

## SynChain – synchromodal transport chains

SynChain aimed at analyzing synchromodality in detail such that a profound understanding of the underlying key enablers can be gained. In addition, awareness training for stakeholders in the transport sector has been started. Based on the obtained insights technical, organisational and systemic basic conditions for a successful application of synchromodality will be defined, which shall be implemented in follow-up projects.

The major part of transport decisions is not made based on objective criteria but on traditions or a biased view on eco-friendly alternatives. As a result, 76% of freight transport in the European Union is done by truck. Nevertheless, rail or inland waterway would be appropriate and often favorable options for many transports. Due to SynChain this weakness shall be eliminated since transport decision processes will be changed. In fact, SynChain is based on the latest logistical concept synchromodality which has been applied successfully in the Benelux countries. However, synchromodality is almost unknown in the rest of Europe (including Austria).



The concept of synchromodality is built upon multi-modal transportation networks within the transport modes rail, road and inland waterway which are parallel interconnected with each other. Synergy effects are gained due to the shift of modal decisions from the client to transport service providers who decide upon transportation mode considering current utilization of the networks as well as other concurrent shipments. In addition, flexibility in the transportation networks guarantee that each mode of transportation is backed-up by the other modes including continuously updated data on transport.

Due to this flexibility aspect, transport networks with synchromodal structures provide reliable backup systems which are able to compensate failures of single transport modes. The whole system is robust against transport risks. Additionally, often stressed economic as well as ecological points can be significantly strengthened compared to standardized multimodal transport networks. SynChain aimed on the one hand for the creation of a profound understanding of the underlying key enablers and deep understanding of the underlying concepts such that key enablers can be extracted and suggestions can be presented for establishing technical, organizational and systemic basic conditions. On the other hand it aimed to increase awareness for this transport system among stakeholders which is needed simultaneously to establish a working synchromodal transport system in Austria.

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