PROJECT

SOFTICE

Survey on Freight Transport Including Cost Comparison for Europe

Funding: European (4th RTD Framework Programme)
Duration: Jan 1998 - Sep 1999
Status: Complete with results

Background & policy context:
Freight transport is central to debates on European competitiveness, traffic congestion and environmental damage. Policy can only be optimised if the factors controlling freight costs and demand are well understood.
At a European level, this is important for predicting how the relative competitiveness of the haulage industry in different countries will be affected by changes in transport policy.

Objectives:
SOFTICE had two main goals:
to identify the factors affecting road freight costs and their interaction with production costs and demand;
to identify the consequences of different policies for taxation on the freight market.

Related Projects:
- INFREDAT - Methodology for collecting intermodal freight transport data.
- PETS - Pricing European transport systems.
- REDEFINE - Relationship between demand for freight transport and industrial effects.
- STEMM - Strategic European multi-modal modelling.

Parent Programmes:
FP4-TRANSPORT - Specific research, technological development and demonstration programme in the field of transport, 1994-1998

Institute type: Public institution
Institute name: European Commission; Directorate-General for Energy and Transport (DG TREN; formerly DG VII)
Funding type: Public (EU)

Partners:
Key Results:

Survey results showed that drivers' wages are the largest single cost factor (especially for collection/distribution operations), and fuel is the next largest factor (especially in long distance haulage). These factors vary substantially between countries. Total tax costs also vary between countries, ranging from 10% to 25% of the total operating cost of long haulage trucks. For 100km distance, EU prices are between 3 and 8 times higher than in Eastern European countries, but prices are closer for long distance freight. Typically, transport costs account for around 3% of the total costs of industrial production, but with significant variations by industry sector.

Shippers were asked about the expected effects of a reduction in the allowable number of working hours. Less than 10% suggested lower demand and/or modal shift, while around 60% foresaw only cost increases. Case studies suggested that systematic violation of traffic rules could reduce costs per tonne-kilometre by up to 30-40% in some countries. Feedback from shippers indicated, when faced with policy changes or traffic problems, they are more willing to consider measures like increasing transport prices or changing shipping times than anything to do with modal transfer. The unwillingness to change mode is largely attributed to bad experience with other transport modes, no matter whether that experience has been directly suffered or just reported by other companies.

Policy implications

The analysis of cost factors shows different levels of cost-competitiveness between Member States, but the underlying reasons for this requires further study. Uniform changes in taxation across the EU would penalise those countries where the tax burden is already relatively high.

Harmonising the enforcement of regulations such as driving hours, speed limits and maximum loads is important for ensuring fair competition in the EU internal market. In addition, safety improvements and a reduction in harmful emissions would arise.

On average, a 10% increase in total taxation would increase the operating cost of long distance hauliers in the EU by 1.7%. However, the diversity and adaptability of road freight operations generally makes it difficult to produce quantitative estimates of reactions to policy.

SOFTICE found that internalisation of external costs of road transport (environmental damage, infrastructure costs) is increasingly considered as a fair principle and an effective means of fighting
congestion. However, the expected magnitude of price increases in inter-urban transport is not such that it will cause major modal transfers - and there is a lack of non-road alternatives for urban freight.

More generally, the project concluded that the application of intensive policy measures to 'push' freight off the roads, for example through higher taxation, is insufficient to achieve significant changes in modal split. A strong improvement in efficiency and quality from other modes is necessary in parallel for shippers to consider the scale of modal transfers thought desirable to meet policy goals. This implies changes such as liberalisation of access to the railways. SME’s are particularly reluctant to change mode.

Documents:
- softice.pdf (Final report)

**STRIA Roadmaps**: Network and traffic management systems

**Transport mode**: Road transport

**Transport policies**: Decarbonisation, Societal/Economic issues