The Dynamics of the Development and Increased Effectiveness of International Road Transport in Poland in 1998-2016

Leszek Mindur

The International University of Logistics and Transport in Wroclaw, Poland

The analysis of the motor-car transport development after the transformation of the political system and economy in Poland in 1989 was made in this article. The development of domestic roads in this country with taking into account the constructed highways was also presented. Also the leading role for load carriages in the motor-car transportation was indicated. Some law provisions obligatory for transport agents on the territory of the European Union and the quantities of the transported loads and passengers in the international motor-car transport in 2003-2013 were also taken into consideration in this article. Moreover, the problems of Polish transport agents operating on the territory of the European Union were indicated.

Keywords: Polish motor-car transport, the development of domestic roads, goods transport, transport of passengers.

1. INTRODUCTION

The dynamic development of vehicle transport in Poland after 1989, when system and economic changes took place, and which resulted in the changed directions of Polish foreign trade, influenced long-term planning of the country's transport policy. The liberalisation of the market resulted in the fact that the number of small- and medium-sized companies nearly doubled - to 860 thousand. Nowadays both private and state companies provide services for all types of clients on equal basis. The public character of vehicle transport companies results from the elimination of industry barriers in new legal and economic conditions, as well as from the coercive management style.

Carriages of international cargo with the use of vehicle transport provided by Polish carriers in the European Union account for 14.7%, which places Poland on the second position after Germany, and before Spain and France (Transport... 2004–2015). In 2014 approx. 30 thousand Polish companies dealing with cargo haulage possessed EU licences and owned approx. 164.5 thousand vehicles. Moreover, there are 3.5 thousand passenger transport companies that possess 12 thousand

vehicles (The Ministry... 2015). Therefore, vehicle transport appears to be one of the key factors that create the competitiveness of Polish economy on the Single Market.

2. DEVELOPMENT OF THE ROAD INFRASTRUCTURE

The increase in the number of carriages forced the development of the road network. In 1989 in Poland there were a few routes of international importance, of the total length of 5,000 km, while the length of highways was 224.5 km, and of express roads 98 km. The situation of national roads network in Poland in August 2016 is presented in Figure 1.

At the end of 2016 Poland has 3,129.1 km of fast roads, including 1,632.7 km of highways and 1,497.4 km of express roads (The General... 2015). However, in 2015 the length of highways was 1,559 km. It means that for the surface of 1,000 km² the length of highways was 5 km, and there were 4.1 km for 100 thousand inhabitants (while in 2012 the average for 27 EU states was 17 km and 14 km respectively) (The General... 2015).

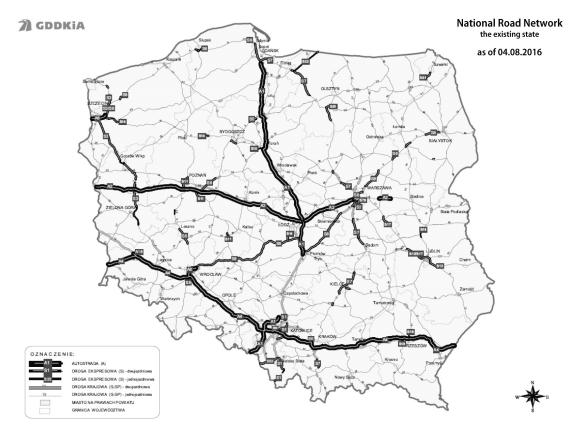


Fig. 1. The network of national roads in Poland (The General... 2015).

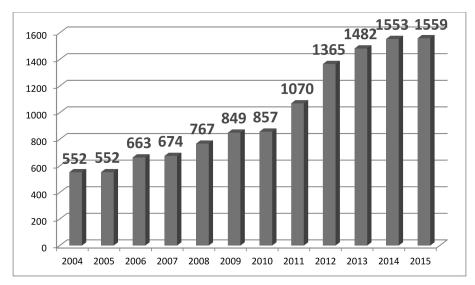


Fig. 2. The length of highways in Poland in 2004-2015, in km (Transport... 2004-2015).

