

SCIENTIFIC PAPERS  
OF THE UNIVERSITY OF PARDUBICE  
Series B  
The Jan Perner Transport Faculty  
18 (2012)

**THE DEVELOPMENT AND POSSIBILITIES OF COMBINED  
TRANSPORT IN THE CZECH REPUBLIC IN POLITICAL  
CONSEQUENCES**

Jindřich JEŽEK, Nina KUDLÁČKOVÁ

Katedra dopravního managementu, marketingu a logistiky

**Introduction**

Combined transport pertains to progressive transport systems. This new mode of transport was formed for the purpose of connection of each mode of transport advantages. There were established new self-contained systems thanks to this connection. The target of these systems is to ensure the transport of goods from the place of demand to the place of consumption. Nowadays there is put great emphasis on enlarging of the combined transport. From this reason must be problems of combined transport solved by the Transport Policy and by governmental subventions, which are ways of support used nowadays in the Czech Republic.

**Period 1994 – 2004**

This period is in the combined transport area presented by function of the RoLa system. This system worked with success for almost ten years of regular operation before all on the route Lovosice – Dresden. The end of this line was prognosticated but by two ears later when the leg of motorway D8/A17 was supposed to be completed. But it was the entrance of the Czech Republic into the EU which brought the end of this system.

The RoLa system (which is the abbreviation of German term Rollnede Landstrasse) means the transportation of camions on freight cars on the route Lovosice –

Dresdem (110 km) was started on 25th September 1994. The system worked on the bases of cooperation of two operators – Bohemiakombi a Kombiverkehr.

This route offered alternative solution for those carriers which wanted to duck many hours of waiting on the frontier crossing because of the customs procedure. In concrete it was the frontier crossing called Cínovec – Zinwald. Thanks to this position of the RoLa system offered another advantage in the time of winter gridlocks when the frontier crossing was heavily accessible for the road transport. Most noticeable advantage was obviously the fact that camion which used the RoLa system did not need German entrance concession for the journey across the Germany. These concessions were anyway issued only for limited number of transportations on the basis of reciprocal contracts.

One of the most discussed reasons why this system does not exist in the Czech Republic anymore is that it was very heavy on finances. The RoLa system was heavy not only on cost of purchase but also on maintenance costs. According to operators opinion these high costs had an impacts on high rental to owner of the system (in this case it was company Railion) together with costs on electric traction reservation. So providing of the RoLa system was from the beginning accompanied by high government subsidies. Government subsidies in the Czech Republic came straight from the state budget to the company ČD (majority Czech railway carrier) on the basis of the document called "Proceeding for provision and drawing of non-investment grants from the state budget for combined transport". Government subsidies in the Germany (Bundes Republik Sachsen) were provide by the National Economic Development Office of the Bundes Republik Sachsen to the German operator (above mentioned Kombiverkehr) by the force of retrogressive compensation of month loss of income from the RoLa system providing.

Utilization of capacity of trains was (except the beginning) about 70 – 80 %. Regardless incomes from the providing of the RoLa system met only about 45 % of total costs. From the beginning the RoLa system was provided only by the German side. Total subsidies were oscillated between 307 million Czech Crowns in the 1995, 279 million Czech Crowns in the 1996 and 241 million Czech Crowns in the 2003. Share of the Czech side was about 25 – 35 %. Even though the share of the Czech side had rising tendency the RoLa system was subsidized primarily by the German side. Ordinary subsidy on one train oscillated between 45 and 50 thousands Czech Crowns. In the 1995 reached 57 thousands Czech Crowns which was the top. The trend of subsidies had rather falling tendency with one exception in the 2002. Subsidy on one transported vehicle became unwound from the load ratio. When the period was successful subsidies were lower and to the contrary. After the year 2000 subsidies declined because of reduction of number of trains in the RoLa system however both achieved growth in the 2003.

