



MARKET ACTORS USING THE CORRIDOR OF PROJECT FLAVIA

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Apstract: *This article belongs to the publicity of European project FLAVIA. Its goal is in summary of main market actors and areas in involved countries with a special impact to Czech Republic. All goals are summarized at the end of the article.*

Key words: *FLAVIA, market actor, economic cluster.*

INTRODUCTION

FLAVIA project is significant, in context of Central Europe Goals, especially in area of the transport accessibility. The main project goals are:

- to improve Central Europe's interconnectivity,
- to develop multi-modal logistics cooperation between market players,
- to promote sustainable and safe mobility, especially green transport.

The activities taken in project should improve transnational solution for the interconnection of Central Europe, and at the same time consider the impacts of transport and establish an efficient and sustainable transport network. Economic integration is getting stronger. It leads to increasing traffic volume, also in the countries of the FLAVIA corridors. It has a huge influence on the road traffic. In order to avoid congestion and negative environmental impacts, it will be necessary to foster a multimodal logistic cooperation to meet the requirements of economic development. One of the project aims is to improve multimodal transportation. The project also fosters interconnectivity and inter-modality for higher efficiency and reduced volumes of road transport across the Central Europe countries.

Goals and activities cannot be done without identification of the transport market segment, especially:

- production district,
- manufacturing and trade companies,
- logistics operators in Central and South-East Europe.

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Some data and conclusions from the report can be useful to create infrastructure and organizational measures with high impact and identification of FLAVIA corridor user needs. Case results can be also used for the creation of action plans for logistics chains, to remove bottleneck, in particular action plans for infrastructure, legislation and terminal development. Effect of this report will be used to create future activity plans to improve the intermodal channels.

In this article are presented the identified production districts, manufacturing companies and logistics operators in Czech Republic and summary for all FLAVIA countries. There was prepared an excel form to further data gathering and filled by each partner.

First of all the main sectors of industry and the most significant production districts have been identified for each country. It has to be added that the most developed regions in each country are marked on the map. In the next step companies in the main important production districts were analyzed. In the last step logistics operators in the FLAVIA countries are presented.

The analysis shows that the engineering industry is the most developed sector of industry in the FLAVIA countries. Further, that main mode of transport used by the companies and the logistics operators in FLAVIA corridor is road transport, next is rail transport, and last is water and air transport.

1. METHODOLOGY

The results of the analysis presented in this report were prepared according to a methodology which was created for this sub-action. The whole process can be divided into three steps:

- first step: preparing of excel form to data gathering – responsible: Action Leader,
- second step: data collecting in each FLAVIA country – responsible: involved Partners,
- third step: data analysis in FLAVIA corridor – responsible: Action Leader.

