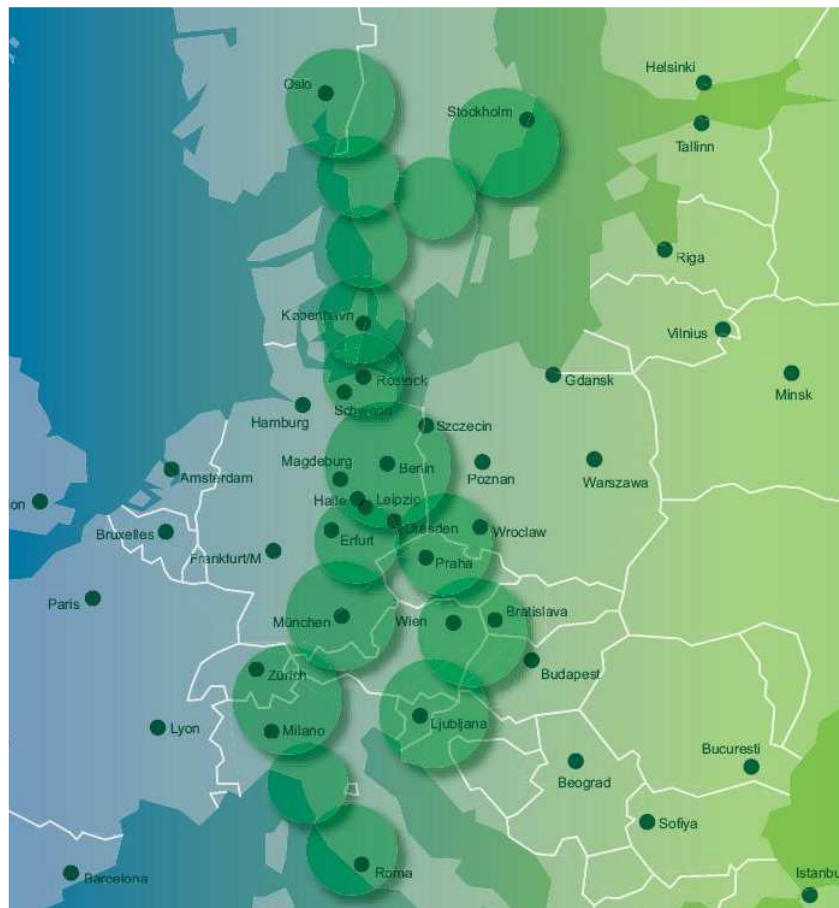


# Evaluation of Goods Traffic Corridors through Mecklenburg–West Pomerania

## Final Report



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This study was drawn up by:

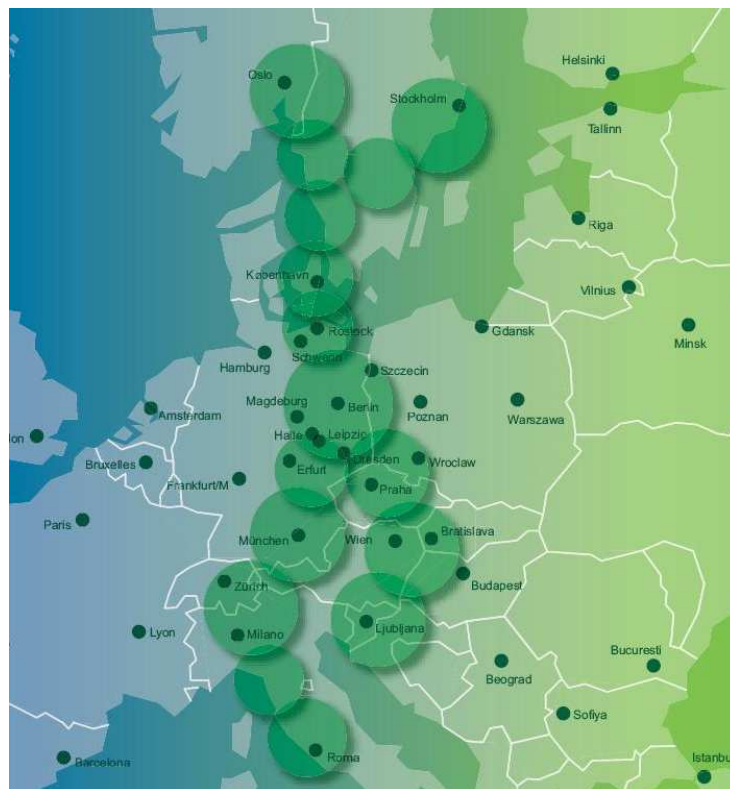
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## 0. SUMMARY

### The Scandinavian–Adriatic Corridor

In May 2007 the German federal States of Berlin, Brandenburg, Mecklenburg–West Pomerania, Saxony and Saxony-Anhalt brought into being an initiative to build up a development corridor that runs from Scandinavia through the new federal States to the Adriatic. The corridor, in which about 93 million people live, has the highest density of capital regions in Europe and shows a GDP of 2.5 billion euro. It links areas that are characterised by historically developed economic and cultural relationships. The division of Europe after the Second World War, however, tore out the middle area of this corridor from this structure that had evolved. The building-up of the Scandinavian–Adriatic Corridor is intended to initiate cross-border co-operation efforts, which will enable a closer dovetailing of the regions and thereby promote the economic and cultural development of the corridor area. This orientation of the development of the corridor was recorded in the Berlin Declaration of 30 November 2007.

