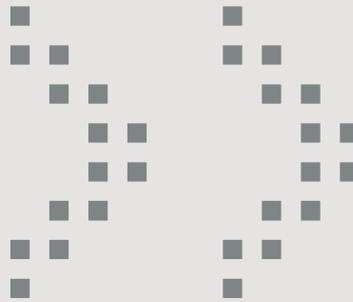


# COMBINED TRANSPORT DRIVES FREIGHT EAST

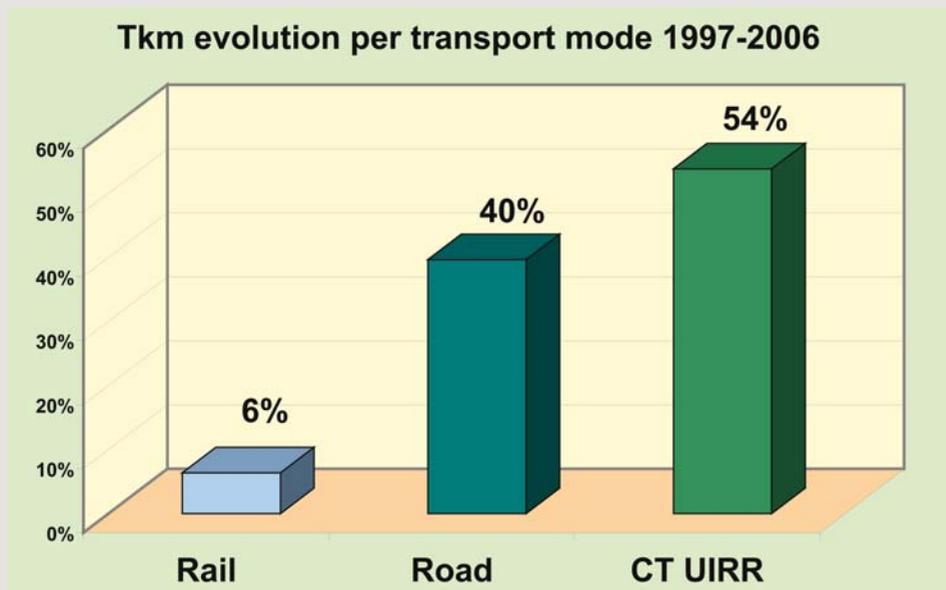
COMBINED TRANSPORT (CT) IS THE MOST DYNAMIC MARKET IN FREIGHT TRAFFIC. ITS GROWTH RATE GREATLY EXCEEDS THAT OF RAIL FREIGHT IN GENERAL AND IS EVEN CONSIDERABLY GREATER THAN THE INCREASE IN ROAD FREIGHT.

FOR THE FRENCH AND GERMAN RAILWAY UNDERTAKINGS SNCF AND DB, ONE QUARTER OF THEIR FREIGHT TRAFFIC IS REALISED BY MEANS OF CT, WHILE FOR THE ITALIAN, THE FS, CT ACCOUNTS FOR 40% OF ITS FREIGHT VOLUME. WHERE DISTANCES EXCEED 300KM, CT INVOLVING THE ALPS CROSSING, COMES OUT AHEAD, REPRESENTING BETWEEN 10 AND 30% OF TOTAL RAIL FREIGHT. THE INCREASING AMOUNT OF ROAD FREIGHT INDICATES THAT THERE IS SUFFICIENT POTENTIAL AND AN URGENT NEED TO PURSUE THE WELCOME DEVELOPMENT IN CT EVEN MORE VIGOROUSLY.



**C**ombined Transport involves two approaches, each intended for, and adapted, to a different market:

- Unaccompanied transport using loading units (containers, swap-bodies and semi-trailers).
- Accompanied transport, also called rolling motorway (RoMo), where the entire heavy goods vehicle (HGV) travels on special wagons, like on a ferry, and the driver accompanies the load by resting in a passenger coach.



