



Baltic Sea Region
Programme 2007-2013

Part-financed by the European Union
(European Regional Development Fund
and European Neighbourhood and
Partnership Instrument)



EAST WEST
TRANSPORT CORRIDOR II

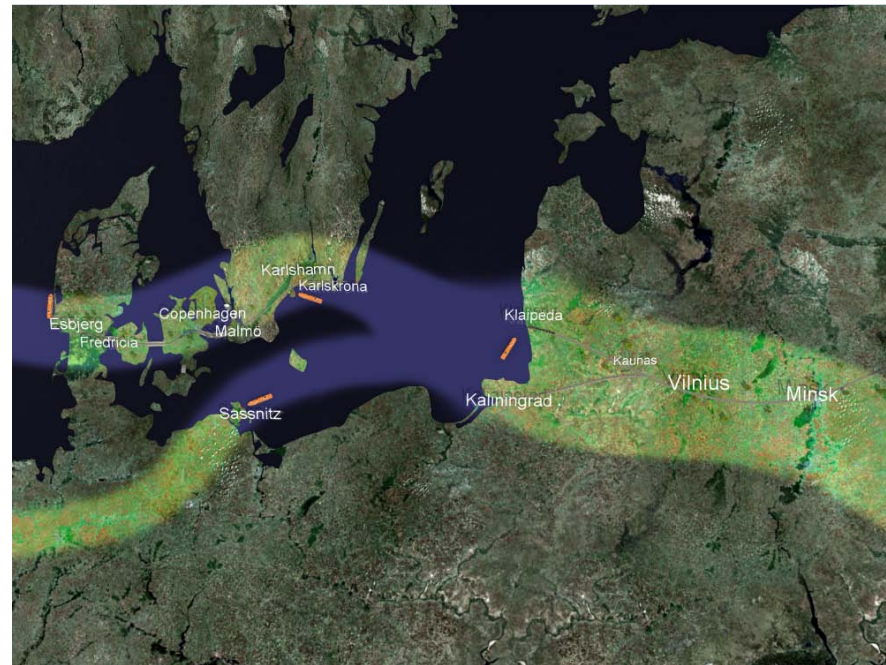


Port of
SASSNITZ

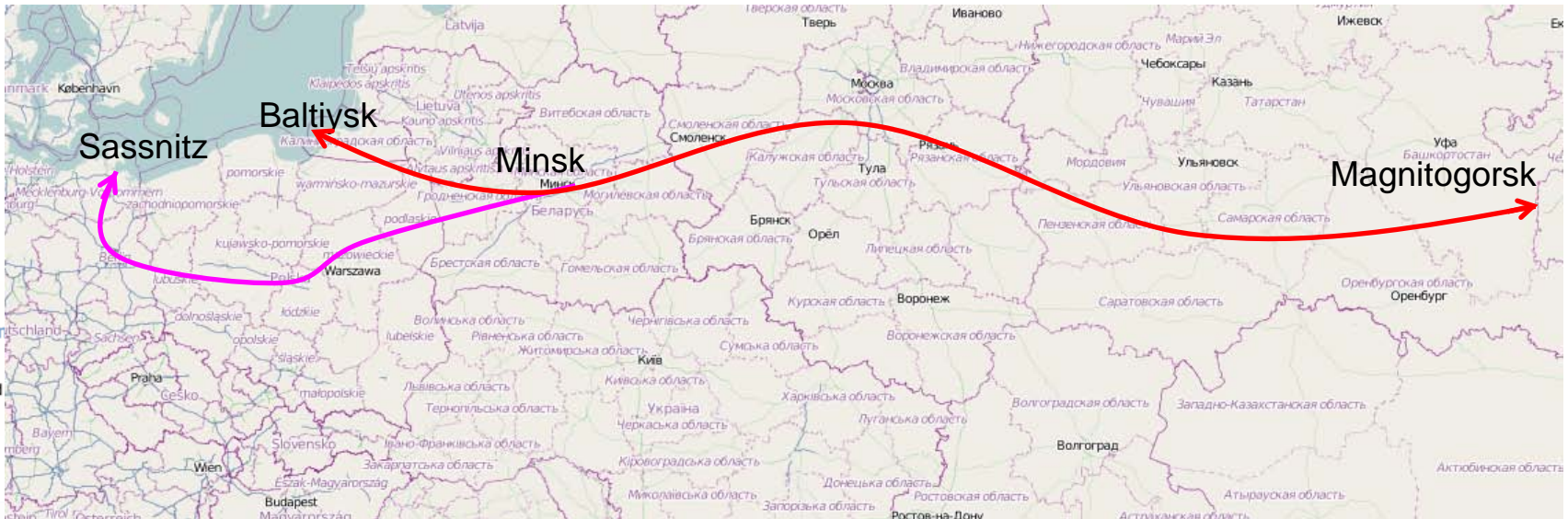
railistics

Report on the Market Study for new Ro-Ro Services

- Heavy Cargo - Summary -



Heavy Cargo Relation 1



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- Cargo: Steel plate (freight weight ca. 70 ton per wagen)
- Relation 1: Magnitogorsk (RU) – Minsk (BY) – Vilnius (LT) – Baltiysk (RU), 3.225 km
- Relation 2: Magnitogorsk (RU) – Minsk (BY) – Brest (BY) – Warschau (PL) – Seddin (DE) – Sassnitz (DE), 4.115 km

Heavy Cargo

Relation 1 – Transport time

To Port Baltiysk

| Country | From | To | Traction system | Distance (km) | Mean speed (km/h) | Travel time (h) | Reserve time (h) | Time on border (h) | Time in operation (h) | |
|-----------|--------------|----------|-----------------|---------------|-------------------|-----------------|------------------|--------------------|-----------------------|-------|
