

## LOGISTICS IN CEE REGION

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*In this article we would like to give a short overview and an outlook about the logistics/transport situation in the CEE region taking in consideration of Slovenia, Hungary, Romania, Poland, Czech Republic and Croatia.*

### **Prof. Martin Lipicnik: Slovenia**

For a number of years, Slovenia's geostrategic position was seen as a comparative advantage and a prospective transport-logistics hub in this part of Europe. Over the past few years, however, this advantage has been reducing given the lack of adequate infrastructure. Moreover, due to accelerated construction of logistics routes in neighboring countries, Slovenia is likely to become isolated. Hence, there is not only a need for a comprehensive strategy for the development of transport-logistics infrastructure, but for an integration of all actors and prioritization of development goals that will facilitate economic growth and create value-added logistics development, using Slovenia's geo-strategic position as a competitive advantage. An important role in recent developments plays the economic crisis that has hit the Slovenian economy and the area of logistics. The impact of the crisis has hit Slovene small and micro-businesses the hardest, as most of them are struggling to survive.

In Slovenia, there are three major logistics players, all of which are state-owned: Luka Koper, Slovenian Railways and the Post of Slovenia. An important role also plays the logistics center BTC. The former, Luka Koper is a modern northern Adriatic port. In the past decade, the freight volume has been increasing year on year. Decline in the volume of freight, resulting from the global crisis, was detected in 2009, but in 2011 and 2012 (with 17.88 million tons) a new record with nearly 18 million tones was reached. Further developments in the Port of Koper depend on back-end infrastructure developments that will facilitate integration with the target markets (almost 60% of goods are transported by rail, but the construction of the second track Koper-Divača has not yet began). Another important issue is the much needed deepening of the waterway so as to provide access to larger ships.

On the one hand, due to the lack of investment in railway infrastructure, from 2001 to 2009 the proportion of goods transported by rail decreased from 19 % to 14.8 %. In 2011, the share of goods by rail has increased by 18% in tons, but if we compare this volume with that transported in Austria (reaching 40%) there is much room for improvement. On the other hand, despite the challenging conditions, the BTC Logistics Centre recorded a 3.6 % growth in revenues, reflecting an increase in demand for integrated logistics solutions and the formation of strong competitive logistics centers.

Based on the findings from the Slovenian logistics sector it may be concluded that the consequences of the economic crisis are dire for the logistics-transport infrastructure. However, such infrastructure and most importantly a better and

holistic development strategy are vital for the Slovene companies to compete more effectively in the global market.

### **Dr. Alfonz Antoni: Hungary**

Until 2013 there was no official need from any government towards the professional and civil organisations/associations to prepare the logistics strategy of the country. This year the situation has been changed and the government asked the Ministry for National Economy to work out the mid-term logistics strategy of the country. (Government decree 1157/2013). The strategy was approved by the government at the end of September 2013. The timeframe of the strategy is from 2014 till 2020; the targeted budget is 40 million eur / each year of which 75-80% is dedicated for logistics infrastructure development. Therefore the GDP participation of the Hungarian logistics industry could rise from the actual 8-9% to 10-15% at the end of the strategy period.

The strategy has 4 main pillars: logistics know-how, logistics infrastructure (logistics centres, excluding the transport infrastructure), logistics networks (connectivity to the neighbouring countries) and logistics R&D. The aim of the strategy is to increase the contribution of the logistics industry to the country and business sector competitiveness. The strategy will be realized by several ministries, Professional organizations and lead by Ministry for National Economy.

The importance of the logistics sector is very high for the country, based also on the geographical situation. (see Figure 1 and 2.). The country itself is very much capital (Budapest) oriented in terms of infrastructure, companies, headquarters etc..During the last 5 years , 15 millions of m2 new distribution centres were built in Budapest region (see Figure 3.).

Seven tools / intervention areas were identified in order to reach the strategic targets. One of the most challenging intervention areas is the recording/monitoring of the logistics inputs/outputs of the country and the set up of a logistics data base creation task. Actually there is no real information in Hungary (only theoretically one on paper, see Figure 4 and 5) about the goods flows: we don't know the volume, the nature, the timing, the locations, therefore there is no real picture about the movements in the European corridors or at the border crossing points. Also there is lack of knowledge in terms of existing warehouses/distribution centres, where are they and with which capacities. There is no correct information about the origins/destinations of goods coming in and going out of the country or transiting. Therefore it is very difficult to get any fast decision in the logistics national planning.

The other main challenge is the right economical and infrastructure balance within the country (and also between the transport modes, see Figure 6). , how to better balance Budapest and surrounding countryside. (see Figure 7 about the future motorway development which could help). Thus the country and the logistics industry need continuous discussion and a stable and step by step realization of the strategic plan.

## **Adriana Palasan: Romania**

From an economic perspective, in the first half of 2013 Romania registered an increase of 1.8%, at 31 July 2013 the imports reached 3.132 billion Euro and the exports 28.19 billion Euro, with a significant reduction of budgetary deficit of 0.18%, compared to the same period of last year.

Unfortunately the highways situation has not improved, in this year alone remained at a number of 545 km divided into 6 different segments :

- Bucharest - Pitesti
- Bucharest - Constanta
- Bucharest - Ploiesti
- Cluj Napoca – Campia Turzii
- Arad - Timisoara
- Deva - Orastie

Due to poor infrastructure, rail transportation is becoming less used, though in the past few years in the Bucharest area opened three new container terminals: Alinso in Ploiesti, Cefin Logistic Park and Chitila.