**Figure 1** The Scandinavian–Adriatic Corridor

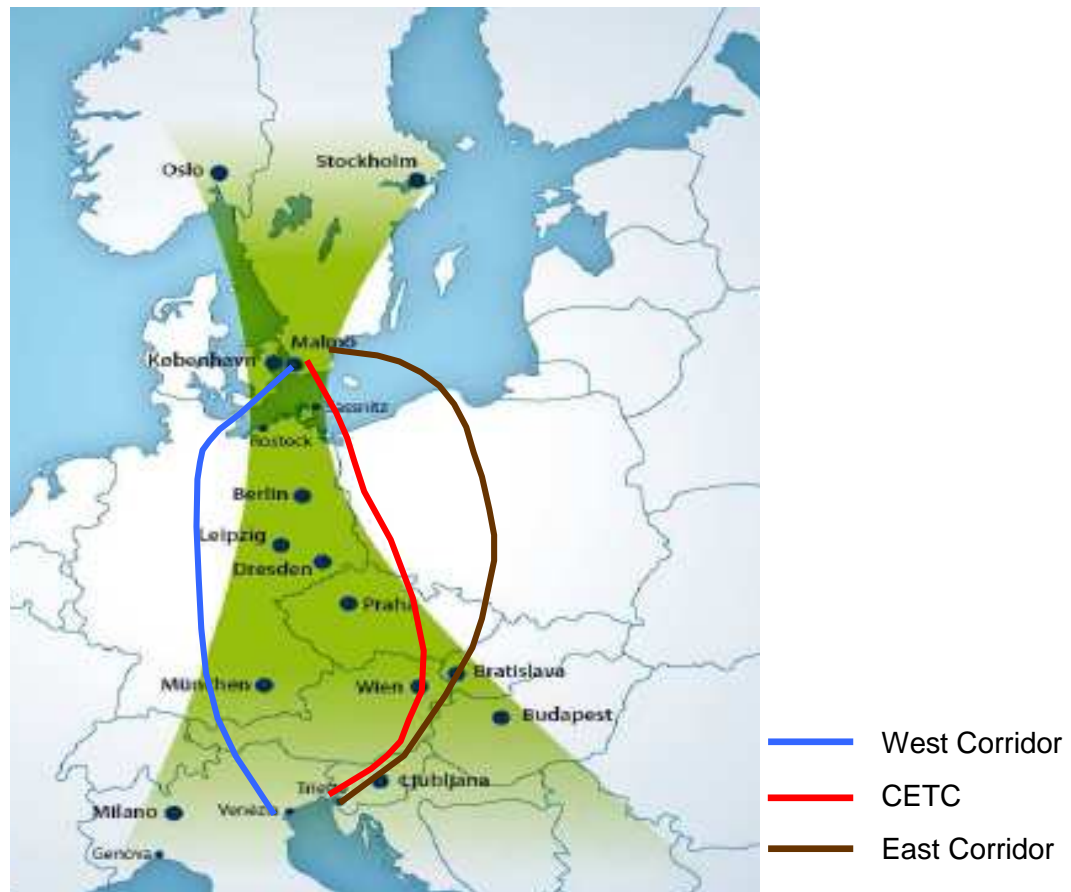


Source: <http://www.scandriaproject.eu/corridor.jpg>

An important component of the development of the corridor is an improvement in attainability for people, goods and services along the north–south axis between the Baltic Sea area and the Adriatic region. The Scandinavian–Adriatic Corridor does, however, find itself in considerable competition with various other corridors.

UNICONSULT Universal Transport Consulting GmbH was therefore commissioned to undertake an evaluation of the Scandinavian–Adriatic Corridor. The competing corridors were defined, on the one side, as the West Corridor through Schleswig-Holstein and, on the other side, the East Corridor – also known as the CETC<sup>1</sup> – through the port of Swinoujscie (see the following figure). The more easterly corridor<sup>2</sup> that runs through the ports of Gdansk/Gdynia was not considered further in this study.

**Figure 2** The Scandinavian–Adriatic Corridor and the competing corridors



Source: UNICONSULT, based on maps of the Mecklenburg–West Pomerania Ministry of Transport, Construction and State Development.

