

Advantages:

- Location in the Central Europe – transport bridge between West and East Europe,
- Main transport flows are realized by road transport and by shuttle intermodal and automotive trains,
- High density of road and railroad network,
- Many boards with neighbours,
- Favour prices for road and railroad transport.

Disadvantages:

- Congestion on roads and emissions,
- Transit transport brings low added value,
- Big demand on road infrastructure and its quality,
- Toll on highways and 1st class roads only – less money for investments and maintenance,
- Building of logistic centres and intermodal infrastructure is missing a long-term conception,
- Lower production forced down prices of transport services, especially on railroad transport.

Needs of market players: Shippers wish to move goods at the lowest price and with reasonable quality, if possible anywhere from anywhere. Price depends on amount of costs incurred by the transportation and the amount of profit that the operator expects. In the absence of any external intervention in the form of subventions or regulation, only the market decided what mode of transport will be preferred. If we want the shippers prefer some mode of transport, we must them financially motivated.

The long-term problem in rail transport is a shortage of wagons suitable for specific commodities, especially timber and bulk substrates. For this reason, can not be satisfy all their transportation requirements.

Operators need a reasonable range and quality of infrastructure, especially for long distance transport. Railroad transport is penalized by the complexity of the entry of new operators to the network. The capacity of the rail network is also utilized by strong and large (national) operators – often intentionally.

The problem is still a level of interoperability in the railway. Implementation of ETCS is a matter of corridors. Other network lags. This is a particular problem when the alternate routes are needed.

There is missing a systematic approach and support of public logistic centres development as well as intermodal terminals. Big threat is in past days presented financial reduction of funds for transport infrastructure. Ministry of transport stifled many infrastructure project e.g. reconstruction of railroad corridor from Prague to Austria via České Budějovice or part of Prague orbital.

Railroad network has one of the highest densities in Europe, but technical parameters of many tracks makes their usage in modern logistic chains impossible. Just main corridors connected to AGC or AGTC network are competitive to road transport in speed and service quality. Higher competition on railroad market will increase labour productivity and reduce costs.

2. TRADE AND TRANSPORT IN CZECH REPUBLIC

Project FLAVIA covers seven countries from Germany in the north to Romania in the south. Action 3.1 identifies the FLAVIA corridor as regards intermodal market especially rail and inland waterway area. This aim is achieved through describing transport flows in rail, road and inland waterway.

The figures 1and 2 show the volume of freight transport exported and imported by rail, road and inland waterway transport. The map is valid for country with black thick borders. The volumes of transport are shown in million of tons.

The report includes export and import flow maps for each country. Two maps show the top ten transport flows on railway and on road. The last map displays intermodal terminals and their attraction area with a diameter of 100 km (50 km in all directions), the most important cities and the most important economical centres within the FLAVIA corridor.