There is still no data about the privatization of CFR Marfa , the state company with losses of billions of euros, whose tender was won by the second Romanian operator. The results are expected from Competition Council.

In the private sector the productivity per employee is 88,000 euros versus slightly under 2,000 euro in the state sector.

In Constanta Port although there are signs of modernization, things have not changed much.

The number of vehicles on road transport market declined in May 2013, compared to October 2012, with approximately 2,000 units, of which more than half are older than 2005.

Large companies such as Edy Spedition, which in 2009 owned more than 1,000 trucks, became insolvent and last year exit the top 10 of road transport operators, remaining with 170 trucks.

Also, Dumagas company which currently occupies no. 1 in the top road transport operators, with 542 trucks, is in need because of debts .

In the top 12 shipping companies there are only two international companies : Waberess and Essers with 459 and 249 trucks.

What can we say about is that domestic transport operators is that they are becoming more professionals, with good results and recognized performance by the international clients.

Logistics operators experienced a strengthening of market operations and a sustainable development of the projects, based on the growth of new investments particularly in the automotive sector, supporting the German companies trend of near shoring.

The new projects are developed by Graells & Llonch in Turda, VAP in Timisoara, Tester in Iasi , Daimler Auto AG in Alba, Bosch and VCST Automotive in Cluj , Leoni in Arad, MGI Container in Timisoara, Autoliv and Preh in Brasov , Draexlmaier in Satu Mare and Codlea. Yazaki factory is looking to place the fourth

factory, while other companies are about to sign contracts for new factories. Some of these companies prefer to outsource logistics activities.

This year, almost the entire country is covered with cross-docking logistics platforms and delivery service in 24-48 hours. Because of online commerce developing and reduced training of logistics operators for capillary distribution, this segment was successfully covered so far by couriers. They made investments in automated systems for sorting medium sizes parcels. For pallets and large items such as electronics, they operate consolidation and deconsolidation using traditional methods .

The stock of logistics warehouses in Bucharest amounts 980,000 sqm divided into 26 logistics parks, where the average rent is 4 E/sqm, reaching the limit of 3.5 E/sqm when discussing large area of 10,000 sqm . In other regions of the country, prices are about 10-20 % lower.

This year registered the highest number of sqm validated in renewed contracts, in Bucharest registering 80.000 sqm of such contracts. 65 % of all transactions were made in the capital, with 153,000 sqm in H1.

Other cities in which investments have been made are: Timisoara - 18%, Ploiesti - 10%, Iasi - 1%, Brasov - 6%.

We are expecting more foreign investments in information systems and automated warehouses.

### **Dr. Marcin Hajdul:Poland**

Poland is now focusing on developments of seaports as well as road and rail infrastructure in order to handle increasing flows of containerized goods. At the moment approximately ca. 70% of the containers still leaves Polish ports on trucks, which makes it the most important transport mode. This results in increasing congestion on roads which does not meet current polish transport policy.

In 2012, all modes of transport carried 1844.1 million tonnes of goods, which is 3.6% less than in the

previous year and the transport performance amounted to 325.8 billion tonne-kilometres, which is. 2.3% more than last year. The decrease of carriage of goods was observed in all mode of transport, while only road transport contributed to the growth of total transport performance.

As the road transport plays still the dominant role on the market there was a need to intensify intermodal transport development activities. On 11 December 2012 Sławomir Nowak, the Minister of Transport, Construction and Maritime Economy, established the Intermodal Transport Council [Journal of Laws of 11 December 2012, item 84]. As an auxiliary body, the Council focuses on improving the conditions for the functioning of intermodal transport in Poland by initiating activities to eliminate the existing barriers – both legal and organisational ones – inhibiting the development of this mode of transport.

As a result of executed actions the following results can be observed.

The volume of goods carried by rail transport in tonne-kilometres accounted for above 13% of total rail freight transport declared by the EU countriesd , which

Poland gives the 2nd place among the EU-27 countries between Germany and France. In international transport, Polish rail is on the 3rd place behind Germany and Latvia.

Cargo traffic at Polish seaports (international maritime traffic and cabotage) amounted to 58.8 million

tonnes in 2012, which is by 1.9% more than in the previous year. The increase of cargo traffic was noted in the following categories of cargo: large containers (by 14.4%), other general cargo (by 8.8%), ro-ro self-propelled (by 1.9%) and dry bulk (by 0.3%). There were less ro-ro non self-propelled (by 6.1%) and liquid bulk (by 4.5%).

In first 6 months of of 2013, total intermodal transport carried 2105,9 million tonnes of goods, which is almost the same which was handled in whole 2012.

### **Mirek Rumler: Czech Republic**

Logistics in the Czech Republic has gradually undergone rather dramatic development over last 20 years; Former system of government-owned transportation companies known as CSAD (Czech State Automobile Transportation) was abolished at the beginning of the nineties and replaced by soon replaced by tens of thousands of private transportation companies of all sizes – from small family establishments to vast corporations now successfully competing with the most dynamic global players.

