

## **Deregulation in the transport sector; the case of the railways**

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### *Introduction*

The Dutch transport sector has been subject to a drastic process of deregulation during the past decades. Traditionally, the public sector was strongly involved in almost all segments of the transport sector; nowadays, this is much less the case. Examples of sectors where public sector intervention decreased are: aviation, inland navigation, road freight transport, taxi services, urban and regional public transport, and the rail sector. In some cases the deregulation had clear benefits for the consumer, such as in aviation where frequencies rose and fares fell. For other sectors such as the taxi sector the results are less clear, however. In the present contribution we focus on the railway sector.

### *Liberalization measures.*

Since 1989 the EU gave the start of liberalisation of rail transport. The policy of the EU to introduce competition has four elements:

One via a separation of infrastructure from operations. Second, the progressive opening up of entry to the market for new operators. Thirdly, by rules regarding the allocation of slots and fourth, the pricing of infrastructure use, administered by an independent regulator.

The Dutch government has implemented these policy directions for the Netherlands. Based on the advice of the Wijffels Committee (1992), the government decided to liberalise the Netherlands Railways (NS) as from 1995. This liberalisation was accompanied not only by a separation between infrastructure and operations, but also by a separation of functions within the NS: the operations of passenger transport (NS Reizigers), the operations of goods transport (now Railion), as well as infrastructure management and capacity management (both ProRail). On both the passenger and the freight segment of the market barriers to entry were reduced in order to stimulate competition.

NS Reizigers was expected to behave like a “normal” firm; an introduction at the stock market was not out of the question. Because of the possibility of competition the societal objective had to be changed in a business objective. As a consequence one might expect departures from marginal cost pricing towards higher fares leading to smaller number of passengers.

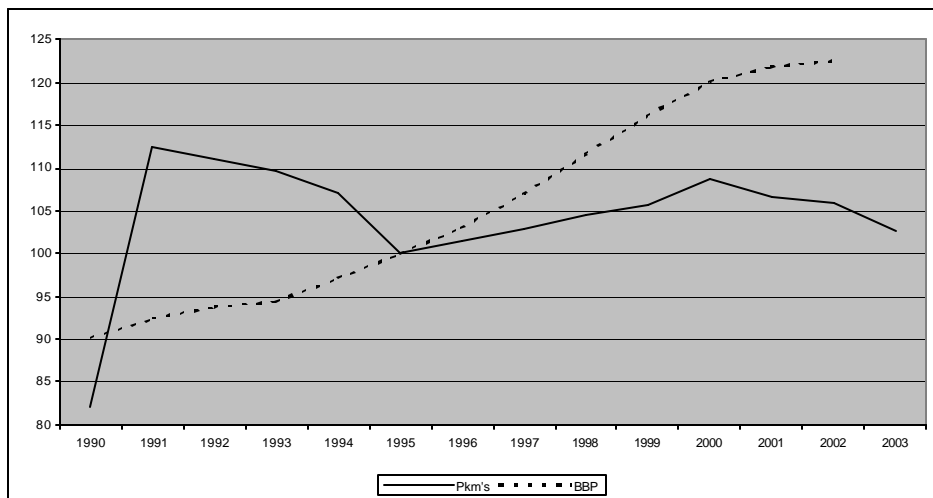
Uncertainties on the policies to be followed were large in the first stage. Because of the zigzag policy of the government at that time, causing obscurity about its future, The threat of entry of new firms discouraged NS to buy additional rolling stock in the initial stages. Competition on rail -initially a main objective of the government- had a

short life (between 1996-1999 Lovers Rail exploited the *Kennemerstrand Expres* between Amsterdam and IJmuiden and the *Keukenhof Expres* between Amsterdam and Lisse). Among the reasons why Lovers rail failed was that the trajectories were not promising. Also there were continuous claims that NS tried to hamper smooth operations of Lovers Rail.

*The Consequences*

The change in culture from a subsidised firm to a commercial company was accompanied by considerable unrest among the personnel. Also the separation of ownership and use of the rail infrastructure and the building up of lags in maintenance have hampered smooth railway operations. The combination of these factors resulted in an unreliable timetable. This must be one of the factors that have led to the decrease in demand for rail transport decreased after 2000 (see figure 1).

The development of the number of passenger kilometres clearly lagged behind the development of Dutch GDP. The rapid increase in railway use in 1990 was owing to the introduction of the free public transport card for students, which may be considered as a major innovation to stimulate the sector. The decreases between 1991 and 1995 were mainly due to changes in the conditions of use for the student cards. Between 1995 and 2000 transport volumes increased, but at rates clearly slower than of real GDP. The decrease of passenger transport after 2000 is due to the stagnation in GDP growth and the decrease in service quality.