| Russia | Magnitogorsk | Krasnoye | Diesel | 2.372 | 45 | 52,7 | 24 | 2 | 78,7 | |
| Belarus | Krasnoye | Sumskas | Diesel | 428 | 40 | 10,7 | 24 | 2 | 36,7 | |
| Lithuania | Sumskas | Kybartai | Diesel | 227 | 40 | 5,7 | 24 | 2 | 31,7 | |
| Russia | Kybartai | Baltiysk | Diesel | 198 | 45 | 4,4 | 24 | 0 | 28,4 | |
| | | | | 3.225 | | | | | Total: | 175,5 |



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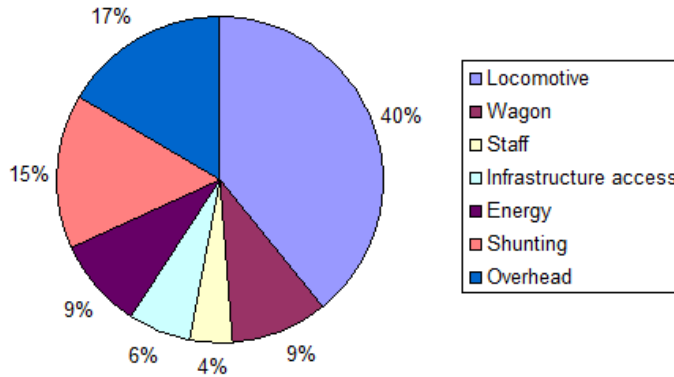
To Sassnitz

| Country | From | To | Traction system | Distance (km) | Mean speed (km/h) | Travel time (h) | Reserve time (h) | Time on border (h) | Time in operation (h) | |
|----------|---------------|---------------|-----------------|---------------|-------------------|-----------------|------------------|--------------------|-----------------------|-------|
| Russland | Magnitogorsk | Krasnoye | Diesel | 2.372 | 45 | 52,7 | 24 | 2 | 78,7 | |
| Belarus | Krasnoye | Brest | 25 kV AC | 604 | 40 | 15,1 | 24 | 48 | 87,1 | |
| Poland | Brest | Frankfurt (O) | 3 kV DC | 668 | 40 | 16,7 | 24 | 2 | 42,7 | |
| Germany | Frankfurt (O) | Sassnitz | 15 kV AC | 471 | 50 | 9,4 | 12 | 0 | 21,4 | |
| | | | | 4.115 | | | | | Total: | 229,9 |