3. VEHICLE TRANSPORT OF CARGO

The national transport system, which includes cargo and passenger transport, consists of all modes of transport, as well as other economic elements. However, the leading role in the system is played by the vehicle cargo transport. It mainly results from the characteristics of this transport, which among others include:

high carriage speed,

- easy adaption of vehicles to various types of cargo,
- easiness of adapting the carriage potential to the carriage tasks, changing in time and space,
- the possibility of 'door-to-door' deliveries, and hence avoiding transhipments which is impossible with other modes of transport (apart from the railway transport, if both

partners have railway spurs, which does not happen too often).

In 1990s, due to growing international traffic, the problems with throughput on borders started,

fuel prices, the number of Polish enterprises of international haulage, as well as carriages provided by them, were constantly growing. The scope of cargoes carried in international haulage in 2003-2013 is presented in Table 1.

Table 1 Comes		in intomotional	havilage in 2002 2015
rable 1. Cargo	carriages i	m miernauonai	haulage in 2003-2015.
0	\mathcal{C}		\mathcal{E}

year	export			import				
	in thousands tons		in millions of ton- kilometres		in thousands tons		in millions of ton- kilometres	
	total	incl. the EU states	total	incl. the EU states	total	incl. the EU states	total	incl. the EU states
2003	17 608	12 062	no data	no data	17 146	12 014	no data	no data
2004	19 612	17 219	20 500	16 913	17 265	16 074	17 995	16 771
2005	21 286	18 498	20 570	17 382	19 531	18 437	19 018	17 687
2006	27 730	24 347	26 245	22 492	25 318	24 331	23 958	22 904
2007	31 395	28 538	31 003	27 450	31 946	25 237	31 426	30 138
2008	34 601	31 037	33 801	29 440	33 801	32 956	33 801	32 719
2009	39 185	36 285	36 137	32 451	37 727	36 520	34 299	32 824
2010	48 087	43 053	44 048	37 861	45 347	43 998	42 134	40 780
2011	50 049	45 332	44 479	38 903	46 042	44 548	41 835	40 072
2012	56 865	51 051	50 891	43 780	51 585	50 439	45 164	43 801
2013	62 877	57 211	54 296	47 307	53 699	52 407	47 878	46 337
2014	61 075	56 446	53 594	47 346	55 220	53 539	50 195	48 307
2015	63 601	60 497	53 252	49 229	55 756	54260	48 864	47 333

(Transport... 2004–2015)

where people experienced long, even a few-day-long queues waiting for customs clearance. Moreover, a fast increase in the number of Polish carriers resulted in constant lack of foreign permits for providing international haulage (Report...).

The act on international transport passed in 1991 brought licences – a carrier could apply for such a licence when:

- they had an at-least a 3-year confirmed experience in national carriages, or a 1-year experience in international carriages,
- they have no records during the last 3 years for crimes against safety in road traffic, or against property.

The amendment from 1997 facilitated the development of transport companies, as it introduced the possibility of transferring licences among them along with a sold vehicle, which were next signed over to the buyer, by means of administrative decision.

Despite momentary problems resulting from the introduction of road charges for carriages, obstacles from other countries in the access to permits for vehicle transport abroad, or increased

During the researched 13 years cargo export increased 3.6 times, and import 3.2 times. At the same time carriage operations in both export and import increased during the same period of time by nearly 40%. Therefore it must be stated that cargo is transported on ever longer distances.

While organizing home carriages can be characterized by quite extensive freedom as far as the transport process is concerned, the international carriages are performed within strictly defined rules, resulting from international conventions. For instance, each gainful cargo haulage from Poland to the third country, or the reversed one, undergoes the rules and regulations of the CMR convention which defines relations between a carrier and a user. The proof of the concluded carriage contract is a CMR (Mindur L. 2014) delivery note. Since January 1992 the above mentioned delivery note must be accompanied by a Single Administrative Document -SAD. Moreover, a carrier should be in the possession of numerous other documents, especially an appropriate carnet issued on the basis of the international TIR convention. The TIR carnet enables haulage without the necessity to undergo a customs procedure while crossing the border. The guarantor for the carriers towards customs authorities of individual countries is the organization issuing TIR (Mindur L. 2014) carnets. In Poland this is The International Hauliers Association.

The vehicles admitted for carriage with the use of TIR carnets have to comply with conditions specified in the convention, and the drivers are obliged to use the carnets in an appropriate manner.

