# Group 4. Transport supply

#### Indicator 12 - Capacity of infrastructure networks

Objectives Optimise use of existing infrastructure capacity.

Revitalise rail and inland waterways

Definition The capacity is the maximum traffic flow (vehicle-km in a given time unit) that can be

carried by a multi-modal transport infrastructure network.

Proxy indicator for capacity: Length of transport infrastructure by type

Sub-indicators Length of roads

Length of motorways Length of railways

Length of high-speed lines

Length of navigable inland waterways

Length of pipelines

#### **12.1 Roads**

Concepts

<u>Road</u>: Line of communication (travelled way) using a stabilized base other than rails or air strips open to public traffic, primarily for the use of road motor vehicles running on their own wheels. Included are bridges, tunnels, supporting structures, junctions, crossings and interchanges. Toll roads are also included. Excluded are dedicated cycle paths. (4)

Road network: All roads in a given area. (4)

<u>Motorway:</u> Road, specially designed and built for motor traffic, which does not serve properties bordering on it, and which:

- Is provided, except at special points or temporarily, with separate carriageways for the two directions of traffic, separated from each other, either by a dividing strip not intended for traffic, or exceptionally by other means;
- Does not cross at level with any road, railway or tramway track, or footpath;
- Is specially sign-posted as a motorway and is reserved for specific categories of road motor vehicles.

Entry and exit lanes of motorways are included irrespectively of the location of the signposts. Urban motorways are also included. (4)

Problems related to the definition

National administrative definition of the road network may be applied, e.g. exclusive private roads with public access.

The classification of the road network may be according to

- a) Administration responsible for the operation, etc. of the network,
- b) Design standard or
- c) Users allowed having access to the road.

For motorways, however, the same definition is applied in all European countries.

*Methodology* Statistics are reported as part of the Common Questionnaire.

### 12.2 Railways

Concepts

<u>Railway:</u> Line of communication made up by rail exclusively for the use of railway vehicles. The line of communication is part of space equipped for the execution of transport. (4)

<u>Railway network:</u> All railways in a given area. This does not include stretches of road or water even if rolling stock should be conveyed over such routes, e.g. by wagon-carrying trailers or ferries. Lines solely used for touristic purposes during the season are excluded as are railways constructed solely to serve mines, forests or other industrial or agricultural undertakings and which are not open to public traffic. (4)

<u>High-speed line</u>: A line specially built to allow traffic at speeds generally equal to or greater than 250 km/h for the main segments. High-speed lines may include connecting lines, in particular junctions with town centre stations located on them, on which speeds may take account of local conditions (adapted from Directive 98/48/EC).

Methodology

Statistics are reported as part of the Common Questionnaire and often also included in the statistics of UIC.

#### 12.3 Navigable inland waterways

Concepts

<u>Waterway:</u> River, canal, lake or other stretch of water, which by natural or man-made features is suitable for navigation. Waterways of a maritime character (waterways designated by the reporting country as suitable for navigation primarily by sea-going ships) are included. Waterways also include river estuaries; the boundary being that point nearest the sea where the width of the river is both less than 3 km at low water and less then 5 km at high water. (4)

Navigable inland waterway: A stretch of water, not part of the sea, over which vessels of a carrying capacity of not less than 50 tonnes can navigate when normally loaded. This term covers both navigable rivers and lakes and navigable canals. The length of rivers and canals is measured in mid-channel. The length of lakes and lagoons is measured along the shortest navigable route between the most distant points to and from which transport operations are performed. A waterway forming a common frontier between two countries is reported by both. (4)

Methodology

Statistics are reported as part of the Common Questionnaire.

#### 12.4 Pipelines

Concepts

Oil pipelines: Pipes for the movement of crude or refined liquid petroleum products by pumping. Branch lines are included as well as oil pipelines between the land and drilling platforms at sea. Excluded are oil pipelines whose total length is less than 50 km or whose inside diameter is less than 15 centimetres and oil pipelines used only for military purposes or located entirely within the site boundaries of an industrial operation, as well as oil pipelines that are entirely off-shore (i.e. located solely out in the open sea). International oil pipelines whose total length is 50 km or more are included even if the section in the reporting country is less than 50 km long. Oil pipelines consisting of two (or more) parallel pipelines are to be counted twice (or more). Only units, which actually carry out an activity during the reference period, should be considered. "Dormant" units or those not yet having begun their activity are excluded. (4)

Oil pipeline network: All oil pipelines in a given area. The territory of the area in question includes that part of the seabed allocated to it under a concession. (4)

Problems related to the concepts

Pipelines for transport of natural gas are not included.

Methodology

Statistics are reported as part of the Common Questionnaire.

### Relevant literature

- 1. Are we moving in the right direction? EEA 2000
- 2. Indicators tracking transport and environment integration in the EU EEA 2001
- 3. Transport and Environment statistics for the Transport and Environment Reporting Mechanism (TERM) for the European Union. Eurostat.
- 4. Glossary for Transport statistics. Eurostat/ECMT/UNECE
- 5. International Railway Statistics 1999, UIC, Paris 2001
- 6. EEA fact sheet, cf. http://themes.eea.eu.int/Sectors\_and\_activities/transport/indicators/supply/capacity/Capacity\_of\_infrastructure\_networks\_TERM\_2001.pdf

## Indicator 13 - Transport infrastructure investments

*Objectives* Give investment priority to environmentally friendly transport systems

**Definition** Investment in transport infrastructure by mode

Sub-indicators Investments in roads

Investments in railways Investments in pipelines

Investments in inland waterways Investments in maritime ports Investments in airports

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*Concepts* For definitions of transport infrastructure network see Indicator 12.

<u>Investment expenditure</u> consists of expenditures on new constructions and extension of existing network, including reconstruction, renewal and major repairs of infrastructure. (4)

Problems related to the concepts

The definitions applied may depend on the accountancy practices in the enterprises involved.

Relevant literature

- 1. Are we moving in the right direction? EEA 2000
- 2. Indicators tracking transport and environment integration in the EU EEA 2001
- 3. Transport and Environment statistics for the Transport and Environment Reporting Mechanism (TERM) for the European Union. Eurostat.
- 4. Glossary for Transport statistics. Eurostat/ECMT/UNECE
- 5. EEA fact sheet, cf. http://themes.eea.eu.int/Sectors\_and\_activities/transport/indicators/supply/

investments/Transport\_infrastructure\_investment\_TERM\_2001.pdf