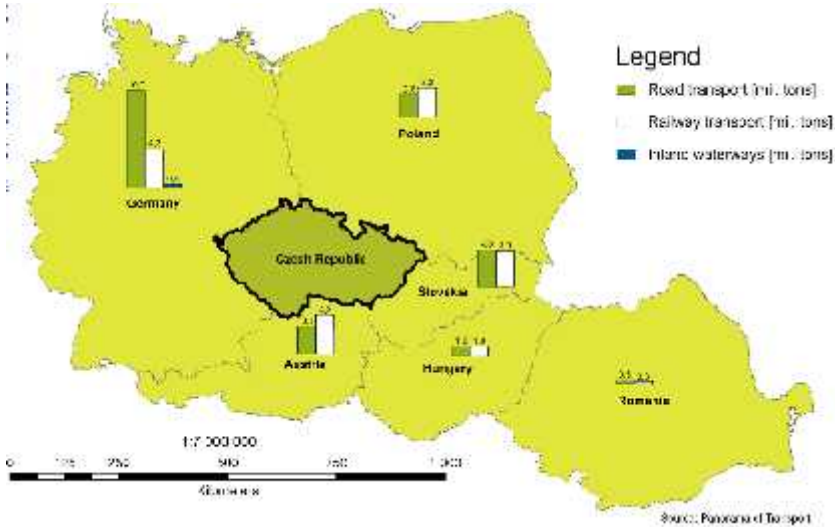


Figure 1: Export flows from Czech Republic

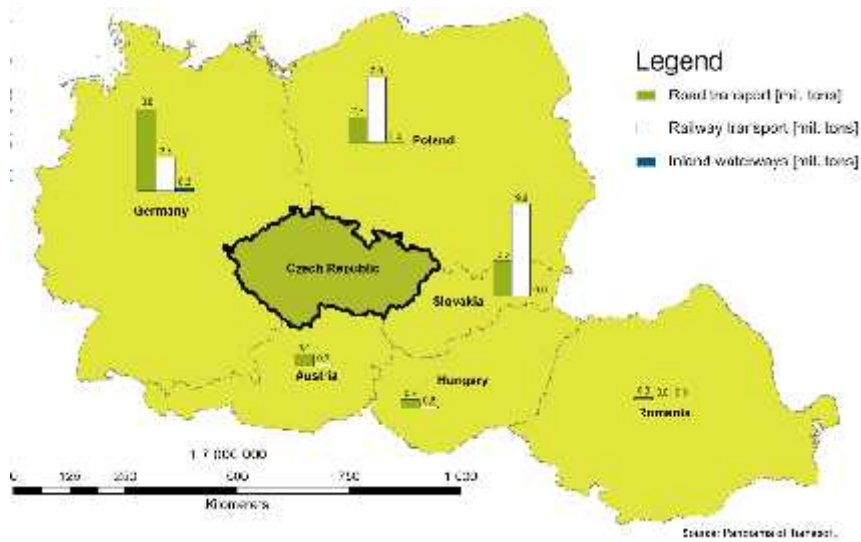


Figure 2: Import flows to Czech Republic

Figure 3 and 4 show the top ten transport flows for rail and road transport. These flow data are corresponding with the transport volumes on the previous figures.