Ninetieth represented by most unprecedented opportunities for newly emerging companies, attractive projects, and unique solutions. However, growing supply side resulted in the desperate need of new ways of achieving competitive advantage as well as in increasing bureaucracy and various business restraints from the side of local government and later also by the EU. Tough competition has forced most transportation companies to broaden array of their business activities while converting those most progressive into modern 3PL providers. Strict Czech legislation together with regulation in place in other European countries initiated remarkable investments in technologies and equipment; As a result of this tendency, Czech logistics now is ready to serve the most demanding customers and offer concepts used by local as well as global customers.

What is it that makes Czech market attractive for further development of logistics? What is the reason that all global 3PL providers have been present in the Czech market since early 1990s? Why did emerge so many successful Czech logistic companies now serving costumers from all around the world? In the first place it is the fact that Czech market is situated right next to the German market which is considered to be an engine of Czech economy. Reasonable quality of service together with still lower cost of operations forced number of German manufacturing and trading companies to shift their logistic processes from Germany to the neighboring Czech Republic. It is fair to say, though, that it has not been only lower costs which made German customers move; It is also favorable geographical position of Czech Republic in the middle of the CEE region, enough well qualified labor, needed infrastructure, and perhaps also the fact, that Czech market can be

perceived as a first step on the way to the markets of Russia, Ukraine, Belorussia, etc.

#### **Elementary data illustrating contemporary Czech Logistics:**

- **Total population 10 mln**
- **Total span of highway network 2 400 km, 1<sup>st</sup> class roads 1 900 km**
- **Total span of railroad network over 9,000 km**
- **Total warehousing space available 3 351 700 sqm**
- **Transport and related services contribute 10% to the Czech GDP**
- **Transport employs over 260,000 people (8,2% of all workforce in private sector)**
- **Road transport betw. Germany and CZ raised by 40% since CZ joined EU**
- **Transiting transport accounts for 20% of total volume**
- **Road transport is the star with its 73% of the market; Rail takes 27%**

The industrial market in CZ is experiencing a period of long-term stability. The rents have oscillated between EUR 3.5 and EUR 3.7 per sq.m. over the past two years.

The ratio of available (vacant) stock also ranges at a healthy rate of around 10 per cent. The shift and expansion of manufacturing premises from Western Europe Czech Republic has heavily profited from this phenomenon.

*“Amazon, the Internet retailer, recently decided to place a warehouse in the Czech Republic for the goods returned by German customers. Cheaper labor force and property costs, together with expansion potential of Amazon business into the CEE region, have been so attractive that they can compensate for the costs of transporting the goods from Germany. A stable environment significantly eases long-term planning for firms,”* says Ferdinand Hlobil, Head of the CEE Industrial Team at Cushman & Wakefield.

Companies in CZ have leased more than 470,000 square metres of modern industrial halls over the first six months of 2013. In the same period last year, the figure stood at 250,000 sq.m. There is a positive mood on the market.

#### **Prof. Dragan Ciscic: Croatia**

The Republic of Croatia has a population of 4.284.889 (2011), and a surface area of 56.5 thousand sq. km. with coastline of 5835 km ,comprising 1246 islands. The geographical shape of the Republic of Croatia and its favourable geostrategic and transport position, emphasizes the vital importance of transport infrastructure for national development, and the need to establish efficient inland and sea connections between Central-European and Mediterranean country, and as a bridge connecting Western and Middle Europe with Black Sea area, as well as Eastern Europe and Baltic with Mediterranean. Croatia became independent in 1991, and since that time all its energies have been focused in reconstructing the country. Though still one of the wealthiest of the former Yugoslav republics, Croatia's economy suffered badly

during the 1991-95 war. The country's production during that time fell down and Croatia missed the tendencies of investment in Central and Eastern Europe that followed the fall of the Berlin Wall. Between 2000 and 2007, nevertheless, Croatia's economic wealth began to recuperate slowly with moderate but steady GDP growth between 4% and 6% led by a rebound in tourism and credit-driven consumer spending. Inflation over the same period remained suppressed and the currency, the kuna (HRK), stable. Croatia experienced an abrupt slowdown in the economy in 2008 and has yet to recover. Difficult problems still remain, including a persistently high unemployment rate, imbalanced regional development, and a demanding investment climate.

Croatia has an underdeveloped logistics network, as is true for all South East European region, but is still ranked 42 in World Bank's LPI (logistic performance index), performing at 69,2 % of highest performer. Croatia's strategic location, its entry route for cargo from the far east to the Adriatic and EU, granting key geographical location for logistic operators, should stipulate better performances. One of the main factors increasing LPI is transport infrastructure.

## Transport

Croatia has entered EU on 1<sup>st</sup> July this year and consequently greater movement of goods is expected. In addition from EU accession, Croatia has become a part of the Trans-European transport network (TEN-T) policy. Croatia is part of three corridors: the Mediterranean, the Baltic - Adriatic and the Danube. Croatia is also founder of South East Europe Transport Observatory (SEETO) created to promote cooperation on the development of the main and supplementary infrastructure on the multimodal network between Albania, Bosnia and Herzegovina, Croatia, the former Yugoslav Republic of Macedonia, Montenegro, Serbia and Kosovo. Croatia as only country part of EU TEN-T and SEETO, should act as key bridge between the two.