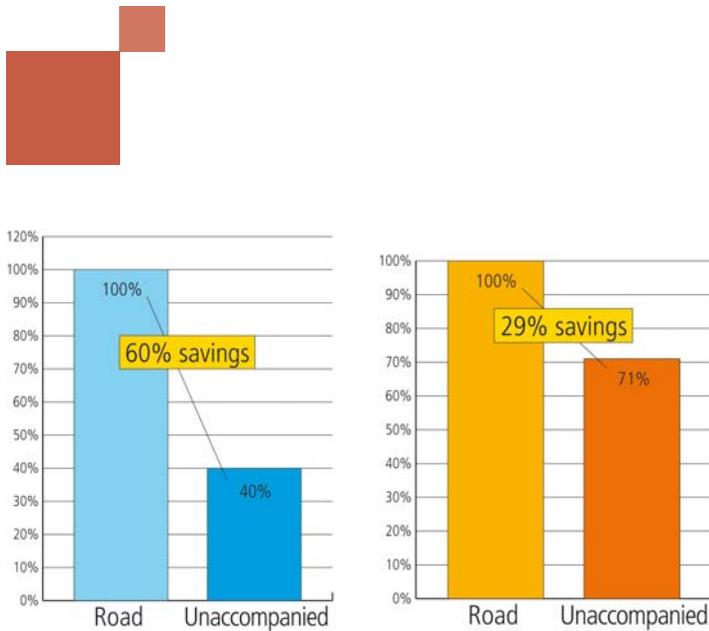


Fig. 1. Savings through Unaccompanied Traffic: energy (left) and CO<sub>2</sub> emissions (right)

The advantages of CT are well known: it is safe and more environmentally friendly. Compared to road transport, the most commonly used form of combined transport – the CT with intermodal loading units (ILUs) – reduces energy consumption by some 30% and CO<sub>2</sub> emissions by 60% (see Fig. 1). CT is organised by operators, with 20 of the leading players having gradually joined the International Union of Road-Rail transport companies (UIRR). In 2007, they succeeded in transferring some 3 million long-distance truckloads or the equivalent of 11.500 truckloads per transport day, for which around 500 CT trains were put daily into service.

The UIRR companies have a liaison office in Brussels to advise European authorities and support members' activities; under its coordination, working groups exchange experiences and aim at simplifying or rationalising CT through shared wagon development, data exchange, common transport conditions, etc.

**Market development in Central and Eastern Europe**

The opening up of the East by the European Union (EU) to 10 new Member States on May 1,

2004 and a further 2 on January 1, 2007 was certainly one of the most significant events in European history: it marked the end of a divided West/Central Europe, a process that had begun with the fall of the Iron Curtain and the Berlin Wall some 15 years earlier. While economic integration already made progress during the aforementioned period, the eastward enlargement of the EU introduced a hurdle for CT because it meant an almost immediate liberalisation of road transport, whereas technical and organisational barriers still prevailed in rail transport and were being only gradually dismantled. While an eastern European HGV and its relatively low-paid driver can move international freight directly throughout the entire EU, the operational and the technical organisations both change at the border when it comes to rail transport. The wagons are transferred to a neighbouring railway undertaking, with its own locomotive and engine drivers working under a different (higher) social regime compared to road. This may occur two or three times before the wagon reaches its destination. However, fair competition between transport operators is only possible if

similar to road a locomotive, which is registered in a given Member State, may circulate throughout the European rail infrastructure together with the same driver and his normal company salary.

Although UIRR welcomed it, the EU's opening up to the East was at first an enormous setback for CT and affected some UIRR companies more than others. It led these to work on a structural change in their transport systems with the support of both the EU Commission and some of the Member States particularly suffering from increased HGV transit traffic.

Before the EU enlargement, Central and Eastern European UIRR member companies used mainly rolling motorways for their rail business. The proportion of this RoMo traffic, which amounted around 20% for the EU-15, represented 84% of the combined traffic in the East. In that part of Europe, very little freight involved loading units (mainly sea containers), while typical road units such as swap-bodies and semi-trailers that could be lifted by cranes were even totally absent (see Fig. 2).

The reason was that Eastern European road transport operators not only had no intermodal

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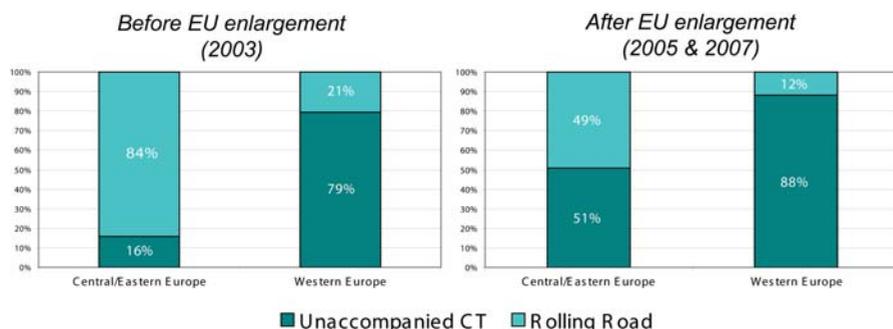
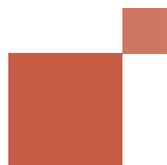



Fig. 2. Proportion of CT techniques: from Rolling Motorway to unaccompanied traffic

loading units (ILUs) and were keen on safeguarding their employment, but were also not interested because of their wage structures, in switching to the more expensive railways. The main motive for using rolling motorways before EU expansion was a lack of bi- and multilateral road transport licences. Anyone wanting to drive to the EU was therefore directed in part to the trains on the rolling motorway. This “flank protection” for CT has now disappeared for all companies of the new EU Member States and led to the collapse of the eastern rolling motorways.

