

“ A technical, legal, commercial, and management framework for moving goods door-to-door in containers or trailers using more than one mode of transport ”

- The aim of intermodal transport is to combine benefits of different transport modes into one intermodal supply chain
- European Commission statistics show that in Europe 76.5% of inland freight transport expressed in tonne-kilometers (tkm) is transported by road, 17% by rail and 6.5% by inland waterways.



Main objective

Analyze intermodal freight markets in Europe in order to be able to better understand the functioning of these (competitive) markets leading to policy recommends for the design of more efficient markets.

Main Questions

1. How could the market share of intermodal freight transport be explained by market dynamics, can it be improved and how?
2. How does the competitive position of intermodal freight transport influence its pricing strategy and vice versa and how can it be improved?
3. How efficient are intermodal freight transport supply chains and how can we improve them to realize a better market share?



Research Scope

This project focuses on intermodal freight supply chains in Europe (at least one of the origins and/or destinations is in Europe).

Intermodal freight transport consists of 4 main parts: pre-haulage, terminals, main haulage (rail, short sea, inland waterway) and end-haulage which will be considered in this research.

Methodology

1. Several different market analysis models (such as the extended Porter model, market share indexes) will be extended and applied to the respective intermodal market segments
2. In this research a new methodology to calculate the value (price) of the intermodal logistics services will be developed based on the changing value of the product in each (intermediate) point in the intermodal supply chain.
3. Conventional data envelopment analysis (DEA) cannot be employed directly to measure the performance of intermodal supply chains and their members, so the Network-DEA model will be extended. Especially, the value of the freight will be analyzed as one of the decision-making variables.

