

Fr	B	C	NY	S	T	Total
2	10	1	0	0	8	21

Beispiel:

Berlin uses or is reviving existing peri-urban structures such as inland ports and long-serving rail-road terminals. There is the strategy of suing the goods distribution centre on the city limits and the goods distribution centre in the city as bundling and transshipment points for intermodal transport. The use of the existing waterways and rail network as alternative transportation routes is regarded by the city as a building block for sustainable transport development.

Copenhagen: not known. Intermodality is mentioned only in connection with the movement of people

1. Differentiated description of the key field

Definition

- Intermodal freight transport refers to the combined use of different modes of transport to supply a city with the goods and merchandise it needs.
- For example, goods are transported by rail or ship to the city; then the small-scale distribution of goods by road from intermodal transfer points ensues.
- But other (inner-city) combinations of modes and means of transport are also conceivable, depending on existing transport routes as well as the geographical and historical circumstances of a city (e.g. the use of canals in Amsterdam).

The aim of the key field

The key goals are the city-friendly and environmentally-friendly design of freight transport and the reduction of the inner-city road traffic in order to relieve the often congested road networks and to create space for individual mobility. This requires a consolidation of transport alternatives to freight transport on the roads and the expansion of the rail and water infrastructure that has to be used as well as the necessary hubs (stations, ports, intermodal terminals) to link the different networks up.

2. Reference to sustainability:

- Impact on the following levels: social, ecological, economic, resilience of the city system
- The shift of freight transport to more environmentally friendly modes of transport (rail, inland waterways) will result in less road traffic and thus reduce the associated high environmental impact.
 - An important component towards developing a sustaina-

ble freight transport infrastructure

- Securing the supply and disposal functions for the inner city areas
- Multi-modal logistics hubs in an integrated location offer advantages for the local economy

Risks if ignored/doesn't work?

The huge potential for designing freight transport in a more environmentally friendly way has not been exhausted.

If the current trends continue (i.e. road traffic continues to increase due to the rising urbanization etc.) congestion of the transport network can be expected. Without the (partial) shift to other modes of transport, the supply function may not be able to be maintained.

3. Relevance to industrial sectors?

Mobility:	Medium
Energy:	None
Production & logistics:	High
Security:	Low
ICT:	None
Water infrastructure:	Low
Buildings:	Low
Governance:	Medium

Brief description of the high level of importance:

The key field affects the production and logistics sector most. Due to the common use of transport routes, activities in this key field also indirectly impact on mobility.

4. Impact (positive & negative)

Positive:

- Traffic load is balanced out by distribution
- Opportunity to develop innovative transport chains and new options for logistics services (market development, new business models)
- Transshipment hubs in the city offer potential for the use of electric commercial vehicles due to the short road haulage distances that still remain

Negative:

- Increase in transport and logistics spaces in the city

5. Implementation measures:

Taking stock:

- What possibilities for intermodal freight transport does the city have? What are the historical or geographical circumstances? What infrastructure is already in place?
- Where is there potential for development (e.g. appropriate areas)?

Concept development for an intermodal freight transport system based on existing opportunities and identified development potential

- City-wide perspective
- Involvement of relevant stakeholders (see actors)

Creation of the requisite general conditions:

- Improving the utilization possibilities for alternative transport routes by means of infrastructure development (e.g. electrification of rail lines, the upgrading of inland waterways, provision of land for handling plants, terminals) and the establishment of multi-modal hubs, where the efficient transfer between transport modes can occur
- Development of possible incentives (e.g. financial support in the start-up phase, exemption from certain taxes, special permits, etc.)

Implementation:

- In stages by developing individual solutions and implementing pilot projects to act as role models
- Identification of appropriate goods, branches and users of intermodal solutions and the joint development of competitive offers for lorries
- Establishment of new transport services by the logistics companies right through to the permanent establishment as an offer on the market.

6. *Actors: Who can shape things?*

City: Design of traffic concepts, development plans for existing areas, political and financial support of infrastructure development

Infrastructure operators: Private companies or public sector enterprises; creation of attractive usage options and conditions for industry, trade and logistics companies; investments in infrastructure with high development potential

Logistics companies: Concepts for the use of infrastructure, Readiness of terminal operators, railway and shipping companies and logistics service providers to invest in new solutions and work together to create competitive offers for lorries.

Industry, trade and commerce: A willingness to change, adaptation of their own processes to ensure efficient use of intermodal freight offers

7. *Prerequisites:*

Historical/geographical: the key prerequisite for an intermodal freight system is the availability of suitable infrastructure, i.e. a well-developed rail and waterway network in the urban area and in connection with the surrounding areas and multimodal interfaces between transport modes;

Economic: Sufficient volume of suitable goods, availability of funds or investors for infrastructure projects

8. *Obstacles/barriers:*

1. Land use:

- The integration of logistics hubs into the city often competes with other urban planning, e.g. water sites are attractive for both port areas as well as for residential areas
- The close proximity of logistics areas and residential areas harbours potential for conflict, e.g. in terms of noise control

2. Possible conflicts between passenger and freight traffic, since much of the same infrastructure can be shared, but different demands exist (e.g. the routes of trains, main station vs. freight station).

3. Constructional and structural changes in the city are necessary for the development of intermodal freight transport. The more the density of urban spaces increases, the more far-reaching the impacts are and the harder it is to implement these changes.

9. *Indicators:*

What information must be collected to identify the key in a city? If necessary, establish a reference to the existing City of the Future indicators

- The volume of freight traffic
- Distribution of modes of transport (modal split)
- Existing infrastructure, road, rail and inland waterway network
- Existing (multimodal) transshipment terminals, ports, railway stations, etc.
- Availability of land in the city

10. *Special features/remarks:*