**Table 1** Transportation process of the RoLa system

Transportation process of the RoLa system on line Lovosice – Dresden between 1994 and 2003					
Year	Total number of transported road vehicles	Index	Total number of trains	Index	Utilization of train unit in %
1994	17 549	0,22	1 474	0,24	51,76
1995	78 103	1	6 011	1	56,49
1996	88 055	1,12	5 808	0,97	65,92
1997	82 479	1,05	5 518	0,92	64,99
1998	93 610	1,19	5 664	0,94	71,86
1999	93 684	1,20	5 618	0,93	72,50
2000	103 430	1,32	5 646	0,94	79,65
2001	84 040	1,08	5 228	0,87	69,94
2002	71 803	0,92	4 522	0,75	69,04
2003	93 026	1,19	5 312	0,88	75,79

Source: SŽDC

In the development index the base accepted number of transportations in the 1995 when the RoLa system worked for the first time for whole year. Data include both directions together. As seen in the table the number of transported vehicles had growing tendency until 2000. Subsequent fall was caused by emission of more dispensations and opening of new frontier crossing Cínovec. The fall in 2002 was caused by summer floods which affected also the frontier crossing Cínovec even though camions were allowed to use frontier crossing St. Sebastian Mountain.

The entrance of the Czech Republic into the European Union brought together (except many contributions) the termination of the RoLa system. Main reasons were: reduction of clearance procedure for the member states respectively possibility of realization of the clearance procedure on inline customs offices for transportations outside the EU and reduction of necessity of entrance permissions. Another reason developed already on 1st of March 2004. Since this date for vehicles with the norm EURO 3 were reciprocally regarded eurolicenses as bilateral permission for reciprocal transit transport. This change influenced negatively the RoLa system immediately after 1st May 2004. In first two weeks of May 2004 about 300 camions were transported. In the same period in 2003 it was 3 100 camions. Meeting of Ministry of Transport of the Czech Republic and the National Economic Development Office of the Bundes Republik Sachsen deputy took place on 18th May 2004. On this meeting deputies agreed on ending of the RoLa system in next three months regardless of reconstruction of the track leg in Germany planned on summer months July and August (destroyed during floods in 2002). They also decided about transportation price cut and number of number of line

reduction. Since 23rd May 2004 the price reduced by 33 EUR from 83 EUR for one-way ticket. The price of return ticket was reduced from 145 EUR to EUR. The number of trains was reduced on four pairs a day and one to two pairs during weekend. On 19th June 2004 was by the force of morning train Nex 41356 ride transportation of camions on this line ended.

Possibility of formation of new line for accompanied transport on Czech railway in the future is almost unreal. Each step which would make camions to be loaded on railway as for example the tollgate system or camion weighing are in the Czech Republic insufficient and not only in the Czech Republic because this is problem of almost each country in the EU. In common we can say that the RoLa system is the least effective form of railway combined transport because of the share of the camion on the whole weight of the railway set. So the way to use railway in the combined transport is to use some non-accompanied modes of transport. It will be also heavy on financial support but still more perspective than to invest into the RoLa system lines. What we must mention here is that the RoLa system would sole problems with road maintenance costs, accident frequency reduction disorder of road operation reduction, increase of the travel speed of other vehicles and increase of motorway permeability which would cause savings of investment into the third traffic lane construction.

One of other forms of support of combined transport in the Czech Republic is the tax abatement in the case of road tax for vehicles used for the combined transport as defined in the rule no. 16/1993 Sb., § no. 12 or published exception makes possible weekend rides for these vehicles according to the § no. 43 of the law no. 361/2000 Sb., about the operation on road communications. Unfortunately we cannot say that above mentioned forms of support caused transition from the road transport to railway transport.

There were financial means set aside in the state budget for the RoLa system (in concrete it was about 693 million Czech Crowns) during the whole existence of this system. Most of these finances spend on purchase of 500 container wagons series Sgnss for the ČD company during the period 1996-2002. Table no. 2 exactly shows when and how many of these finances were transfer from the state budget and for what.

Most of them used the ČD company on purchase of Sgnss wagons. Next part of these finances were used for purchase of exchange extensions in concrete those were roll containers ACTS. These containers used only the company OKD, Transportation.