Croatia has achieved and improved transport sector in a very short time, but government still dictates the transport sector to an disproportionate degree, and public transport expenditures are more than 6% of GDP. There is significant opportunity for further privatization and commercialization of the transport sector in order to reduce total costs to 3% of GDP. Transport demand has changed profoundly since Croatia's independence. The efforts to restructure the economy have downgraded the movement of heavy goods and favored road transport, as it has happened in other transition economies. Furthermore previous governments created ambitious, but evidently unaffordable, motorway program that creating of the from Croatian highways one of the most modern and safest in Europe, because considerable part of motorways has been recently constructed, and further construction is on-going. Additionally, tourism as leading factor in economic, and most tourists come on vacation by cars, contributed to highways becoming indispensable for the sustainable development of Croatia. Consequently, Croatia's existing motorways infrastructure provides extensive capacity for a number of years in the future. In numbers, there are 29 410 km of interurban roads, from which 2058 km of expressways and 1413,1 km of motorways, enabling reaching any part of

Croatia in less than 5 hours. Additionally the existing excellent road infrastructure supported by planned reconstruction of the railway system, is creating significant opportunities for logistics development throughout Croatia, in particular at the port of Rijeka and Zagreb, which will become dominant cargo logistic centers.

The Croatian railway system consists of 2,722,41 km of rails (of which 253,87 km (or 9,3%) is double track). 980,07 km (or 36%) is electrified. The railways need to be modernized because for more than 30 years there has been a significant investment in railway infrastructure. Croatian Government aims to revitalize rail traffic through development and improvements, establishing railways as serious competitor to the motorways, particularly for cargo transport from ports. The government is focussing principally on improving the rail networks link from Rijeka to enable the Port of Rijeka and the neighbouring North Adriatic ports, to be more competitive with the more established ports in northern Europe.

Rijeka's geographical position suggests that it can act as a gateway in to central, central eastern and south eastern Europe. Rijeka is part of the North Adriatic Ports Association (NAPA), which also comprises the Port of Koper, the Port of Trieste and the Port of Venice. The Port of Rijeka is a multi-purpose port facility capable of handling almost any type of cargo. A modern and highly competitive port offers excellent opportunity for high influx of new cargo and new shipping companies willing to use such port as gateway for its cargo. In accordance with the new market-based economic policy, the port operations are now in charge of a large number of concessionaires. As a result of the privatization of port operations, development of port infrastructure and modernization of its road connections with the port hinterland, port of Rijeka is constantly improving its performances and competitive ability thus creating unique business potentials. Total investments in modernization of the port of Rijeka amounts to €190 millions which includes €160 millions from World Bank loan and €30 millions from Croatian National Budget. Investments involve construction of additional 300 metres of coast at the container terminal Brajdica and construction of additional 400 metres of coast and surrounding area for new container terminal on Zagreb pier. The conclusion of extension works on terminal Brajdica is expected by the end of 2013 with the capacity of 450.000 TEU units. Meanwhile, Zagreb pier will be in construction and by that time a total capacity of container traffic is expected to reach 1.000.000 TEU which is five times more than today.

Along the 1,777.7 km long Croatian coast, economic circumstances were favorable to the creation of a significant number of ports and small harbors. Of some 350 ports and small harbours on the coast and islands, seven can take large ocean-going ships, all of them located along the mainland coast. Besides major Croatian port of Rijeka there are other public ports of Pula, Zadar, Sibenik, Split, Ploce and Dubrovnik. The port of Ploce is significant due to its strategic importance for the Bosnia and Herzegovina. The largest Croatian passenger port is Split in Dalmatia, named gateway to the islands, followed by Zadar, and Dubrovnik Port is exceptionally significant for international cruise ships, along with Zadar and Split City Ports.. Based on the Free Zones Act, free zones have been instituted in Rijeka and Ploce



Ports, in Sibenik and in Split Northern Port in order to increase port activity and development. Ploce port is in process of modernization of existing terminal for container transshipment and bulk cargo terminal. Dubrovnik Port will develop a modern passenger terminal for ferries, scheduled passenger and cruise ships. Announced privatization of public ports opens new possibilities for effective port activity and for attracting foreign capital.

Croatian river transport, on rivers Sava, Drava, Danube and future canal Danube – Sava, is an integral part of the European waterways. This also includes the addition of harbors in Osijek, Vukovar, Slavonski Brod and Sisak into the network of harbors opened for international traffic. The Danube is an international river, and also Drava from its mouth to the town of Osijek (23 km). The remaining upstream section of the Drava holds an interstate status, as does the Sava. This wealth of waterways is a respectable basis for the development of river transport. Nevertheless, this potential has not yet been sufficiently exploited.

Croatia is also very well outfitted with airports of various sizes and standards. There are seven airports that can receive wide-body aircraft - Zagreb, Split, Dubrovnik, Zadar, Rijeka, Pula and Osijek that are used in the international air transport and are mostly in the state property (55% of the shares). In addition, there are three smaller airports (Osijek, Brac, Mali Losinj) used by the smaller commercial aircrafts.