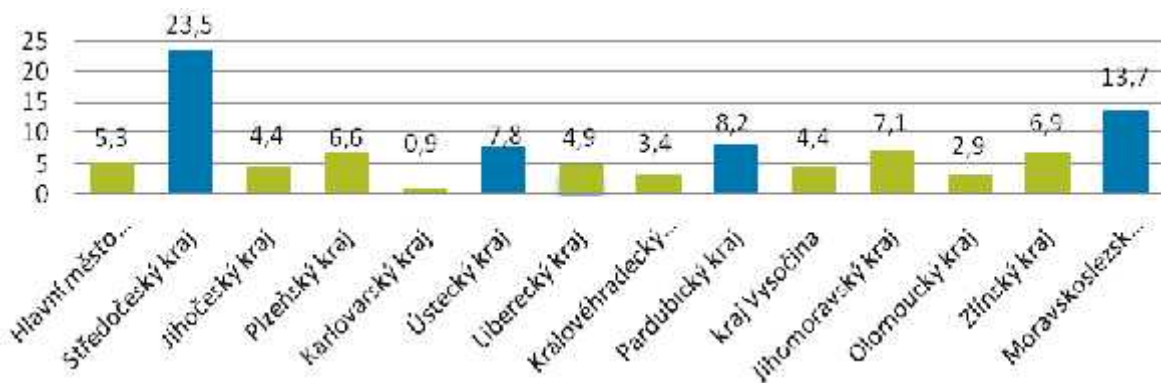
2. SITUATION IN CZECH REPUBLIC

Data gathered by University of Pardubice were put into prepared tables and graphs. Results are summarized in this chapter. Table 1 and figure 1 present a list of the biggest production districts in Czech Republic. Regions with the highest share of industry in the GDP are marked in blue colour. Středočeský kraj (23,5%), Moravskoslezský kraj (13,7%), Pardubický kraj (8,2%) and Ústecký kraj (7,8%) are the most industrialized districts in Czech Republic.

Table 1: List of the biggest production districts in Czech Republic

Region in country	Share of industry in the region [%]
Hlavní město Praha	5,3
Středočeský kraj	23,5
Jihočeský kraj	4,4
Plzeňský kraj	6,6
Karlovarský kraj	0,9
Ústecký kraj	7,8
Liberecký kraj	4,9
Královéhradecký kraj	3,4
Pardubický kraj	8,2
kraj Vysočina	4,4
Jihomoravský kraj	7,1
Olomoucký kraj	2,9
Zlínský kraj	6,9
Moravskoslezský kraj	13,7

Source: www.czso.cz



Source: www.czso.cz

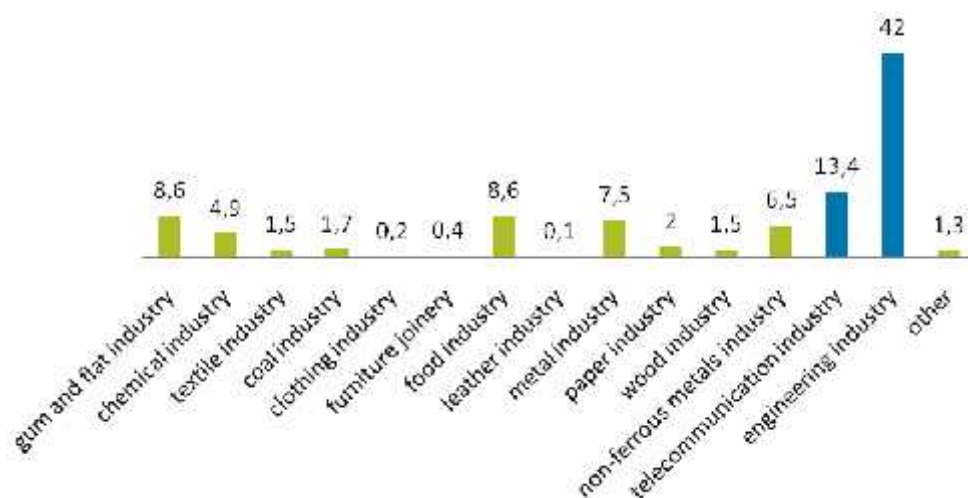
Figure 1: Share of industry in the region

From the sector participation (in GDP) in the industry point of view engineering industry (42%) and telecommunication industry (13,4%) are the most developed. Sectors and their participation in industry are shown in the table 2 and figure 2.

Table 2: Sector participation in the industry in Czech Republic

Sector of industry	Sector participation in the industry [%]
gum and flat industry	8,6
chemical industry	4,9
textile industry	1,5
coal industry	1,7
clothing industry	0,2
furniture joinery	0,4
food industry	8,6
leather industry	0,1
metal industry	7,5
paper industry	2
wood industry	1,5
non-ferrous metals industry	6,5
telecommunication industry	13,4
engineering industry	42
other	1,3

Source: www.czso.cz



Source: www.czso.cz

Figure 2: Sector participation in the industry in Czech Republic

The most development industry in Czech Republic is engineering (42%). Therefore, the companies from engineering industry and from following regions³ were considered:

- Středočeský kraj,
- Liberecký kraj,
- Moravskoslezský kraj.

Additional information, as name of company and their products are presented in table in table 3.