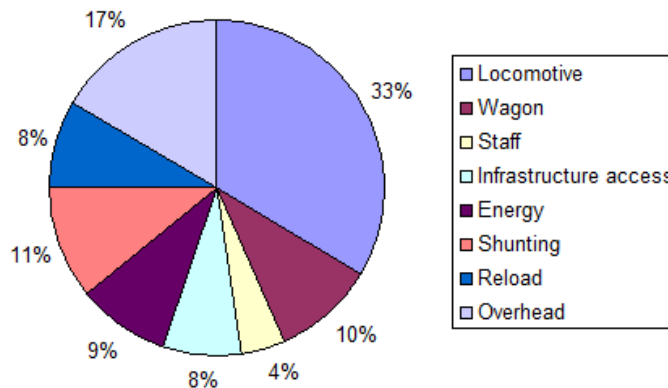


- Transport time between Magnitogorsk and Baltiysk: 175.5 h
- Transport time between Magnitogorsk and Sassnitz via Seddin: 229.9 h

Heavy Cargo Relation 1 – Result

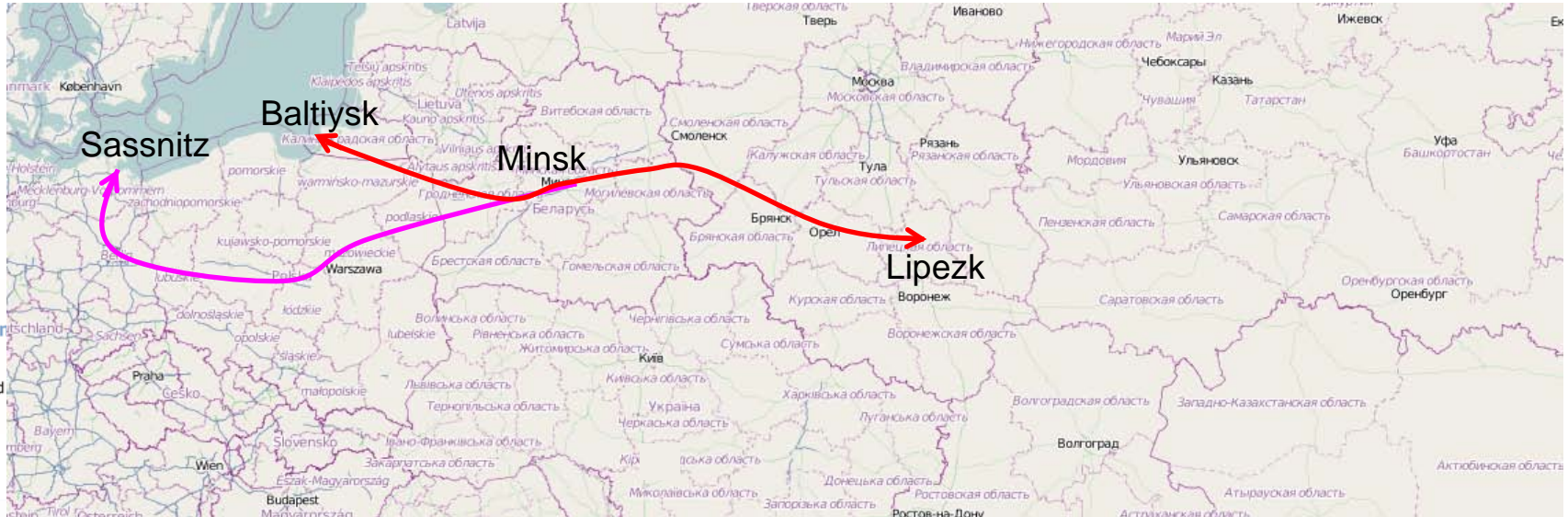


- Transport costs per wagon Magnitogorsk – Baltiysk: 1,960 €
- Costs per wagon-km: 0.61 €
- Costs per ton: 28.10 €