## Logistics

The logistics market in Croatia is underdeveloped, as is true for all South and Eastern Europe, but supply in Croatia is significantly below other CEE countries. Primary logistics market is concentrated around capital Zagreb and partly around Rijeka as main port. Zagreb has population of nearly 800.000 ( about one fifth of all Croatian population), and is site of headquarters for 34% of all companies in Croatia. Zagreb involves 38.4% of Croatian workforce, embracing almost all banks, utility companies and public transportation. Companies in Zagreb accounted for 52% of total turnover and 60% of Croatian total income ( 2006 ), 35% of export and 57% of all Croatian imports.. As the capital and the economic centre, Zagreb benefits from the majority of activity in the logistic market. Currently within Zagreb, there is a total supply of 360,000 m<sup>2</sup> of logistics real estate. Demand for modern logistics property is high – especially from retailers and third party logistics operators, but the offer is still below the level of demand. High rents from 72 euros per square meter per year for areas below 5,000 square meters and 75 euros in Zagreb for the bigger ones are uncompetitive, but a number of logistic operators moved their operations from Zagreb to underdeveloped regions of Croatia, trading distance ( 150 – 200 km ) for premium rents. Dynamic market development and increasing number of logistics centres: Globcargo (Zagreb, 2006), Intereuropa (Dugopolje, 2006), Miklavlja and Skrljevo ( Rijeka 2005), Transeuropa (Zagreb, 2005), LIDL ( Jastrebarsko and Perusic 2011) are major trends in logistic services in Croatia.

The effects of joining the EU have not been comprehended in this few months, but on the occasion of the conference " The potential logistics and distribution when

entering the EU," the consulting firm Proago made a research on the subject with more than 420 respondents mainly managers of Croatian companies. The largest number of respondents ( 49%) thought that joining the EU Croatian will increase revenues of logistics companies, but 34 % assumed that revenue will decrease. As many as 17 % of respondents expect the revenues Croatian logistics enterprises will remain the same. As the position of logistic companies, 40% respondents assumed improvement and 41% thought that it will remain the same. 88% of all examinees think that new Eu logistic players in Croatia , and 82% said that logistic capacities in Croatia will increase, with 30 % of Croatian entrepreneurs and business people assumed substantial increase.

