

## SF 50: Deployment of alternative concepts for re-using existing infrastructure

Fr	B	C	NY	S	T	Total
4	8	8	7	4	0	31

### Example:

Large parts of Berlin's transport infrastructure have been modernised and extended since 1990 and these days, the city has a generally good infrastructure in comparison with major cities at home and abroad, with, in part, considerable reserve capacity. There are still a lot of freight stations and old rail tracks from the time when Berlin was an industrial city. Inner-city port facilities and a network of waterways provide easy access to Germany's seaports. Currently, the demands as regards speed and flexibility of the means of transport are resulting in rather unfavourable starting conditions for rail and inland waterways. Due to the lack of potential demand, a major part of the existing infrastructure is no longer used. In the past, the fall in demand and urban conversions of commercial areas have already led to a dismantling of the rail infrastructure. With regard to sustainable transport development, it is therefore important to regard the existing infrastructure as an advantage and make best use of it. To strengthen the transport alternatives to road transport and to support the modal shift to environmentally friendly modes of transport, the preservation of sustainable rail and waterway infrastructure is of strategic importance to the city of Berlin. The development of inter-modal logistics hubs in the urban area represents therefore an important part of the process to ensure a sustainable transport infrastructure.

### 1. Differentiated description of the key field

Cities in sum as well as individual urban districts or sectors change over time and are forced to adapt to the changes or developments. This leads to new opportunities and possibilities. One example of this is the subsequent or continued use of existing infrastructures, such as converting existing industrial buildings into residential buildings. Often, however, cities also have an old transport infrastructure, which no longer meets the current needs of the city. With regard to sustainable urban development, this offers an opportunity to see whether this infrastructure in general and transport infrastructure elements in particular are not in use only for the foreseeable future and should, therefore, be preserved, or whether the infrastructure will not be used any more in the future because of technological changes and thus they have to be dismantled.

### 2. Reference to sustainability:

The safeguarding of existing infrastructure, particularly if it is a matter of alternative and more environmentally fa-

vourable means of transport than the road transport of goods and passengers (e.g. water and rail routes), offers an ecological advantage, because these ways and means of transport are usually more favourable to the environment. Maintaining the infrastructure associated with such transport routes poses economic risks because, on the one hand, there is the risk that the infrastructure will no longer be required despite its preservation because other more ecologically favourable means of transport may be invented. Preservation of appropriate infrastructure (transport as well as building infrastructure) can only ever be for a limited period. The preservation of transport infrastructure and the re-use or strengthening of alternative transport infrastructure can turn into a decisive locational advantage for the city. This locational advantage can be of both an ecological and an economic nature.

### Risk if ignored:

The decommissioning of existing infrastructure and the subsequent construction of new infrastructure tailored to current needs puts a financial burden on the city. In addition, the new infrastructure may not be accepted by the actors in the city. The review of what „forgotten“ infrastructure should be preserved and re-used or the consolidation of alternative infrastructure should be examined accordingly.

### 3. Relevance to industrial sectors?

Mobility:	High
Energy:	Low
Production & logistics:	High
Security:	Low
ICT:	Low
Water infrastructure:	Medium
Buildings:	Medium
Governance:	Medium

#### Brief description of the high level of importance:

For the manufacturing sector (industry), appropriately good infrastructure (logistics) is vital and necessary in order to have the materials for production and to deliver the produced goods to the customer. Depending on what they produce, firms make different and, in part, strongly differentiated demands on the transport infrastructure. The greater the range of alternative transport infrastructure and related logistics and loading centres to change from one means of transport (ship, road, rail, air) to another that a city can offer, the greater the attractiveness of the city and the location for companies. Traffic-related infrastructure is also closely linked to the issue of mobility, and this is where concepts for the appropriate use of shared transport routes can be drawn up.

#### **4. Impact:**

The preservation of existing infrastructure along with new use concepts for existing infrastructure have a positive impact on the location. A broad and balanced range of different and not necessarily competing transport routes and means allows users to decide or select the infrastructure that is best suited to their needs. What is disadvantageous for the city is the fact that the preservation and revival of the existing infrastructure also constitute a financial burden for the city as well as a risk if acceptance of the 'new' infrastructure fails.

#### **5. Implementation measures:**

- Detailed information about the condition and use of existing infrastructure
- Information about current and future customer needs or requirements for the continued use of the infrastructure
- Information regarding the general legal conditions that complicate or impede the use of certain infrastructures (e.g. no heavy vehicle traffic in certain urban areas, noise specifications for rail freight transport, the use of certain transport corridors and times)
- Information regarding the financial cost of preserving, demolishing or revitalizing infrastructure
- Knowledge of future technological developments in the field
- Use concepts and operating models

#### **6. Actors: Who can shape things? With whom?**

- Construction companies
- Users of the infrastructure, e.g. residents, businesses (steering demand through their user behaviour)
- City
- Infrastructure operators

#### **7. Prerequisites:**

No special conditions are necessary apart from the existing appropriate infrastructures which can be revived (redesigned) or converted.

#### **8. Obstacles/barriers:**

Barriers to the preservation and continued use of existing infrastructure can include the following: lack of financial resources to maintain and/or re-use, lack of acceptance of or demand for infrastructure, lack of operational concepts, legal rules have changed over time (have been tightened) and the maintenance or re-use and redevelopment is subject to additional investment.

#### **9. Indicators:**

- The temporal course of the modal split (what transport paths exists, how are they used and how used over several years □ derivation of changes) (Modal split of freight transport: % of road transport; modal split of freight transport: % of transport on inland waterways; modal split of freight transport: % of rail transport)
- Number of freight distribution centres (existence of logistics centres in the urban area and their implementation level)

#### **10. Special features/remarks:**