### Preconditions of the evaluation

The evaluation takes place on the basis of definite logistic chains. Each logistic chain is characterised by the following features:

<sup>1</sup> Central European Transport Corridor

<sup>2</sup> The corridor corresponds to Priorities 23 and 25 of the Trans-European Transport Network.

- Source–Target link: A total of four regions in the central European hinterland and five sea ports – Gedser<sup>3</sup>, Trelleborg<sup>3</sup>, Klaipeda, Helsinki and St. Petersburg – in Scandinavia and the Baltic were selected. A large part of the transports handled in these ports is indeed conveyed further into the hinterland (and vice versa), but this transport sector has no effect on the evaluation of the corridors, so that these ports can be considered either as starting-points or destinations as applicable.

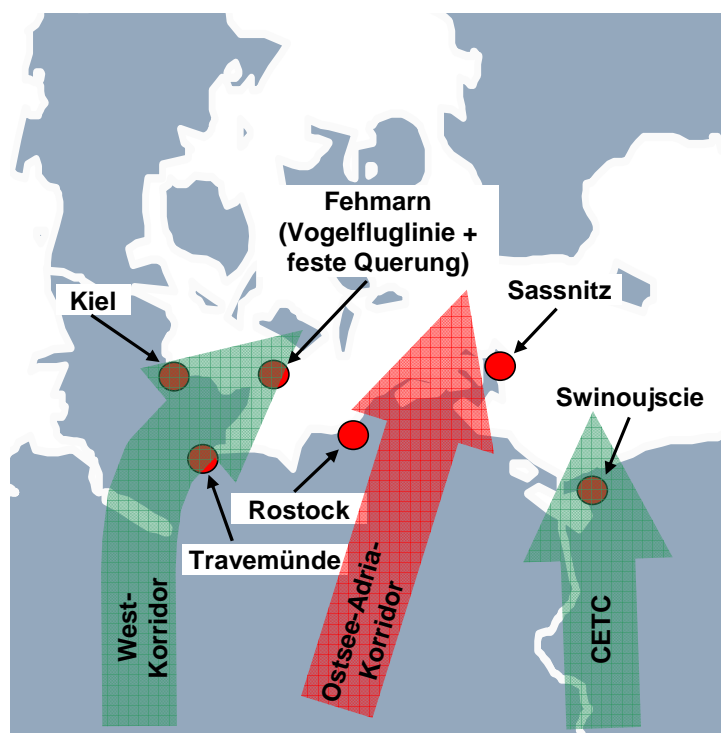
**Figure 3 Overview of the places of origin or destination**



Source: UNICONSLT

- Course of the routes: For each of the Source–Target links there are seven alternative courses of the route that can be chosen (see the following figure). An exception applies to the links to and from Klaipeda, Helsinki and St. Petersburg. These connections are not reasonably open to being served by the Fehmarn route – either by the linear route or the future fixed crossing – and are therefore excluded from consideration.

<sup>3</sup> In this study the ports of Gedser and Trelleborg are considered as starting-points or, as applicable, destinations of transports that are being routed via German Baltic Sea ports or, as applicable, Świnoujście (see the following expositions of the course of the route). For the purpose of evaluating the route via Fehmarn Belt, however, neither of these two ports is suitable, as this route runs neither through Gedser nor Trelleborg (this applies both to the use of the linear route and to the future fixed crossing of the Fehmarn Belt). For this reason Rödby or, as applicable, Malmö are chosen as alternative starting-points or, as applicable, destinations for the Fehmarn Belt route.

**Figure 4** Presentation of the courses of alternative routes

Source: UNICONSLT

- Transport carriers: For each of the previously established combinations two combinations of transport carriers come into consideration: in one case exclusively road transport, in the other the use of combined transport (CT), in each case in connection with the ferry crossing.<sup>4</sup>

In total 232 possible logistic chains result from this, which can be derived from the following table. Whether the logistic chains currently exist was not taken into consideration initially. For example, ferry routes that are not served at present were also included in the evaluation. The evaluation was therefore concerned with all theoretically possible and reasonable logistic chains. In a later stage only the currently existing routes are considered.

<sup>4</sup> This lapses in the case of the future fixed crossing of the Fehmarn Belt.