The data from Polish statistics since 2005 on HGVs mileage show a slight increase in the years 2005-2013 of loaded runs against the empty ones (Fig. 3), which translates into higher effectiveness of international haulage in Poland. A slight drop of mileage happened in 2011 which was the results of less haulage through Poland between other countries.

(Fig. 4 and 5). Export cargo from Poland to Germany has been steadily increasing every year. During the 10 surveyed years export to Germany increased 3-fold, from 7,698 thousand tonnes in 2003 to 25,923 thousand tonnes in 2015.

Despite the increase in export to Russia until 2013, embargo on Polish products introduced periodically by Russia caused fluctuations in the sizes of the cargo transport to that country. The drop in export to Russia, compared to the previous year, occurred in the years 2009, 2011. The existing political situation which resulted in the imposition of sanctions by Russia on export of agricultural products from the European Union, Poland included, resulted in greater decline in export in 2014 and 2015.

The trade with Italy, realised by road transport, has been constantly increasing. Since 2003 export

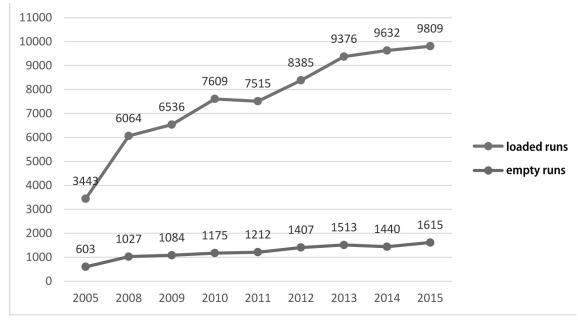


Fig. 3. The carriage HGVs in international haulage, split into loaded and empty runs in 2005-2015 (Transport... 2004–2015).

In the case of foreign vehicles providing services of domestic transport, in a Member State, other than that where they are registered, the rate of empty run is almost 50%. This means, that carriers are not able to organize their transport activities in an efficient way. However, the proportion of empty carriage with respect to the loaded runs in the analysed period, in international transport is about 16%. This indicates that in spite of the increase in the number of loaded runs, empty runs are at a similar level in relation to loaded runs.

The clear leader among the countries to / from most goods are exported and imported using road transport in the years 2003-2015, is Germany

has grown by 31% (from 916 to 2,956 thousand tonnes) and import by 35% (from 1170 to 3,322 thousand tonnes). 2014 was a record-breaking year in terms of cargo export to Sweden- 1,787 thousand tonnes of cargo was transported in that year (in 2015 a decrease, to 1,612 thousand tonnes was noted).

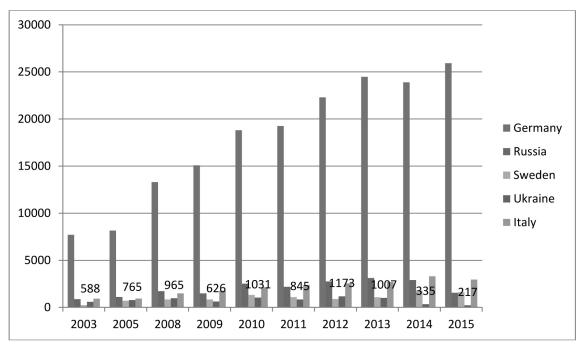


Fig. 4. Transport of freight export, with use of road transport, for chosen countries, in the years 2003-2015 (given in thousands tonnes) (Transport... 2004–2015).

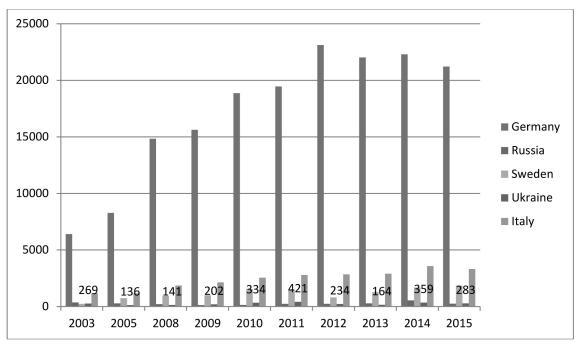


Fig. 5. Transport of freight import, with use of road transport, for chosen countries, in the years 2003-2015 (given in thousands tonnes)(Transport... 2004–2015).

