# The success of rolling motorways consists in higher costs for road transport

[ by Pamela Luică ]

*As part of the international freight transport, a rolling motorway is the most convenient service when it comes to reduce costs and travel time, as an alternative to long-distance road transport.*

In Europe, the rolling motorway service is considered the transport of the future because it implies the organisation of a "door-to-door" transport, it is environmentally and infrastructure friendly (a 40 tonne truck has the impact of 90,000 – 100,000 automotive vehicles) and it reduced deadlocks, especially at border crossings, which is one of its most important advantages.

Choosing the transport mode for carrying heavy vehicles is influenced by many factors: costs, time of departure, frequency, punctuality, risk of loss, flexibility, management organisation and costs, as well as by a series of social, political and legislative factors.

Why a rolling motorway service? First of all, this transport mode provides the right technical and organisational choice for international transport based on partnerships and cooperation, without technical or management-related preparation. Using the rolling motorway service is easier for road transport companies: each train and truck with official departure leave is shipped without any technical changes. Thus, they eliminate the necessity of many other transport leaves and road tolls which significantly cuts costs.

According to a study ("The choice between road transport and rolling motorway") carried out based on the information provided by 33 drivers and 9 transport companies, costs, travel time and the day of the week are the three most important factors. Thus, taking into account prices and regulations, the rolling motorway service carried out in weekdays has not a major potential of demand as there is more demand in weekdays. A major demand for this type of service appears when road costs (fuel, tolls) increase significantly. For example, a toll equivalent for the passing of a truck through the Alps inclines the balance in favour of the rolling motorway in Switzerland and Austria. In the case of the rolling motorway service, the travel time is easier to estimate and known by user, but it depends, however, on different aspects (speed, load, type of rails, locomotive), time departure factors and bottlenecks. According to the UIRR, the speed average is 45 km/h (2009) with a 70% punctuality, while for road transport, the travel time varies a lot depending on traffic congestions, accidents etc. For example, for the Trieste Fernetti-Chop relation it is estimated that the rolling motorway would take 22 hours including loading and unloading, while, according to truck drivers, it takes on average 26 hours by road.

Restrictions play a crucial role in determining the relative advantages\disadvantages.

**External diseconomies of road transport**

| costs EUR/1000 tkm | road | rail |
|---|---|---|
| accidents | 5,44 | 1,46 |
| noise | 2,138 | 3,45 |
| emissions | 7,85 | 3,8 |
| adverse effect on climate | 0,79 | 0,5 |
| infrastructure | 2,45 | 2,9 |
| traffic jams | 5,45 | 0,235 |
| total | 24,12 | 12,35 |

*Source:* **fh bfi Vienna**

The rolling motorway has a clear advantage when it can run when the road cannot: on festivities, at night and in weekends. Restrictions vary depending on country. Furthermore, the railway journey of the trucks can be legally recognized as resting time for their drivers which means they may resume their road journey immediately after the arrival of the train.

The rolling motorway service is energy-efficient, reduces costs and travel times, as well as the activity of polluting means of transport and sustains eco-friendly transport. However, the rolling motorway service proved successful in a limited number of cases so far. ■