Table 3: Information about engineering industry in Czech Republic

Region	Name of company	Product which are produced
Středočeský kraj	Škoda Auto, a.s.	Cars
	TPCA, a.s	Cars
	Continental Automotive Czech Republic s.r.o.	Automotive industry accessories
Liberecký kraj	TRW Lucas Varity s.r.o.	Automotive industry accessories
	Magna Exteriors & Interiors (Bohemia) s.r.o.	Automotive industry, rubber parts
	DENSO MANUFACTURING CZECH s.r.o.	Automotive industry accessories
Moravskoslezský kraj	ArcelorMittal	Production and processing of iron and steel
	Vítkovice Holding a.s.	Engineering products and whole investment units
	Hyundai Nošovice	Cars

Source: www.ct100.cz

The second strongest developed industry in Czech Republic is telecommunication industry (13,4%). Companies from the following regions were considered:

- Plzeňský kraj,
- Pardubický kraj,
- Jihomoravský kraj.

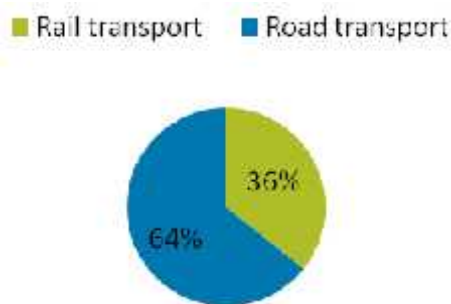
More information about companies which come from engineering industry is presented in table 4.

Table 4: Information about telecommunication industry in Czech Republic

Region	Name of company	Product which are produced
Plzeňský kraj	Panasonic AVC Networks Czech, s.r.o.	LED pannels, TV
Pardubický kraj	FOXCONN CZ, s.r.o	PC components
	PANASONIC	Audio systems
Jihomoravský kraj	AGORA DMT, a.s.	GSM, PDA, GPS navigation
	Konica Minolta Business Solutions Czech, spol. s r.o.	Copy and print systems, Laser printers, consulting services
	GC System a.s.	IT products and services

Source: www.ct100.cz

Fifteen companies have been analysed (presented on table 3 and 4) and can be stated that main mode of transport used by the biggest companies in the most industrialized regions in Czech Republic is road transport – 64%, next is rail transport – 36%. All those data are shown in figure 3.



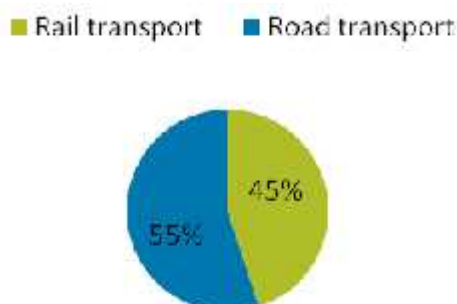
Source: authors

Figure 3: Mode of transport used by analysed companies

Examples of chosen logistics operators in Czech Republic are as follow:

- A.W.T.,
- ČD Cargo, a.s.,
- ČSAD Hodonín, a.s.,
- Dachser Czech Republic, a.s.

It has to be underline that road transport is the most used by logistic operators – 55%. Second most used is rail transport – 45%. Those data are presented in figure 11. Transport direction of the analysed logistic operators are mainly foreign markets – global work area.



Source: authors

Figure 4: Mode of transport used by analysed logistics operators

3. RESULTS FOR FLAVIA CORRIDOR

Whole report includes results for all countries. In this charter are just summarizations of them. There are identified production districts, manufacturing companies and logistics operators in FLAVIA countries. First of all it can be stated that the engineering industry is the most developed sector of industry in the FLAVIA countries. In table 5 are presented in detail sector participation in the industry in all countries. On the blue colour are marked column with the biggest sector participation in the industry.