Table 1 Overview of the logistic chains considered

|        |                  |               | Via  |            |                                  |                     |         |          |             |
|--------|------------------|---------------|------|------------|----------------------------------|---------------------|---------|----------|-------------|
|        |                  |               | Kiel | Travemünde | Fehmarn Belt<br>(fixed crossing) | By the linear route | Rostock | Sassnitz | Swinoujście |
| Munich | Gedser/Rödby     | Lorry + ro-ro | ✓    | ✓          | ✓                                | ✓                   | ✓       | ✓        | ✓           |
|        |                  | CT + ro-ro    | ✓    | ✓          | ✓                                | ✓                   | ✓       | ✓        | ✓           |
|        | Trelleborg/Malmö | Lorry + ro-ro | ✓    | ✓          | ✓                                | ✓                   | ✓       | ✓        | ✓           |
|        |                  | CT + ro-ro    | ✓    | ✓          | ✓                                | ✓                   | ✓       | ✓        | ✓           |
|        | Klaipeda         | Lorry + ro-ro | ✓    | ✓          | ✗                                | ✗                   | ✓       | ✓        | ✓           |
|        |                  | CT + ro-ro    | ✓    | ✓          | ✗                                | ✗                   | ✓       | ✓        | ✓           |
|        | Helsinki         | Lorry + ro-ro | ✓    | ✓          | ✗                                | ✗                   | ✓       | ✓        | ✓           |
|        |                  | CT + ro-ro    | ✓    | ✓          | ✗                                | ✗                   | ✓       | ✓        | ✓           |
|        | St. Petersburg   | Lorry + ro-ro | ✓    | ✓          | ✗                                | ✗                   | ✓       | ✓        | ✓           |
|        |                  | CT + ro-ro    | ✓    | ✓          | ✗                                | ✗                   | ✓       | ✓        | ✓           |
| Vienna | Gedser/Rödby     | Lorry + ro-ro | ✓    | ✓          | ✓                                | ✓                   | ✓       | ✓        | ✓           |
|        |                  | CT + ro-ro    | ✓    | ✓          | ✓                                | ✓                   | ✓       | ✓        | ✓           |
|        | Trelleborg/Malmö | Lorry + ro-ro | ✓    | ✓          | ✓                                | ✓                   | ✓       | ✓        | ✓           |
|        |                  | CT + ro-ro    | ✓    | ✓          | ✓                                | ✓                   | ✓       | ✓        | ✓           |
|        | Klaipeda         | Lorry + ro-ro | ✓    | ✓          | ✗                                | ✗                   | ✓       | ✓        | ✓           |
|        |                  | CT + ro-ro    | ✓    | ✓          | ✗                                | ✗                   | ✓       | ✓        | ✓           |
|        | Helsinki         | Lorry + ro-ro | ✓    | ✓          | ✗                                | ✗                   | ✓       | ✓        | ✓           |
|        |                  | CT + ro-ro    | ✓    | ✓          | ✗                                | ✗                   | ✓       | ✓        | ✓           |
|        | St. Petersburg   | Lorry + ro-ro | ✓    | ✓          | ✗                                | ✗                   | ✓       | ✓        | ✓           |
|        |                  | CT + ro-ro    | ✓    | ✓          | ✗                                | ✗                   | ✓       | ✓        | ✓           |
| Verona | Gedser/Rödby     | Lorry + ro-ro | ✓    | ✓          | ✓                                | ✓                   | ✓       | ✓        | ✓           |
|        |                  | CT + ro-ro    | ✓    | ✓          | ✓                                | ✓                   | ✓       | ✓        | ✓           |
|        | Trelleborg/Malmö | Lorry + ro-ro | ✓    | ✓          | ✓                                | ✓                   | ✓       | ✓        | ✓           |
|        |                  | CT + ro-ro    | ✓    | ✓          | ✓                                | ✓                   | ✓       | ✓        | ✓           |
|        | Klaipeda         | Lorry + ro-ro | ✓    | ✓          | ✗                                | ✗                   | ✓       | ✓        | ✓           |
|        |                  | CT + ro-ro    | ✓    | ✓          | ✗                                | ✗                   | ✓       | ✓        | ✓           |
|        | Helsinki         | Lorry + ro-ro | ✓    | ✓          | ✗                                | ✗                   | ✓       | ✓        | ✓           |
|        |                  | CT + ro-ro    | ✓    | ✓          | ✗                                | ✗                   | ✓       | ✓        | ✓           |
|        | St. Petersburg   | Lorry + ro-ro | ✓    | ✓          | ✗                                | ✗                   | ✓       | ✓        | ✓           |
|        |                  | CT + ro-ro    | ✓    | ✓          | ✗                                | ✗                   | ✓       | ✓        | ✓           |
| Prague | Gedser/Rödby     | Lorry + ro-ro | ✓    | ✓          | ✓                                | ✓                   | ✓       | ✓        | ✓           |
|        |                  | CT + ro-ro    | ✓    | ✓          | ✓                                | ✓                   | ✓       | ✓        | ✓           |
|        | Trelleborg/Malmö | Lorry + ro-ro | ✓    | ✓          | ✓                                | ✓                   | ✓       | ✓        | ✓           |
|        |                  | CT + ro-ro    | ✓    | ✓          | ✓                                | ✓                   | ✓       | ✓        | ✓           |
|        | Klaipeda         | Lorry + ro-ro | ✓    | ✓          | ✗                                | ✗                   | ✓       | ✓        | ✓           |
|        |                  | CT + ro-ro    | ✓    | ✓          | ✗                                | ✗                   | ✓       | ✓        | ✓           |
|        | Helsinki         | Lorry + ro-ro | ✓    | ✓          | ✗                                | ✗                   | ✓       | ✓        | ✓           |
|        |                  | CT + ro-ro    | ✓    | ✓          | ✗                                | ✗                   | ✓       | ✓        | ✓           |
|        | St. Petersburg   | Lorry + ro-ro | ✓    | ✓          | ✗                                | ✗                   | ✓       | ✓        | ✓           |
|        |                  | CT + ro-ro    | ✓    | ✓          | ✗                                | ✗                   | ✓       | ✓        | ✓           |