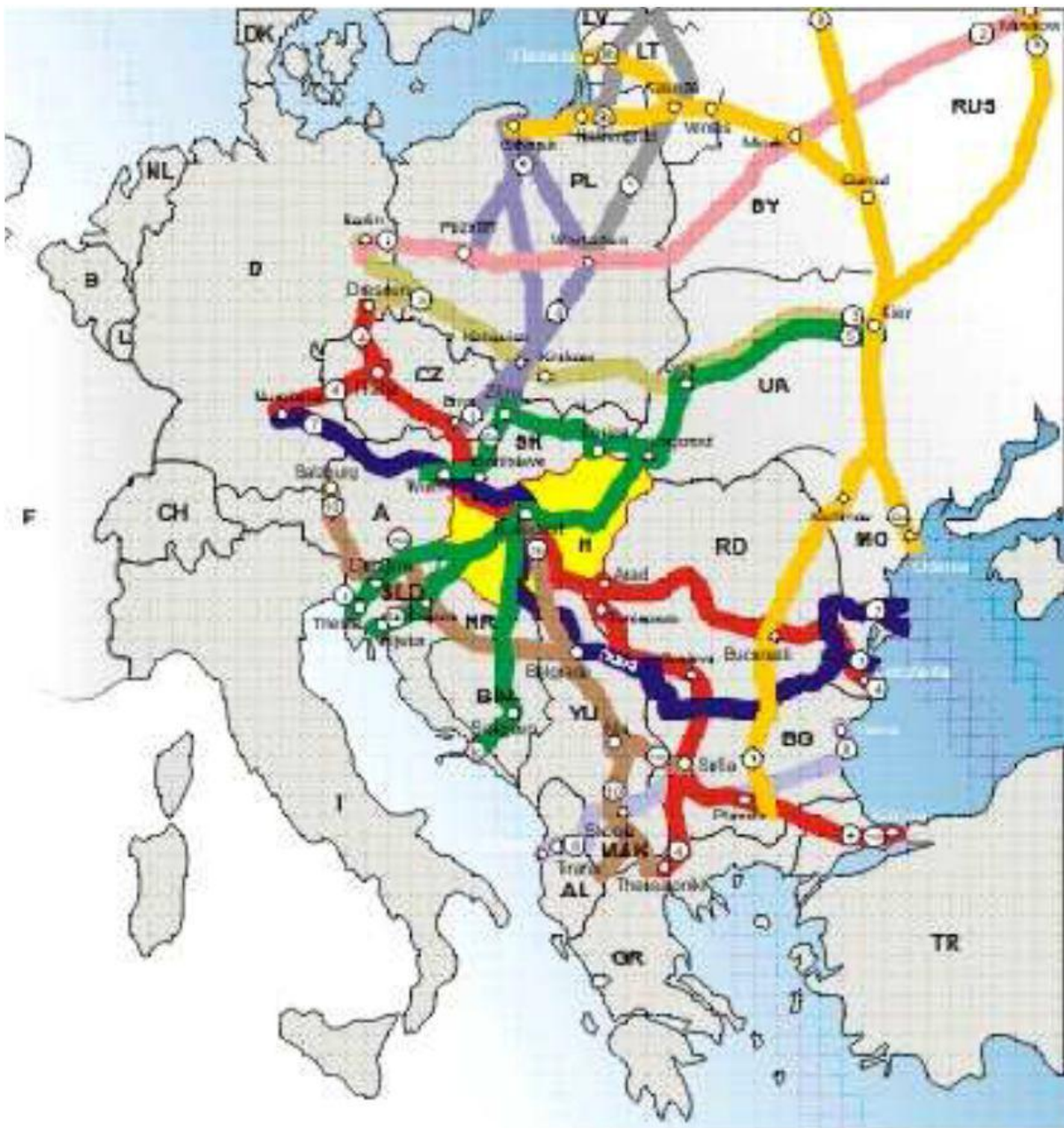


Figure 1. Goods flows and corridors in CEE region



## Helsinki corridors & TEN-T network in Hungary

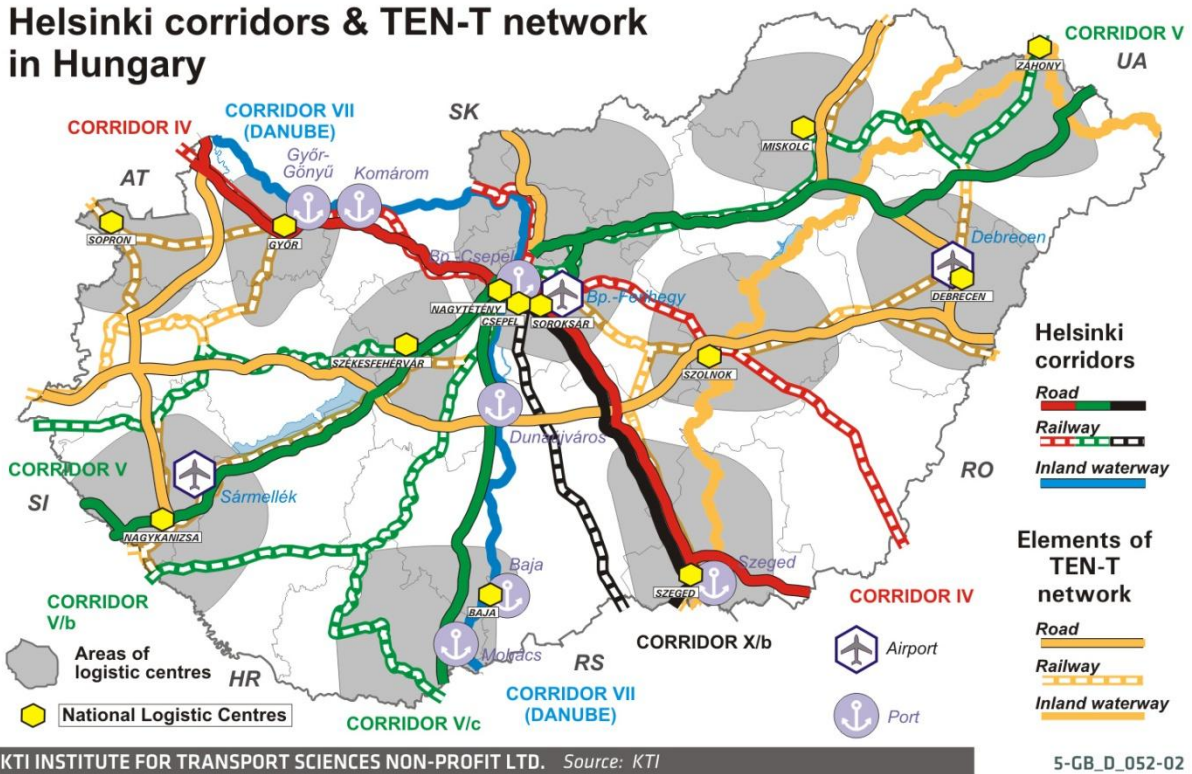


Figure 2. Corridors and logistics centres areas in Hungary

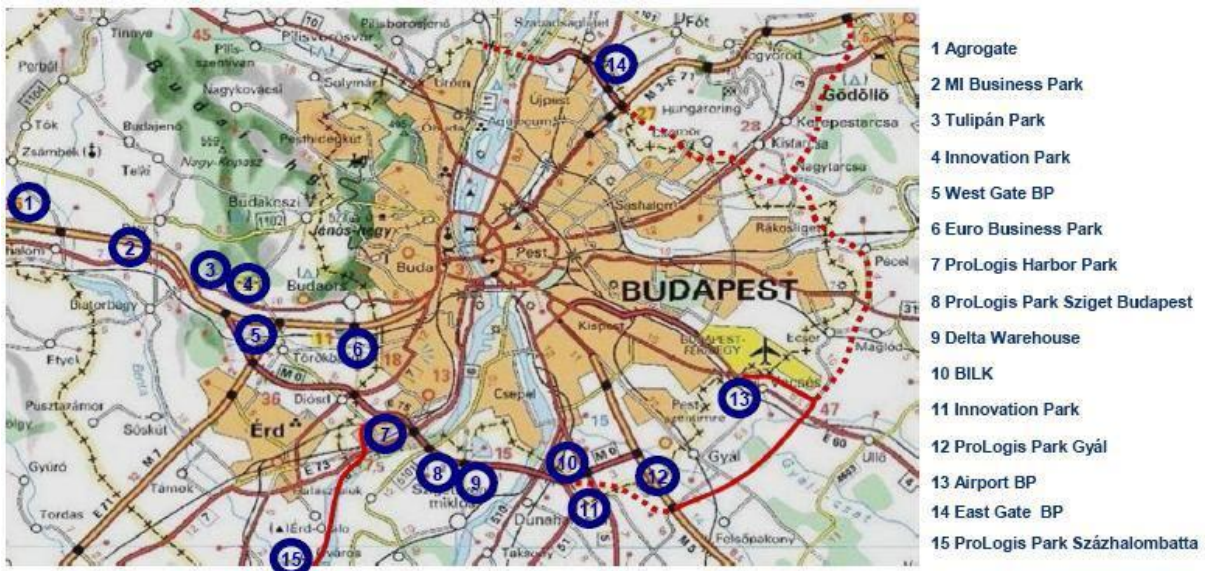
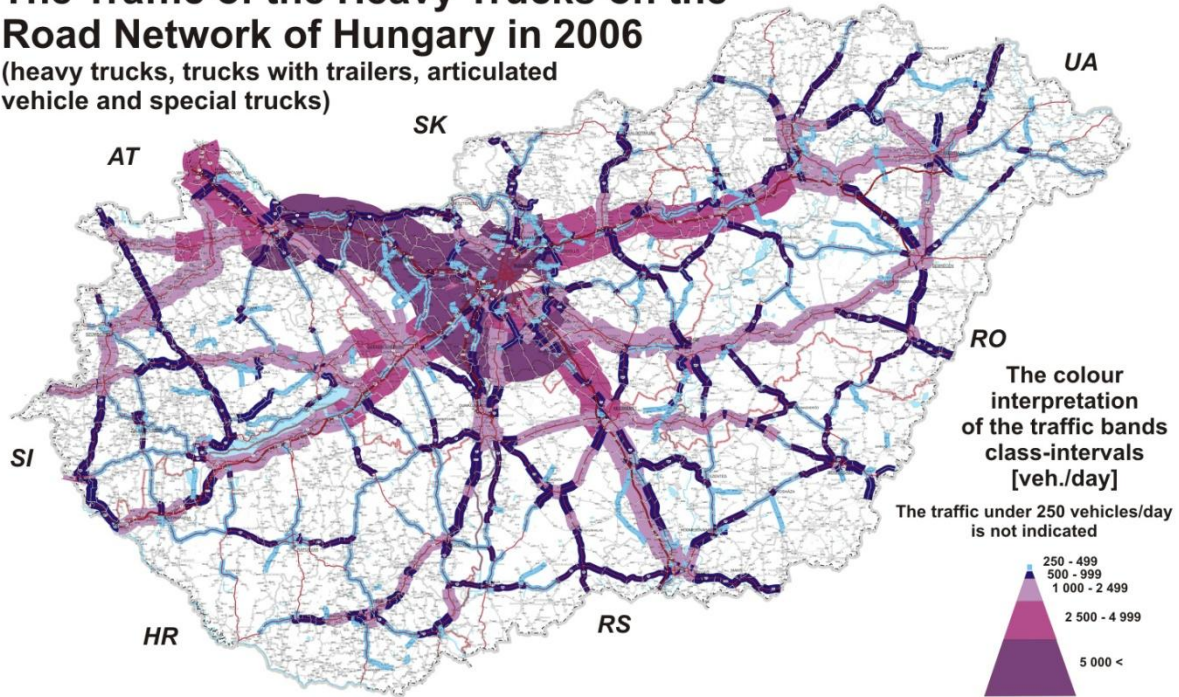