**Table 2** Direct investment promotion from the state budget in each year

Direct investment promotion from the state budget in each year		
Year	Finance (in millions of the Czech Crowns)	For what
1996	63,00	-purchase of the Sgnss wagons - emendation of vessels for container transportation
1997	115,00	- purchase of the Sgnss wagons
1998	117,96	- purchase of the Sgnss wagons - purchase of exchange extensions - purchase of transfer mechanisms
1999	52,83	- purchase of the Sgnss wagons - purchase of exchange extensions - purchase of transfer mechanisms - purchase of road carriers VN
2000	244,42	- purchase of the Sgnss wagons - purchase of transfer mechanisms - purchase of information systems
2001	0,00	-
2002	100,00	- purchase of the Sgnss wagons
2003	0,00	-
2004	0,00	-

Source: Ministry of Transport

Exchange extensions (type C 785) were also bought with state subsidies but never really used. These were used by new owners as for example the JTC Transcentrum Jičín was (nowadays is not in the possession of ČD Cargo a.s. anymore) in the road transport.

Finally it is important to mention when we talk about this period that railway do not (and even must not) see road transport as enemy but as partner. It is necessary to reduce the load of roads to increase the speed and safety on these routes for buses and automobiles. The sense is not in the motto "Trains go – cars no!" but "Trains go to let cars go so!". That's the sense of Transport Policy.

### **After the entrance into the EU**

The enlargement of the EU brought together better conditions for the road transport as for example the 15 – 20 % depreciation was. Time spent on state boundary drawn in considerably (from several hours to several minutes) and interstate road transport became quicker, more reliable and so more productive. More transportation can be realized in the same time with the same personal which leads to costs reduction and other economical advantages.

But on the other side the entrance into the EU influenced the combined transport (in combination railway-road) very significantly in concrete it was more than 30 % reduction of volume because the combined transport was realized namely by the RoLa

system. Above mentioned reduction looks hazardously but from the whole transport capacity point of view it drawn only 1 % which is the share of combined transport on the whole transport capacity in the Czech Republic. Moreover we can see such impact also in other member states. The combined transport is in EU solved more theoretically in the Transport Policy than in praxis.

After the end of RoLa system it was very important to secure accurate, reliable, safety and quick transport. Self-contained trains may be the solution of this problem because these can go between concentrated source areas and target destinations. This condition is fulfilled for example in harbours where road transport is not needed on one end of the transportation chain. The problem here is that in the frame of continental transportations combined transport hardly asserted (firstly in the Czech Republic). In 2005 no such line had source or target here and continental transportation by the force of self-contained trains was realized only in transit transportations between Poland and Italy and between Petrovice u Karviné and Břeclav.

Therefore European Union started to support regular trains for continental transport by the force of “public logistic centres” and public place of reloading for combined transport. These centres enable compounding and separation of consignments and work on neutral principle which is very important because it enable the entrance to each interested person.

The Czech Republic missed legislative support in this area which would enable to use public sources and interest from the side of state administration organs. Without this support for reloading areas for combined transport with undiscriminating approach and acceptable price of given services the combined continental transport could not exist. For example in Germany was the price for reloading of one container 17 € in the Czech Republic it was between 22 and 30 €.

But there appeared also some new possibilities to be utilized. One of them was above mentioned support from the side of EU by the force of EU funds. In the case of combined transport it was the Operational Program Infrastructure measure 2.2 in short program period 2004 - 2006. This program enabled to draw support from both state budget and European Regional Development Fund. But it is necessary to mention that finances from ERDF were possible to use only in NUTS II regions with GDP over 75% of European average. In the Czech Republic it was possible everywhere except Prague. But it is just Prague with the potential and placement of some reloading areas what complicates the whole situation.

In the October 2005 the Ministry of Transport presented material “Conception of support of combined transport in the period 2006 – 2010“. Main target of this conception was to develop the combined transport and meet the target moving freight transport from road to railway and other modes of transport. Support was supposed to head on construction, development, enlargement and modernization of reloading areas for combined transport and support of new arising lines which should have lead to competitiveness in the combined transport market. Total support was supposed to be

about 1, 50 milliards Czech Crowns and for the 2006 it was in concrete 181, 627 million Czech Crowns. But 154, 227 million from it was on supplementary financing for the support from EU funds. The problem was that there was not enough time to submit applications from notification of the program from the EU side in 2006. Therefore the Czech Republic has drawn only 647, 2 thousand Czech Crowns from possible 181, 627 million Czech Crowns. This support was directed to two new lines opening. Majority (600 000 Czech Crowns) took company Bohemiakombi for the line Lovosice – Hamburg. Rest of the support took company ARGO Bohemia for the project EAST Line (self-contained trains between the Czech Republic and Russia).