Source: UNICONSULT

The evaluation of the logistic chains takes place on the basis of the following three criteria:

- transport costs,
- duration of transport,
- CO<sub>2</sub> emissions.

For transport purely by road the transport costs and the CO<sub>2</sub> emissions are calculated per lorry. In this process, the use of an articulated lorry is assumed. To retain a unified basis of measurement for evaluating the corridors, the values in CT and for the ferry crossing are determined per articulated lorry.

For the transport costs of transport by lorry and conveyance by CT the values of the both the following tables were accepted.

**Table 2 Overview of costs for transport by lorry**

|                              |   |      |
|------------------------------|---|------|
| Freight rate (Long-distance) | 1.15  | €/km |
| Toll                         |   |      |
| Öresund crossing             | 100.50  | €    |
| Fehmarn Belt crossing        | 255.25  | €    |
| Vignette Poland              | 10.00   | €    |
| Eurovignette                 | 8.00  | €    |
| Germany                      | 0.18  | €/km |
| Austria                      | Determination of the toll costs depending on the route are obtainable from the Internet pages of the operators of the toll systems <sup>5</sup> |      |
| Italy                        |   |      |
| Czech Republic               |   |      |
| Slovakia                     |   |      |

Source: UNICONSLT

**Table 3 Overview of costs for transport by CT**

|                                      |        |              |
|--------------------------------------|--------|--------------|
| Freight rate                         | 0.85   | €/Trailer-km |
| Trans-shipment, departure terminal   | 25.00  | €/Trailer    |
| Trans-shipment, destination terminal | 25.00  | €/Trailer    |
| Preceding road journey               | 100.00 | €/Trailer    |
| Subsequent road journey              | 100.00 | €/Trailer    |

Source: UNICONSLT

The assumed costs of the ferry crossing per trailer-km are presented in the following table.

<sup>5</sup> for Austria: <http://www.go-maut.at/go/>  
 for Italy: <http://www.autostrade.it/index.html>  
 for the Czech Republic: <http://www.premid.cz/index.php?id=291&L=2>  
 for Slovakia: <https://www.emyto.sk/web/guest/home>

**Table 4** Freight rates for ferry connections by trailer-km

|                    | Rödby  | Gedser | Trelleborg | Klaipeda | Helsinki | St. Petersburg |
|--------------------|--------|--------|------------|----------|----------|----------------|
| <b>Kiel</b>        | -      | €2.51  | €1.40      | €0.64    | €0.50    | €0.50          |
| <b>Travemünde</b>  | -      | €2.84  | €1.60      | €0.70    | €0.50    | €0.50          |
| <b>Puttgarden</b>  | €12.76 | -      | -          | -        | -        | -              |
| <b>Rostock</b>     | -      | €4.46  | €2.03      | €0.71    | €0.50    | €0.50          |
| <b>Sassnitz</b>    | -      | €2.65  | €2.02      | €0.80    | €0.50    | €0.50          |
| <b>Swinoujście</b> | -      | €1.62  | €1.49      | €0.80    | €0.50    | €0.50          |

Source: UNICONCONSULT

The following average speeds have been used for the duration of transport on the section that occurs on land:

- Lorry: 70 km per hour (in Poland 40 km per hour) plus legal driving and rest times,
- Rail: 50 km per hour (in Poland 35 km per hour) plus 2 hours waiting time at the departure terminal and again at the destination terminal.

For the ferry crossing the durations of journey are to be derived from the following table. In addition, 3 hours waiting time at the port are assumed, regardless of whether the preceding or following journey is made by lorry or CT.

**Table 5** Duration of ferry crossing (in hours)

|                    | Rödby | Gedser | Trelleborg | Klaipeda | Helsinki | St. Petersburg |
|--------------------|-------|--------|------------|----------|----------|----------------|
| <b>Kiel</b>        | -     | 5      | 9          | 21       | 31       | 35             |
| <b>Travemünde</b>  | -     | 4      | 7.5        | 20       | 28       | 32             |
| <b>Puttgarden</b>  | 1     | -      | -          | -        | -        | -              |
| <b>Rostock</b>     | -     | 1.75   | 6          | 19       | 27       | 31             |
| <b>Sassnitz</b>    | -     | 3.5    | 4          | 18       | 26       | 30             |
| <b>Swinoujście</b> | -     | 5      | 7.5        | 17       | 25       | 29             |

Source: UNICONCONSULT

Finally, the following values are assumed for the determination of environmental damage depending on the transport carrier.