Figure 3. Logistics centres around Budapest. Source: Colliers International

## The Traffic of the Heavy Trucks on the Road Network of Hungary in 2006

(heavy trucks, trucks with trailers, articulated vehicle and special trucks)

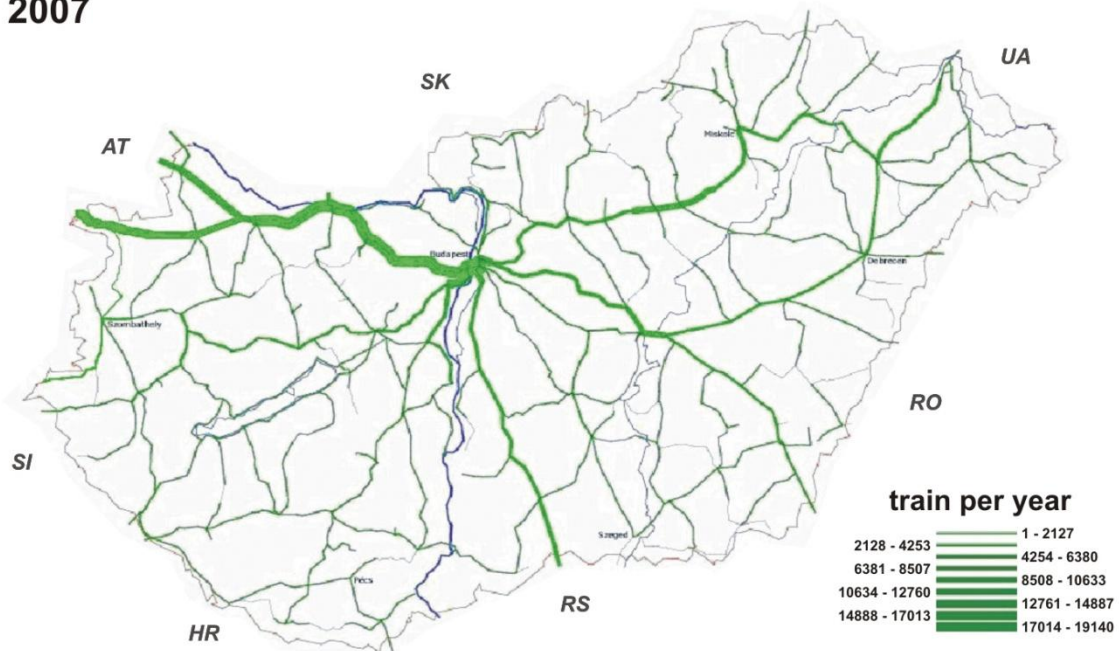


KTI INSTITUTE FOR TRANSPORT SCIENCES NON-PROFIT LTD. Source: Közlekedés Kft. 2009