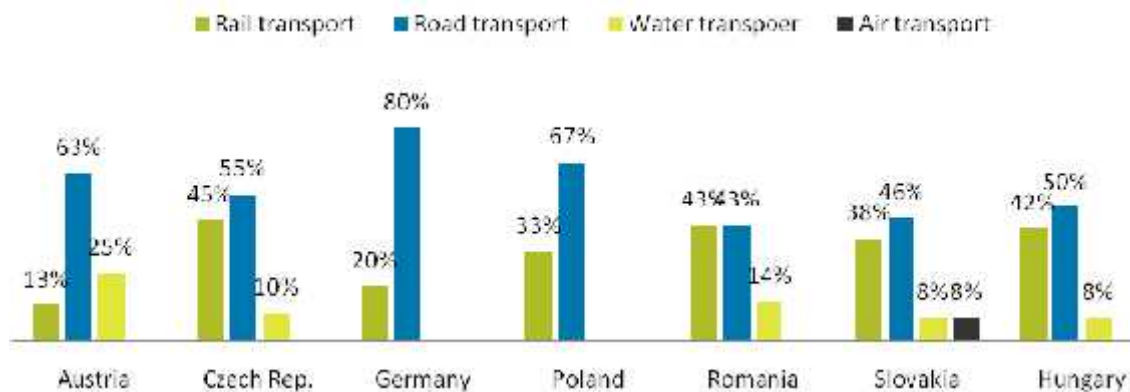
Table 5: Information about telecommunication industry in Czech Republic

Sector of industry [%]	Austria	Czech Republic	Germany	Poland	Romania	Slovakia	Hungary
gum and flat	4,1	8,6	5,3	7,7	3,7	3,6	5,5
chemical industry	5,1	4,9	7,7	8,3	4,3	9,7	13,9
textile industry	0,9	1,5	1,5	1,8	1,3	0,6	0,8
coal industry	0	1,7	0	5,3	0,8	0,2	0,1

Sector of industry [%]	Austria	Czech Republic	Germany	Poland	Romania	Slovakia	Hungary
clothing industry	0,7	0,2	0,4	1,3	1,5	0,4	0
furniture joinery	1,9	0,4	1,3	5,1	2,2	1,6	1,3
food industry	9,8	8,6	22,6	27,7	16,8	5,5	9,1
leather industry	0,3	0,1	0	0,5	0,9	0,6	1,2
metal industry	8,8	7,5	5,9	11,5	4,6	11,9	4,9
paper industry	4	2	4,6	2,9	0,8	2,0	1,9
wood industry	4,8	1,5	4,1	4,2	5,3	0,9	2,5
non-ferrous metals industry	0	6,5	19,1	7,6	3,2	3,0	0
telecommunication industry	0	13,4	10,7	2,1	0,4	8,9	19,7
engineering industry	11,7	42	14,7	10,5	21,9	31,5	31,2
other	47,9	1,3	2,2	3,9	32,2	19,7	8

Source: authors

On the figure 5 are shares of modes of transport used by chosen logistic operators in FLAVIA countries.



Source: authors

Figure 5: Mode of transport used by analysed logistics operators

CONCLUSION

Analyzing sectors of industry which are the most development in the FLAVIA countries it can be noted that their products are mostly suitable for intermodal transport. Further, comparison participation of rail transport in the overall transport carried out by identified in report of the largest companies can be concluded that there is considerable potential for move freight from road to rail.

The above statement also confirmed further comparison: Analyzing the mode of transport used by the biggest companies and logistics operators there can be noticed that rail transport is not fully utilized. Therefore, there should be carry out further analysis and research in order to determine the causes of this situation (greater use of road transport) and identified during research obstacles. Additionally, should be also carry out activities which promote rail and intermodal transport and dissemination of the FLAVIA project results.

ACKNOWLEDGEMENT

This paper has been supported by the project „Creating an environment for the operation of advanced technology of horizontal transfer between road and rail transport“ (TA01030425) on Transport Faculty Jan Perner, University of Pardubice, Czech Republic and the project “Freight and Logistics Advancement in Central/South-East Europe” (No. 2CE189P2) on European Union.



EUROPEAN UNION
EUROPEAN REGIONAL
DEVELOPMENT FUND

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