**Table 6** CO<sub>2</sub> emissions of the transport carriers considered

|                           |       |              |
|---------------------------|-------|--------------|
| Lorry                     | 933   | g/km         |
| CT                        | 450   | g/Trailer-km |
| Ferry boat and ro-ro boat | 1,390 | g/Trailer-km |

Source: UNICONCONSULT

## Results

The result of the evaluation of the corridors when considered exclusively on the criterion of transport costs is presented in Table 7. In each link only the best two routes are considered. If they comprise part of the Scandinavian–Adriatic Corridor, they are shown in red.

The Scandinavian–Adriatic Corridor is the leader in 14 out of the 20 links, in which the route via Sassnitz comes out as particularly successful. Rostock shows clear advantages in the case of Gedser/Rödby traffic. The main competitor is the CETC via Swinoujście, while the West Corridor occurs in only one link as being among the two best situated routes.

**Table 7 Overview of transport costs calculation**

|               |    | Gedser/<br>Rödby | Trelleborg/<br>Malmö | Klaipeda            | Helsinki            | St. Petersburg      |
|---------------|----|------------------|----------------------|---------------------|---------------------|---------------------|
| <b>Munich</b> | 1. | Rostock (CT)     | Sassnitz (CT)        | Sassnitz (CT)       | Sassnitz (CT)       | Sassnitz (CT)       |
|               | 2. | Rostock (Lorry)  | Rostock (CT)         | Rostock (CT)        | Rostock (CT)        | Rostock (CT)        |
| <b>Vienna</b> | 1. | Rostock (CT)     | Sassnitz (CT)        | Swinoujście (CT)    | Swinoujście (CT)    | Swinoujście (CT)    |
|               | 2. | Swinoujście (CT) | Swinoujście (CT)     | Sassnitz (CT)       | Sassnitz (CT)       | Sassnitz (CT)       |
| <b>Verona</b> | 1. | Rostock (CT)     | Sassnitz (CT)        | Sassnitz (CT)       | Sassnitz (CT)       | Sassnitz (CT)       |
|               | 2. | Travemünde (CT)  | Rostock (CT)         | Rostock (CT)        | Rostock (CT)        | Rostock (CT)        |
| <b>Prague</b> | 1. | Rostock (Lorry)  | Sassnitz (CT)        | Swinoujście (Lorry) | Swinoujście (Lorry) | Swinoujście (Lorry) |
|               | 2. | Rostock (CT)     | Rostock (Lorry)      | Sassnitz (CT)       | Sassnitz (CT)       | Sassnitz (CT)       |

Source: UNICONCONSULT

Table 8 contains the results when the duration of the transport is considered. The fastest two routes are shown for each link. If they comprise part of the Scandinavian–Adriatic Corridor, they are shown in red.

When considered exclusively on the basis of transport speed, the Scandinavian–Adriatic Corridor is the leader in 16 out of the 20 links, of which 12 are via the Rostock route. The main competitor in the case of transports in the eastern Baltic Sea area is the CETC. On the links from/to Gedser/Rödby and Trelleborg/Malmö the future fixed crossing at Fehmarn Belt will be the greatest competitor.

**Table 8 Overview of the calculation of the duration of transport**

|               |    | Gedser/<br>Rödby     | Trelleborg/<br>Malmö | Klaipeda            | Helsinki            | St. Petersburg      |
|---------------|----|----------------------|----------------------|---------------------|---------------------|---------------------|
| <b>Munich</b> | 1. | Fehmarn Belt (CT)    | Sassnitz (CT)        | Rostock (CT)        | Rostock (CT)        | Rostock (CT)        |
|               | 2. | Rostock (CT)         | Fehmarn Belt (CT)    | Sassnitz (CT)       | Sassnitz (CT)       | Sassnitz (CT)       |
| <b>Vienna</b> | 1. | Rostock (CT)         | Sassnitz (CT)        | Rostock (CT)        | Rostock (CT)        | Rostock (CT)        |
|               | 2. | Fehmarn Belt (CT)    | Rostock (CT)         | Swinoujscie (CT)    | Swinoujscie (CT)    | Swinoujscie (CT)    |
| <b>Verona</b> | 1. | Rostock (Lorry)      | Sassnitz (Lorry)     | Rostock (Lorry)     | Rostock (Lorry)     | Rostock (Lorry)     |
|               | 2. | Fehmarn Belt (Lorry) | Rostock (Lorry)      | Swinoujscie (Lorry) | Swinoujscie (Lorry) | Swinoujscie (Lorry) |
| <b>Prague</b> | 1. | Rostock (Lorry)      | Sassnitz (Lorry)     | Swinoujscie (Lorry) | Swinoujscie (Lorry) | Swinoujscie (Lorry) |
|               | 2. | Sassnitz (Lorry)     | Rostock (Lorry)      | Rostock (Lorry)     | Rostock (Lorry)     | Rostock (Lorry)     |

Source: UNICONSULT

The two environmentally most friendly routes for each link are to be derived from Table 9. If they comprise part of the Scandinavian–Adriatic Corridor, they are shown in red.