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Figure 4. Goods flow related to road transport

## Railway Freight Transport in Hungary 2007



KTI INSTITUTE FOR TRANSPORT SCIENCES NON-PROFIT LTD. Source: KHEM

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Figure 5. Goods flows related to rail freight



### Change of Goods Transport Performances by Mode in Hungary (1980-2015)

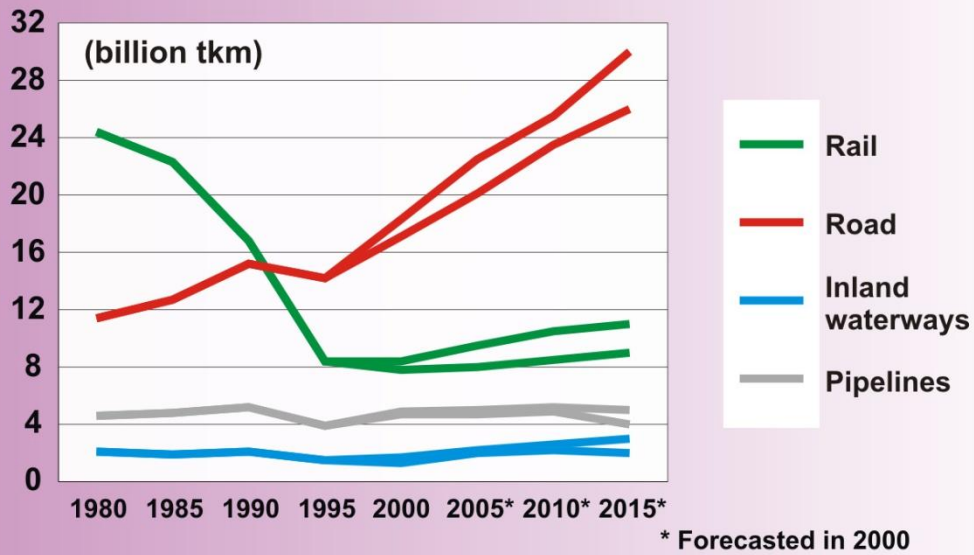


Figure 6. Change of Goods Transport by Mode in Hungary (1980-2015)

## Hungarian Motorway-Expressway Network in 2030 (by OTrT)

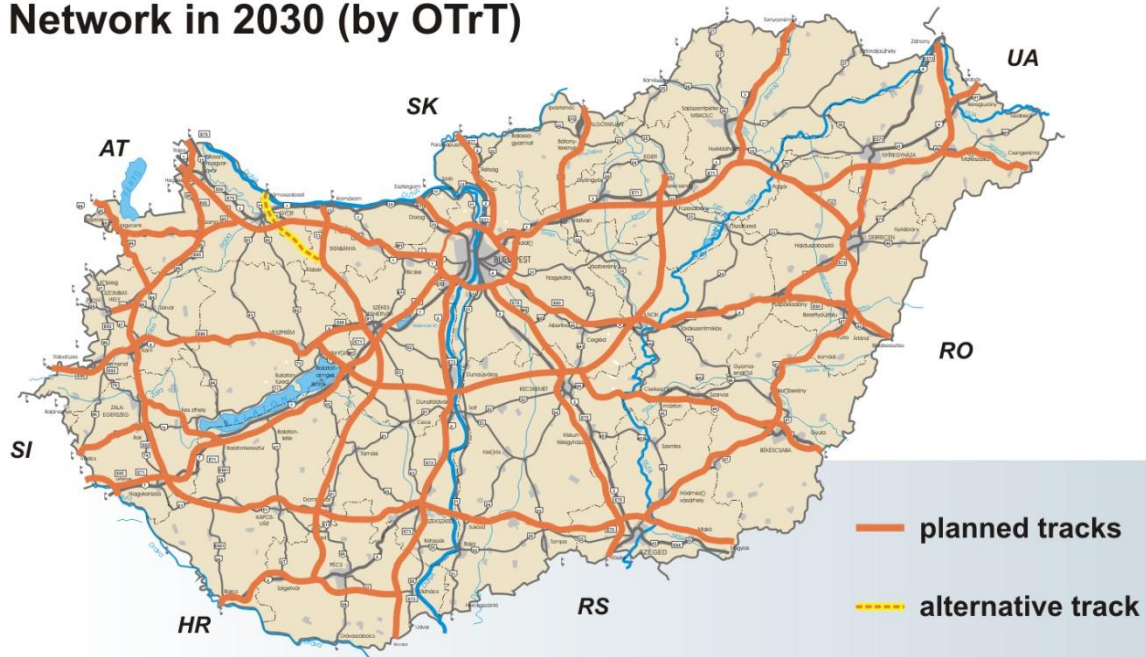


Figure 7. Planned Motorway Network in Hungary