However, the UIRR companies and participating rail networks have reacted. While various RoMo routes have had to be abandoned altogether, others have been developed further eastwards because potential customers include road transport companies located outside the now enlarged EU – from the Ukraine, the Balkans, Turkey, etc – who are interested in the rolling motorway because of tighter road transport licences.

The leading CT operator – the Austrian company Ökombi, with road transport operators and logistics companies making up the majority of its shareholders, as it is the case with many other UIRR companies – was taken over completely in 2005 by RCA (Rail Cargo Austria) and moved from a polyvalent activity into devoting itself just to develop RoMo traffic. Its former intermodal loading unit activities are carried out by another rail subsidiary, ICA. In Hungary, a new operator – Hungarian Intermodal – was founded with the participa-

tion of railways and UIRR companies to develop exclusively transport with intermodal loading units, while the existing Hungarokombi, founded in the late 1980s, also had to withdraw from this activity and concentrate on promoting rolling motorway transport. Hungarokombi and Ökombi were able to convince the Hungarian Authorities to follow the Austrian example, by granting them a transition period for the rolling motorway until its competitive situation improved businesswise and through the introduction of road tolls, increasing diesel prices and a gradual alignment of wages. The UIRR office was also able to assist in their successfully applying for EU funds under the Marco Polo programme II, and these will allow Ökombi and Hungarokombi, in the framework of their “RoMoNet” project, to set up new rolling motorways that are also attractive for companies from the new EU states.

The Czech Bohemiakombi had to stop business on the Dresden-Lovosice route with its 12 RoMo trains per day and in each direction, after the German State of Saxony and the Czech Republic halted the subsidies that had been granted from the start but only until the opening of the new motorway on the same route.

### Gateway Slovenia

With the help of the UIRR office and some of its partners, the Slovenian Adria Kombi has restructured its business and switched over to unaccompanied transport with loading units. Its basic problem had been that CT consignments using ILUs were previously transported in the so-called sin-

gle wagonload traffic. But this is relatively time-consuming because the wagons are consolidated in single trains for different relations and have to be exchanged en route with other ones. Direct trains, on the contrary, moving between two combined terminals are the fastest and potentially the least expensive solution, but require a high amount of business. If this cannot be achieved quickly and the trains are not loaded at least three-quarters full, high operating losses arise.

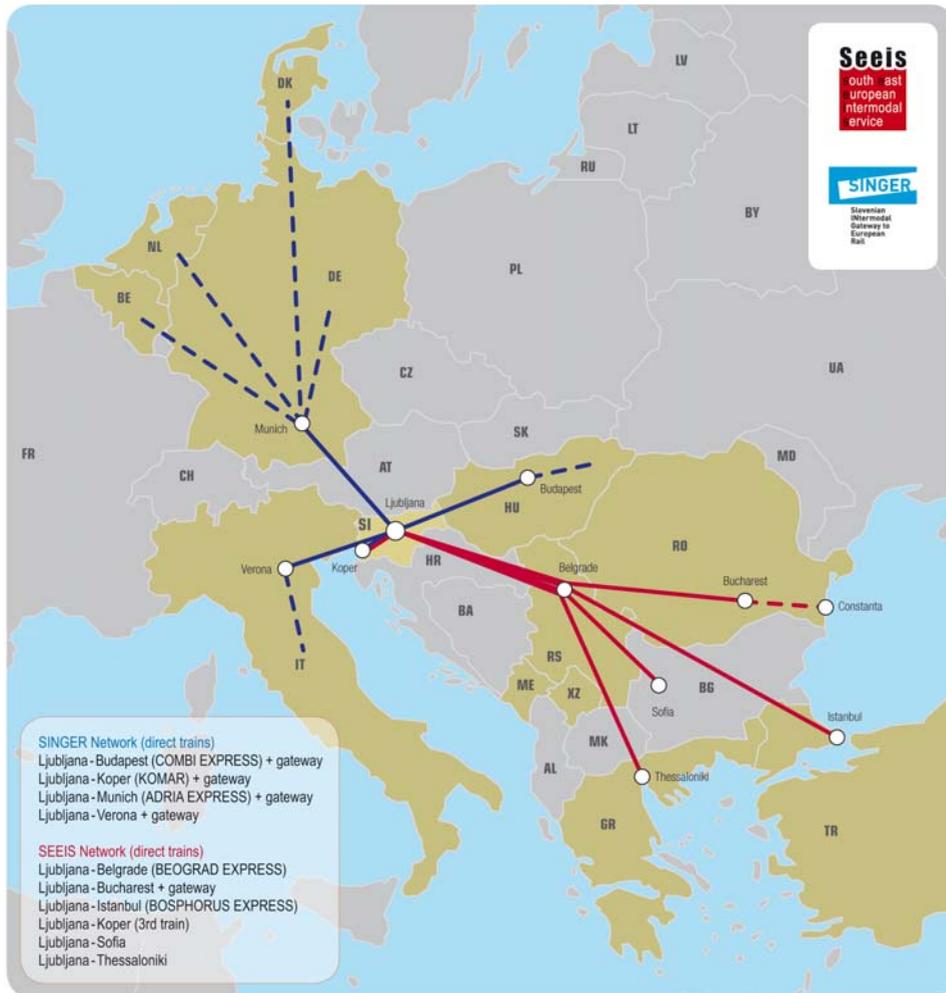
This is a situation where the assistance of the European Commission’s Marco Polo programme is extremely welcome and can be used to help covering such initial losses.