Export to Ukraine was characterized by volatility – increase until 2010 (in 2003, 588 thousand tonnes of cargo were exported, and in 2010 1,031 thousand tonnes), slowdown in 2011, when exports decreased to 845 thousand tonnes, and another increase in 2012 with 1,173 thousand tonnes. In 2013, the export decreased again to 1,007 thousand tonnes of cargo, and the following two years deepened the fall to 335 thousand tonnes

in 2014 and 217 thousand tonnes in 2015. A similar trend continued in import. In 2003 cargo imported from Ukraine amounted to 269 thousand tonnes, in 2005 as little as 136 thousand tonnes, in 2008-2011 an increase was reported, from 141 to 421 thousand tonnes, and in 2013 a decrease to 164 thousand tonnes, but in 2014 an increase to 359 thousand tonnes was observed, and in 2015 drop to 283 thousand tonnes.

4. PASSENGER ROAD TRANSPORT

Adopting and implementing road transport requires a license. The issues regarding a license are regulated by Article. 5, paragraph. 1 of the Act of 6 September 2001 on road transport (JoL 2004.

average distance has been steadily increasing. The number of transported passengers in international road transport, in the years 2003-2013, along with the transport performance, are presented in Table 2.

Table 2. Passenger transport in international road transport in the years 2003–2015.

Year	Passengers in thousands	Passenger-km (in millions)	Average distance of 1 passenger transport in kms
2003	2389	3542,7	1483
2004	2553	3949,1	1547
2005	3019	4086,6	1354
2006	2866	3501,8	1222
2007	3088	4148,7	1343
2008	2727	3463,5	1270
2009	2221	3157,1	1422
2010	2298	no data	no data
2011	2488	3865,2	1553
2012	2447	3798,3	1552
2013	2790	3984,3	1428
2014	3255	4558,4	1400
2015	3900	6023,6	1545

(Transport... 2004–2015)

No. 204, item. 2088), and Council Regulation (EEC), No 684/92 of 16 March 1992, on common rules for the international carriage of passengers by coach and bus, amended by Regulation (EC) No 11/98 of 11 December 1997. Each EU transport company can provide regular (according to timetable and on a specified route, with stops at predetermined locations) or occasional transport services (transport groups formed on the initiative of the customer or the carrier) between Member States for groups of at least nine people including the driver) (European Parliament... 2015). Regulation (EC) No 1073/2009 also specifies the conditions for issuing and receiving Community licenses, their period of validity, the use of the license and a copy of the certified compliance with the original, as well as the way of displaying and submitting it to whom it may concern.

International passenger transport developed dynamically in Poland until 2007. Later the number of passengers increased by an average of 6% per annum. In 2008 transport services decreased to 2,727 thousand people, a significant decrease was observed in 2009 (2,221 thousand). It should be noted, that the difference between 2007 and 2009 equalled 867 thousand passengers. Since 2010, a growth in international transport has been observed. At the same time, since 2009, the

The record, in terms of international traffic, was beaten in 2007, when between Poland and Germany 1,164 thousand passengers were carried, Poland and Great Britain with 361 thousand, Poland and Italy with 310.1 thousand, Poland and France with 209.2 thousand and Poland and the Czech Republic with 187.6 thousand. The least significant transport services were observed between Poland and Bulgaria (Transport amounted to 6.2 thousand of passengers), Sweden -7.3 thousand, and Belgium - 7.4 thousand. For comparison, between Poland and Russia 33.4 thousand passengers were carried, (in 2013 8.9 thousand of passengers). Until 2013, international transport, carriage of passengers with Great Britain decreased most. In the period from 2007 to 2013, the number of passengers using road transport to the UK decreased by more than 250 thousand passengers (Transport... 2004–2015).

In 2015 most of the passenger were transported between Poland and Germany (1,773 thousand), France (319.5 thousand), the Czech Republic, 454.9 thousand), Italy (338 thousand), Austria (238.9 thousand), Great Britain (140.0 thousand), and the fewer between Poland and Bosnia and Herzegovina (4.2 thousand), Latvia (2.2 thousand), Slovenia (4 thousand).

The analysis of these data indicates that the size of passenger transport, in domestic international road transport, is determined, by, among others, economic situation. This applies both with respect to transport for work, and tourism purposes.