Objectively said there wasn't problem only on the side of European Commission and late approval of the program because drawing from Operational Program Infrastructure was not better because of late project submission. Demandingness of conditions was also problem because for example in the case of support from ERDF it means to create prefeasibility study, feasibility study, CB analysis cash-flow of investment for the whole lifetime, environmental study, waste economy study, reverse logistics study, etc. Another problem was also exclusion of Prague from this program and also the condition of utilization of the support for public publicly accessible facility.

All these problems and small number of submitted applications caused that Ministry of Transport decided to decrease the support on the national level (only 30, 274 million Czech Crowns for the 2007). According to opinion of Ministry of Transport this support was targeted only on support of present projects in the frames of OPI with term of submission in 2006. From 15 submitted applications asking for this support two were accepted, one on container reloading area in Lovosice enlargement and one on repurchase of older portal crane from bankruptcy assets port in Ústí nad Labem. Totally it made 22 million Czech Crowns from the whole possible support.

The 2008 also was not good from the subsidy point of view. Level of support of combined transport in this year was quantified on 0 Czech Crowns. So in this year only continued support for the project container reloading area in Lovosice enlargement. There were no other support programs announced because the Czech Republic did not provide money for it.

Hereby we get into the present when the Operational Program Transport run. For the period 2007 – 2013 we have the use of 5,8 billion EUR. Recipients of this financial support were before all SŽDC, ŘSD and ŘVC. For combined transport there is the Priority axis No. 6 – Support of multimodal freight transport and development of inland water transport. This priority axis has three areas of support:

**Area of support of multimodal transport, purchase of multimodal transport vehicles and multimodal transportation units and modernization of transshipment points**

Project of the company METRANS a.s. focused on revitalization of railway sidings belongs to this area of support. This company gained subsidy in the total amount 59 649 947 Czech Crowns (total costs were 258 713 259 Czech Crowns). This company already

provides transshipment point in Praha-Uhřetěves, Želechovice a Nýřany. These transshipment points do not meet requirements on capacity as a consequence of increase of combined transport. The target of this project is construction of new large capacity railway siding with modern reloading mechanisms. Realization of this project should lead to increase of share of railway transport and decrease of share of road transport on whole freight transportation.

Other supported projects are Extension of combined transport terminal in Mělník, Container reloader for company ODK Doprava a.s. and Extension of railway siding in the company Lovochemie a.s. These projects ended in 2012.

### **Area Support and modernization of inland waterways inside and outside the TEN-T**

There are many approved projects in this area. For example we can mention project Completion of Vltava waterway in the section VD Hněvkovice – Týn nad Vltavou.

#### **Area Support of modernization of water draft**

All projects were already finished in this area. It was for example Modernization of the water craft ATHNA or modernization of water craft TC 1068 in order to increase of multimodality.

### **Conclusion**

There are some conclusions following from above mentioned. The support in the combined transport area in the Czech Republic was afforded rather randomly depending on sufficient amount of finance sources. There were no analyses realized in this area which would account for the form and number of support. Some models common in the west Europe were taken over but only particularly. It would be really convenient to pursue to the combined transport area and find suitable form and number of support to use limited finances the most purposeful way.

*This article was created with support of following projects. CZ.1.07/2.3.00/20.0226 „DOPSIT“ and CZ.1.07/2.4.00/17.0107 „POSTA“ solved at DFJP and FEI University of Pardubice.*

*Předloženo: 3. 6. 2013*

### **Literatura**

1. Ministerstvo dopravy [online]. © 2006 [cit. 2012-09-15]. Dostupné z: [http://www.mdcr.cz/cs/Drazni\\_doprava/Kombinovana\\_doprava/Kombinovana\\_doprava.htm](http://www.mdcr.cz/cs/Drazni_doprava/Kombinovana_doprava/Kombinovana_doprava.htm)
2. Správa železniční dopravní cesty [online]. © 2009 - 2012 [cit. 2013-01-20]. Dostupné z: <http://www.szdc.cz/o-nas/zeleznice-cr.html>
3. Ministerstvo pro místní rozvoj [online]. [cit. 2013-01-18]. Dostupné z: <http://www.strukturalni-fondy.cz/cs/Fondy-EU/Programy-2004-2006/Operacni-programy/OP-INFRASTRUKTURA>.