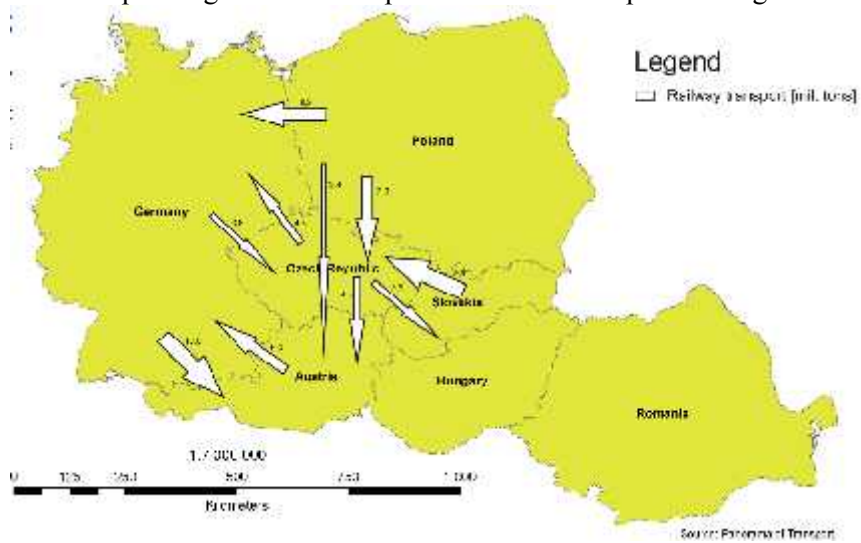


Figure 3: Top ten flows of the rail

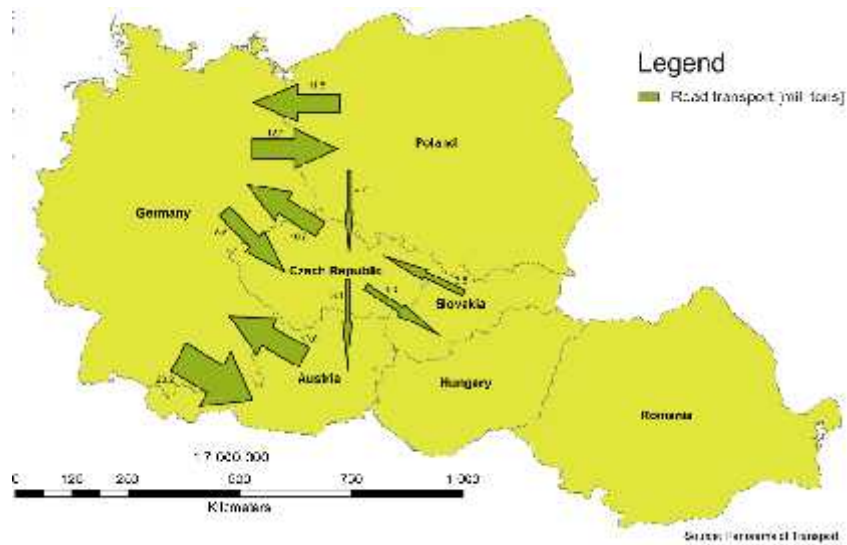
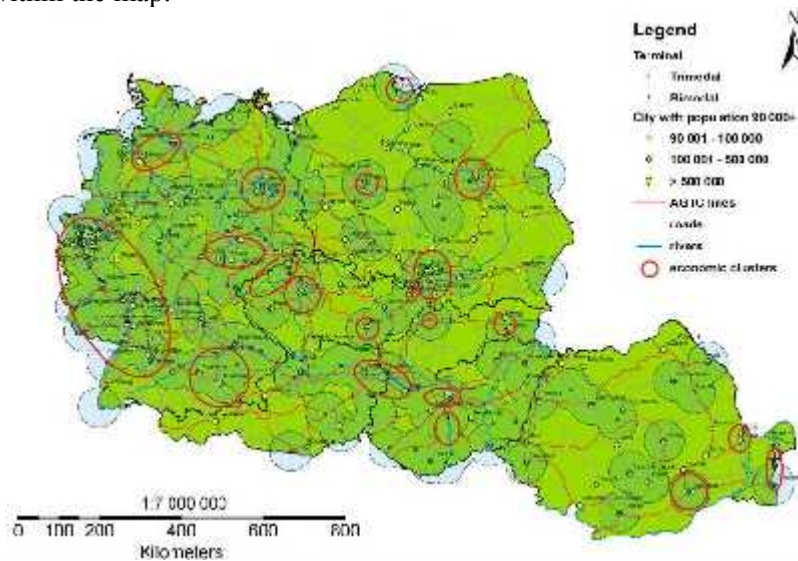


Figure 4: Top ten flows of the road

Figure 5 shows the intermodal terminals with their corresponding attraction areas. The terminals are divided into bimodal (rail-road) and trimodal (rail-road-inland waterway). The diameter of this area is 100 km. Demographic and economic clusters are marked with red colour. All cities with more than 90 000 inhabitants are depicted. Furthermore the AGTC (European Agreement on Important International Combined Transport Lines and Related Installations) lines, rivers as well as canals and roads are included within the map.



Source: Panorama of Transport, Project FLAVIA

Figure 5: Terminals in the FLAVIA area

CONCLUSION

The main problem in the Czech Republic is an infrastructure, which is unable to satisfy the needs of the market players. There is missing systematic support for combined transport and public logistics centers. The railway infrastructure is not fully interoperable yet. Liberalization of the rail market still is not perfect, too. This leads to the situation that the most used mode of transport is the road transport.

FLAVIA will bring together experienced stakeholders in the field of new intermodal transport services to develop trans-national action plans, concepts and suggestions. Key stakeholders from the whole FLAVIA corridor with logistic background will support the objectives of the project as associated partners. Together they build a triple helix of logistics knowledge competence, government and inter-/multimodal transport industry. All integrated actors are interested in an increased accessibility of the regions and improved trade and transport relations along the FLAVIA corridor.

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