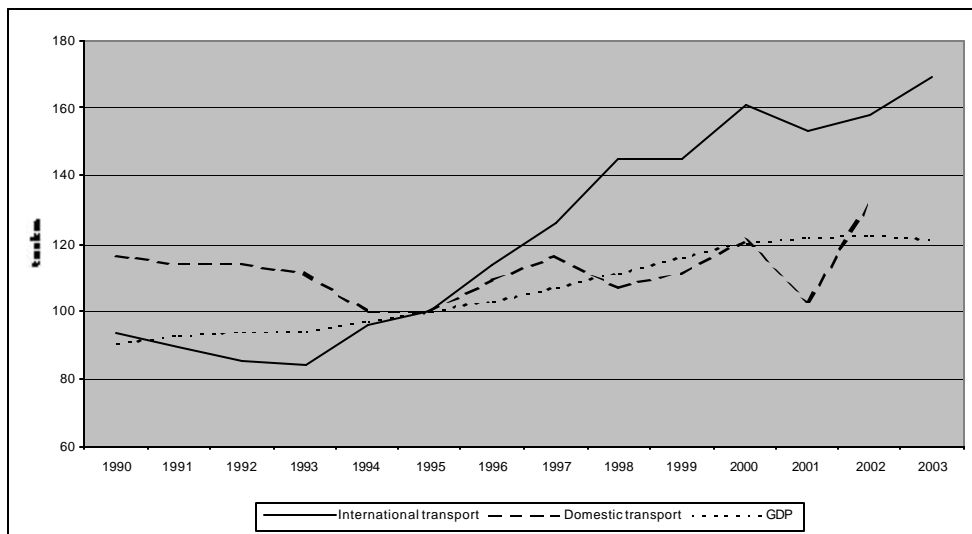
Source: NS-Annual Reports and CBS

**Figure 1 The development of pkm's and the Dutch GDP in constant prices (1995 = 100)**

The market structure of freight transport by rail differs from the passenger market. Besides Railion seven other operators are active in the Netherlands. In other words, the aim of stimulating competition on the rail sector has been successful here. Two

observations must be made. First, the deregulation paved the way to the take-over of NS Cargo by DB leading to the creation of Railion. At the European level this may be interpreted as a (small) increase in concentration. From the perspective of overall competitiveness of rail in the European freight market it is a welcome development towards a stronger international orientation of rail companies. Within the Netherlands the new rules gradually led to an increase of the number of suppliers. The market share of Railion is however still large, though continuously declining. For the year 2003 the individual performances, expressed in train kilometers, are known. Railion had a market share of 82%, so the average market share of the other 5 carriers in that year was about 3.5%.

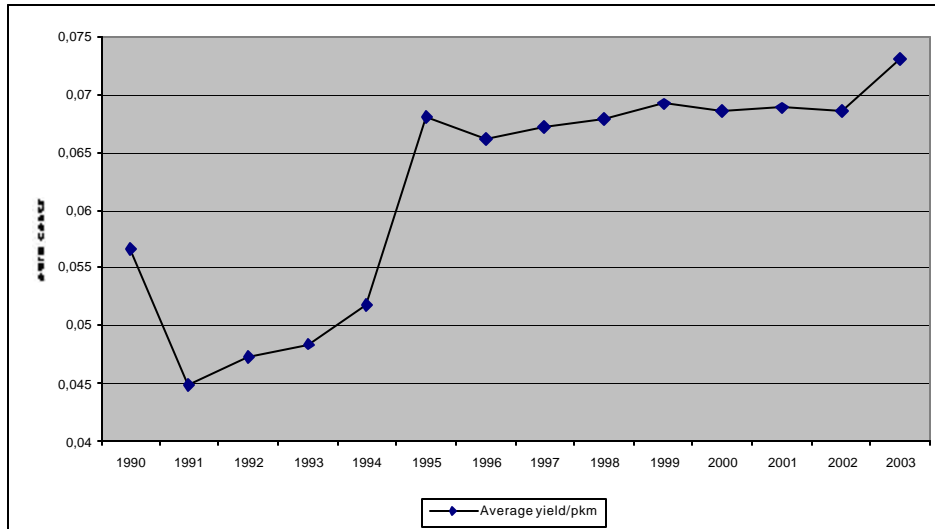
Total volumes transported in tonkms are shown in Figure 2. Since 1995 domestic freight transport on the rails more or less follows the development of GDP, while international transport goes beyond. Comparing Figures 1 and 2, it seems that freight transport benefited somewhat from the regulatory reforms, whereas passenger transport did not.



Source: CBS

**Figure 2 The development of ton kilometers and the Dutch GDP in constant prices (1995 = 100)**

As the subsidies for the operations of the main network would be cut back in the course of NS intended to carry out fare increases. Moreover, NS was obliged to pay a rail charge. The Parliament objected time after time, with the result that only light fare increases were permitted. In Figure 3 the development of fares is reflected, where the average yield per passenger kilometre is the indicator used.