5. SUMMARY

Economic development and consistently expanding integration affect the growth of road transport between the East and the West. It is an inevitable result of the customs duties abolition and of quantitative restrictions on transport between different countries. Transit operations are a consequence of the increasing liberty of people, services and financial resources movement (Mindur M. 2009). Available forecasts, (developed both by governmental centres and independent experts and researchers) lead to the conclusion that measures, whose aim is to reduce the role of road transport, are ineffective. According to the forecasts published in 2013 by the Ministry of Transport, Construction and Maritime Economy (now Ministry of Infrastructure and Regional Development) of the Transport Development Strategy until 2020 (with perspectives and prospects until 2030), the greatest part of the demand for cargo transport, in branch system, will focus on road transport, while the demand for transport work (t-km) freight transport, in special systems, in 2010-2030 will grow most intensively in the field of international transport - an average annual rate of 2.8-3.2%.

The aim of Polish transport and economic policy, until 2020, is to achieve greater integration of road and rail transport, and, consequently, to increase the capacity of the transit freight system. A prerequisite, in order to achieve this goal, is the creation of logistics centres and container terminals.

The development of road transit transport will be connected with the reduction of administrative restrictions which might inhibit its growth. Any formal (e.g. permits, entitling to the international road haulage system, visas, etc.) or bureaucratic (charging system at the borders, complicated customs procedures, etc.) obstacles should be gradually eliminated.

Intensification of the phenomena of consolidation in the road transport, creation of logistics and freight forwarding chains, with participation of foreign entrepreneurs, improvement of technical equipment companies and greater use of modern communication systems

and communication will create favourable conditions of road transit transport development.

Polish carriers, performing international road transport are facing difficulties introduced by the richest members of EU that protect their own transport companies. Germany's activities tend to limit access to its market by imposing on foreign carriers providing transport and cabotage services on the territory of Germany a requirement of remuneration for the drivers of minimum wage, applicable in Germany (8.5 euro per hour). The case was appealed to the European Commission, which is going to give verdict on the compliance of regulations with the Community law. Simultaneously, in France and Belgium, a tightening enforcement against drivers Regulation No. 561 (2006) EC on working time of drivers was introduced. In these countries, the drivers who take regular weekly rest in the cabin of the vehicle, can be subject to penalties, amounting to: Belgium -1800 euro, France - 30 000 euro and one year's imprisonment. The European Commission has expressed a negative opinion about the level of the penalty, indicating, French that they disproportionate to the level of the offense.

Also, the embargo, imposed on the cargo to Russia, creates difficulties in transit through the territory of Russia to Kazakhstan, Mongolia and the Caucasus.

Opening of the Community transport market for road carriers from Poland has increased participation of Polish companies in the service of the EU transport needs - both in terms of procurement, carried out on its territory, and in terms transport services to the third countries. Hopefully, these trends will not be slowed down by restrictions, imposed by some countries of the Western Europe and by Russia.

REFERENCES

- [1] European Parliament About Parliament; http://www.europarl.europa.eu/displayFtu.html?ftu Id= FTU_5.6.3.html (as on 22.03.2015).
- [2] EU Transport In figures. Statistical Pocketbook 2014, s. 76.
- [3] Mindur L., 2014. Transport Technology (Red.). Warsaw–Radom: ITE-PIB.
- [4] Mindur M., 2009. Transport Europa–Azja (Red.). Warsaw–Radom: ITE-PIB.
- [5] Report from the Commission to the European Parliament and the Council on the State of the Union Road Transport Market. COM(2014) 222 final, Brussels 2014.
- [6] Report ZMPD Road transport In Poland selected data.

- [7] The General Directorate of National Roads and Highways; http://www.gddkia.gov.pl/pl (as on 20.03.2015).
- [8] The Ministry of Infrastructure and Development; http://www.mir.gov.pl/aktualnosci/ Transport/Strony/Wsparcie_rzadu_dla_polskich_pr zewoznikow_drogowych_15012015.aspx (as on 19.03.2015).
- [9] Transport statistical yearbook of Polish Central Statistical Office 2004–2015.Warsaw.

Date submitted: 2018-02-05

Date accepted for publishing: 2018-02-12

Leszek Mindur The International University of Logistics and Transport In Wroclaw, Poland Imindur@vp.pl