The SINGER (Slovenian INtermodal Gateway to European Rail) project has seen Adria Kombi (SI), its partners Cemat (IT), Hungaria Intermodal (HU), Kombiverkehr (DE) and the Slovenian railways, plus the assistance of the UIRR, devise a two-stage production concept that was implemented between 2005 and autumn 2007 (see map, p. 240):

- Introduction of a gateway system based on four direct trains linking Ljubljana to Munich, Verona, Budapest and the Slovenian port of Koper.
- Use of this gateway concept to transfer the loading units by crane to other complete trains with connections to the national German combined network (KombiNetz 2000+), Zagreb, Belgrade and central Italy.

In two years, the partners succeeded in transferring 342 million tonnes/km from road to rail. Thus by using intermodal loading units, Adria Kombi was able to increase its international business by 71% in 2007, to 38,000 consignments or 76,000 TEU, compared to the previous year.

In the meantime, these partners have initiated the next project – SEEIS (South East European Intermodal Services) – with the involvement of UIRR company Rocombi (RO). This project plans the shift of a further 540 million tonnes/km to five rail routes: to and from Bulgaria, Romania, Greece, Serbia and to Turkey. At the same time, the partners will expand their EDP systems and include information on these trains in the existing CESAR information system. Eight European CT operators are involved in this system enabling customers, i.e. road transporters >> go to page 240



Customers also need to invest in replacing normal HGVs with vehicles suitable for transporting loading units, and purchase the loading units themselves. But they will only do so if CT operators and railways can make offers that are satisfactory over the long term when it comes to prices and services.

CT means partnership between otherwise competing road and rail transporters. This can only function if lawmakers create stable framework conditions, because the general public has an interest in seeing transport shifted to rail. These beneficial conditions could include: finance, such as assistance in investments in terminals; the removal of bottlenecks in rail networks; business grants; exempting HGVs to and from terminals from the ban on Sundays and weekend road use, plus much more.

The UIRR and its partner companies are committed to forming close relationships with rail and transport Ministries in order to further develop CT as a competitive alternative to pure road transport ■

For more information visit [www.uirr.com](http://www.uirr.com)

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**UIRR**

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<< p. 236 and logistics companies, to receive status messages on all their loading units via a single internet address ([www.cesar-online.com](http://www.cesar-online.com)), regardless of the participating operator they use or the railway transporting them. It is important for customers to have details on irregularities so that in the case of an event, for example if trains are delayed, they have the possibility to reroute their road vehicles to avoid unnecessary waiting times, when they are heading to a CT terminal in order to drop or pick up loading units. The partners will also further improve the security provisions at terminals to prevent theft or terrorist attacks (both of which have been quite rare to date). Security is already an important trump card for CT compared to road transport, so this should be a further incentive to transfer dangerous and valuable goods to rail.

**Summary**

The development of unaccompanied CT using standard containers, swap-bodies, semi-trailers, which accounts for 87% of UIRR business, is difficult in the new member states. Fast and economical CT services can generally only be offered in the context of complete trainloads, but they do involve a considerable full capacity risk for operators. They also require adequate investment. Operators and railways need to provide suitable CT wagons. To the extent that they exist at all, terminals are usually equipped for transferring standard containers. They need to be provided with grapplers so they can transfer swap-bodies and semi-trailers as well. The lifting capacity is often inadequate, so new gantry cranes or mobile transfer equipment must be purchased.

[1]one UIRR consignment equals the capacity of one lorry on the road, i.e. a semi-trailer about 13m long or two swap-bodies or standard containers 6 to 8m long.