When considered exclusively on the basis of CO<sub>2</sub> emissions, the Scandinavian–Adriatic Corridor is the best alternative in 14 out of 20 links, in particular via the Sassnitz route into the eastern Baltic Sea. The main competitor in the case of these transports is the CETC. In the links from/to Gedser/Rödby and Trelleborg/Malmö Rostock comes out better than Sassnitz. The future fixed crossing at Fehmarn Belt appears set to be the greatest competitor from a purely environmental perspective.

**Table 9 Overview of the calculation of CO<sub>2</sub> emissions**

|               |    | Gedser/<br>Rödby  | Trelleborg/<br>Malmö | Klaipeda         | Helsinki         | St. Petersburg   |
|---------------|----|-------------------|----------------------|------------------|------------------|------------------|
| <b>Munich</b> | 1. | Fehmarn Belt (CT) | Fehmarn Belt (CT)    | Sassnitz (CT)    | Sassnitz (CT)    | Sassnitz (CT)    |
|               | 2. | Linear route (CT) | Linear route (CT)    | Swinoujscie (CT) | Swinoujscie (CT) | Swinoujscie (CT) |
| <b>Vienna</b> | 1. | Rostock (CT)      | Fehmarn Belt (CT)    | Sassnitz (CT)    | Sassnitz (CT)    | Sassnitz (CT)    |
|               | 2. | Fehmarn Belt (CT) | Sassnitz (CT)        | Swinoujscie (CT) | Swinoujscie (CT) | Swinoujscie (CT) |
| <b>Verona</b> | 1. | Fehmarn Belt (CT) | Fehmarn Belt (CT)    | Sassnitz (CT)    | Sassnitz (CT)    | Sassnitz (CT)    |
|               | 2. | Linear route (CT) | Linear route (CT)    | Swinoujscie (CT) | Swinoujscie (CT) | Swinoujscie (CT) |
| <b>Prague</b> | 1. | Rostock (CT)      | Fehmarn Belt (CT)    | Sassnitz (CT)    | Sassnitz (CT)    | Sassnitz (CT)    |
|               | 2. | Fehmarn Belt (CT) | Sassnitz (CT)        | Swinoujscie (CT) | Swinoujscie (CT) | Swinoujscie (CT) |

Source: UNICONSULT

The results when all three criteria are considered are contained in Table 10. Again, the best two routes for each link are shown. If they comprise part of the Scandinavian–Adriatic Corridor, they are shown in red.

In 16 out of the 20 links, the Scandinavian–Adriatic Corridor is shown as being the best alternative. The Sassnitz route is the leading axis in 13 cases, while the route via Rostock comes out particularly well in links from/to Gedser/Rödby. The main competitor for transports to Klaipeda, Helsinki and St. Petersburg is the CETC; for the links from/to Gedser/Rödby it will be the West Corridor through the future fixed crossing at Fehmarn Belt after its completion. In the case of transports from/to Trelleborg/Malmö the Scandinavian–Adriatic Corridor even in all cases is in the first two places.

**Table 10 Overview of the results when all the evaluation criteria are considered**

|               |    | Gedser/<br>Rödby  | Trelleborg/<br>Malmö | Klaipeda         | Helsinki         | St. Petersburg      |
|---------------|----|-------------------|----------------------|------------------|------------------|---------------------|
| <b>Munich</b> | 1. | Fehmarn Belt (CT) | Sassnitz (CT)        | Sassnitz (CT)    | Sassnitz (CT)    | Sassnitz (CT)       |
|               | 2. | Rostock (CT)      | Rostock (CT)         | Swinoujscie (CT) | Rostock (CT)     | Rostock (CT)        |
| <b>Vienna</b> | 1. | Rostock (CT)      | Sassnitz (CT)        | Swinoujscie (CT) | Swinoujscie (CT) | Swinoujscie (CT)    |
|               | 2. | Fehmarn Belt (CT) | Rostock (CT)         | Sassnitz (CT)    | Sassnitz (CT)    | Sassnitz (CT)       |
| <b>Verona</b> | 1. | Rostock (CT)      | Sassnitz (CT)        | Sassnitz (CT)    | Sassnitz (CT)    | Sassnitz (CT)       |
|               | 2. | Fehmarn Belt (CT) | Rostock (CT)         | Swinoujscie (CT) | Rostock (CT)     | Rostock (CT)        |
| <b>Prague</b> | 1. | Rostock (CT)      | Sassnitz (CT)        | Sassnitz (CT)    | Sassnitz (CT)    | Sassnitz (CT)       |
|               | 2. | Fehmarn Belt (CT) | Rostock (CT)         | Swinoujscie (CT) | Rostock (CT)     | Swinoujscie (Lorry) |