Source: NS-Annual Reports/CBS

**Figure 3 The development of the average NS-yield per pkm. (in constant prices, 1990)**

This figure shows that during the pre-privatisation stage the average yields per passenger km were rather turbulent, mainly due to the introduction of the free student cards and the subsequent changes. However, the average yield has remained remarkably stable since the privatisation in 1995.

Beside the fares of the NS, the punctuality is also an important quality element. Since the annual report of 1998 the NS is publishing the punctuality percentages of trains on the main network within the 3 minutes margin:

<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>
83%	86,5%	84,7%	79,9%	81,2%	83,1%	86,0%

After the dramatic bad year 2001, punctuality is increasing again. However, it has not yet led to an increase of the number of passenger kilometers (Figure 2).

*Some other aspects*

In the mean time two other providers of passenger rail services, NoordNed and Syntus have been formed. They supply services on small parts in the Northern and Eastern part of the country. It is impossible to get financial information about these two smaller rail companies, but data of the Dutch Consumers Union allow one to compare punctuality between NS and these two companies:

	<u>NS</u>	<u>NoordNed</u>	<u>Syntus</u>
May, 2002	80,5%	93,2%	81,5%
May, 2003	81,6%	95,6%	83,5%

Source: Consumentenbond, 2003.

Thus, in recent years NoordNed and Syntus had a higher punctuality than the NS, but the performance of Syntus is not far from that of NS. Both Syntus and NoordNed are integrated multimodal companies since they also provide bus services. This allows for co-ordination of timetables so that passengers are not confronted with long waiting times at stations. Indeed, a survey for a limited number of origin destination combinations shows that bus-train timetable co-ordination is considerably better for Syntus and NoordNed than it is for NS.

	Average transfer time (min)
NS-Connexxion	13.6
Syntus	5.0
NoordNed	6.5

Source: own calculations based on time tables

Table: Transfer times between train and bus for selections for comparable trips with unintegrated operators (NS-Connexxion) and two integrated rail-bus operators

For the operation of the High Speed Train South (HSL-Zuid) from Amsterdam to Paris, an alliance between the NS and the KLM has been created, the *High Speed Alliance* (HSA). HSA received the concession in 2001, after a sharp competition in a public tender. From 2007 on, HSA will operate this line during a period of 15 years. Like NS, also HSA has to pay a rail charge. HSA will be free in price setting. Fares are expected to be 60 percent higher on average. However, because of the increasing competition of low-cost carriers in air transport, these fare levels may be too high.

### *Conclusions.*

When we compare European railways with those in the USA, a striking difference is that their roles are opposite. In the USA, railways play an important role in long distance freight transport, and in passenger transport their role is confined to only some corridors. In Europe, railway's position in freight transport is limited, whereas in passenger transport it is more pronounced.

The regulatory reforms in the EU railway sector may be interpreted as a means to consolidate or improve the performance for passenger transport and improve opportunities for freight transport. In particular the separation of infrastructure ownership and use may help to stimulate international freight transport.

For the Netherlands we conclude that the expectations for improved railway operations in *passenger* transport have not been met thus far. Competition on rail via the entry of new firms appeared to fail soon and was subsequently dismissed. The public monopolist was succeeded by a private monopolist, but one that remained strongly controlled by the public sector. Prices did not decrease, reliability of operations worsened, the development of passengerkms was disappointing. Welfare has not increased in the market for passenger transport.

Opportunities to achieve better performance via pricing policies were not exploited. The fare level as measured by the average receipt per traveller km has remained remarkably stable during the last decade. Shifts towards a stronger price differentiation between peak and off-peak, that can be defended on the basis of both profit maximisation and welfare maximisation van Vuuren en Rietveld (2003) have not been implemented.

The splitting-off of some local lines (NoordNed and Syntus) was more successful. It led to better integrated networks from a multimodal perspective. More of these splittings are expected in the near future. However, they should be done with great care, because there are clear risks of network fragmentation for long distance travellers confronted with additional transfers.

The effects have been more favourable in the *freight* segment of the market. Here market entry took place, though still at a modest level, but there is a clear trend towards a decline of the market share of the market leader. Also, the position of international freight railway operations was reinforced by the formation of Railion, although the current levels of rail transport remain small when compared with total transport volumes of other transport modes.

It is striking that thus far an overall evaluation of regulatory changes in the railway sector has not been carried out. Monitoring activities are developing, but remain incomplete. A clear handicap is the lack of data on time series allowing comparison of pre- and post privatisation developments in terms of inputs of rail operations, including maintenance activities

*Reference:*

Vuuren, D.J. van & Rietveld, P. (2003). Prijsvorming op de rails. ESB, 88(4410), 364-368.