Source: UNICONCONSULT

Hitherto all the theoretically possible logistic chains have been considered, but the analysis is now limited to combinations that currently exist. This excludes the following connections:

- CT from/to Sassnitz, Swinoujscie, and the via the linear route.
- The following ferry connections:
  - from Kiel: to Gedser, Trelleborg, Helsinki
  - from Travemünde: to Gedser, Klaipeda
  - from Rostock: to Klaipeda, St. Petersburg
  - from Sassnitz: to Gedser, Helsinki
  - from Swinoujscie: to Gedser, Klaipeda, Helsinki, St. Petersburg.

In this way the number of possible logistic chains is reduced from 232 to 104.

The results when the above-mentioned restrictions are taken into consideration are presented in Table 11.

There are no noteworthy changes to the positive statements previously made regarding the Scandinavian–Adriatic Corridor. It still remains the most attractive corridor. In 13 out of the 20 links examined the route via Mecklenburg–West Pomerania is the most attractive, furthermore the Scandinavian–Adriatic Corridor is the second-best alternative in at least five links.

It becomes clear that within the Scandinavian–Adriatic Corridor there is a shift in favour of the Rostock route, which takes first place in 11 links, while the Sassnitz axis represents the best choice ‘only’ twice (and the second-best choice three times). The main cause for this shift is firstly the discontinuation of various ferry connections, through which numerous routes are basically no longer available for travel. Furthermore, the partial non-consideration of CT also leads to changes, because, as became clear in the previous section, CT mostly comes out better than exclusively road transport on the assumptions made. This works particularly to the disadvantage of the Sassnitz route, which declines in attraction when travel by lorry is considered exclusively.

**Table 11 Overview of the results when all the evaluation criteria and restrictions are considered**

|               |    | Gedser/<br>Rödby  | Trelleborg/<br>Malmö | Klaipeda         | Helsinki        | St. Petersburg   |
|---------------|----|-------------------|----------------------|------------------|-----------------|------------------|
| <b>Munich</b> | 1. | Fehmarn Belt (CT) | Rostock (CT)         | Kiel (CT)        | Rostock (CT)    | Travemünde (CT)  |
|               | 2. | Rostock (CT)      | Fehmarn Belt (CT)    | Sassnitz (Lorry) | Travemünde (CT) | Kiel (CT)        |
| <b>Vienna</b> | 1. | Rostock (CT)      | Rostock (CT)         | Kiel (CT)        | Rostock (CT)    | Travemünde (CT)  |
|               | 2. | Fehmarn Belt (CT) | Fehmarn Belt (CT)    | Sassnitz (Lorry) | Travemünde (CT) | Kiel (CT)        |
| <b>Verona</b> | 1. | Rostock (CT)      | Rostock (CT)         | Kiel (CT)        | Rostock (CT)    | Travemünde (CT)  |
|               | 2. | Fehmarn Belt (CT) | Fehmarn Belt (CT)    | Sassnitz (Lorry) | Travemünde (CT) | Kiel (CT)        |
| <b>Prague</b> | 1. | Rostock (CT)      | Rostock (CT)         | Sassnitz (Lorry) | Rostock (CT)    | Sassnitz (Lorry) |
|               | 2. | Fehmarn Belt (CT) | Fehmarn Belt (CT)    | Kiel (CT)        | Rostock (Lorry) | Travemünde (CT)  |

Source: UNICONSLT

It needs to be taken into account that the above-mentioned restrictions result from the current market situation and therefore represent only a snapshot at one moment. These restrictions are subject to permanent change, e.g. through the development of new, or the termination of existing, ferry or CT connections, so that in the medium- and long-term perspectives the consideration of all theoretically possible logistic chains for a complete evaluation of the corridors is essentially more meaningful.

### Summing-up

- Thanks to its good road and rail connections to its seaports Mecklenburg–West Pomerania offers outstanding conditions for goods transport on the north–south axis and in the direction of Russia or the Baltic.
- A well-developed transport infrastructure generates additional goods transport, and thereby jobs and value creation in the ports region of the State, but even in the hinterland a high-value infrastructure also contributes to the establishment of logistics-related enterprises.
- The Scandinavian–Adriatic Corridor is outstandingly placed in the competition with the competing corridors.
- The strengths of the Scandinavian–Adriatic Corridor should be presented assertively in the case of the goods-transport economy in the relevant source and target regions, in order to generate further revenue from goods.
- In this way the significance of Mecklenburg–West Pomerania as an important logistic focal point between Scandinavia and southern Europe, and between Scandinavia and south-eastern Europe, as well as in the direction of the Baltic and Russia will increase.

# **APPENDIX**