- Transport costs per wagon Magnitogorsk – Sassnitz: 2,700 €
- Costs per wagon-km: 0.66 €
- Costs per ton: 38.60 €

Heavy Cargo Relation 2



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EAST WEST
TRANSPORT CORRIDOR II

**Port of
SASSNITZ**

- Cargo: Steel plate (freight weight ca. 70 ton per wagen)
- Relation 1: Lipezk (RU) – Minsk (BY) – Vilnius (LT) – Baltiysk (RU), 1.593 km
- Relation 2: Lipezk (RU) – Minsk (BY) – Brest (BY) – Warschau (PL) – Seddin (DE) – Sassnitz (DE), 2.483 km

Heavy Cargo

Relation 2 – Transport time

To Port Baltiysk

| Country | From | To | Traction system | Distance (km) | Mean speed (km/h) | Travel time (h) | Reserve time (h) | Time on border (h) | Time in operation (h) | |
|----------|----------|----------|-----------------|---------------|-------------------|-----------------|------------------|--------------------|-----------------------|-------|
| Russland | Lipezk | Krasnoye | Diesel | 740 | 45 | 16,4 | 24 | 2 | 42,4 | |
| Belarus | Krasnoye | Sumskas | Diesel | 428 | 40 | 10,7 | 24 | 2 | 36,7 | |
| Litauen | Sumskas | Kybartai | Diesel | 227 | 40 | 5,7 | 24 | 2 | 31,7 | |
| Russland | Kybartai | Baltiysk | Diesel | 198 | 45 | 4,4 | 24 | 0 | 28,4 | |
| | | | | 1.593 | | | | | Summe: | 139,2 |



To Sassnitz

| Country | From | To | Traction system | Distance (km) | Mean speed (km/h) | Travel time (h) | Reserve time (h) | Time on border (h) | Time in operation (h) | |
|-------------|---------------|---------------|-----------------|---------------|-------------------|-----------------|------------------|--------------------|-----------------------|-------|
| Russland | Lipezk | Krasnoye | Diesel | 740 | 45 | 16,4 | 24 | 2 | 42,4 | |
| Belarus | Krasnoye | Brest | 25 kV AC | 604 | 40 | 15,1 | 24 | 48 | 87,1 | |
| Polen | Brest | Frankfurt (O) | 3 kV DC | 668 | 40 | 16,7 | 24 | 2 | 42,7 | |
| Deutschland | Frankfurt (O) | Sassnitz | 15 kV AC | 471 | 50 | 9,4 | 12 | 0 | 21,4 | |
| | | | | 2.483 | | | | | Summe: | 193,7 |

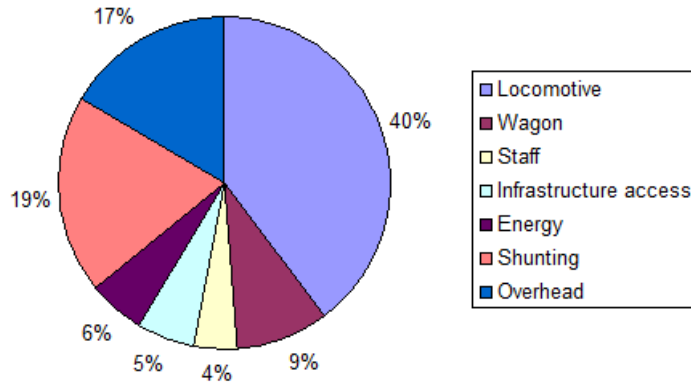


- Transport time between Lipezk and Baltiysk: 139.2 h
- Transport time between Lipezk and Sassnitz via Seddin: 193.7 h

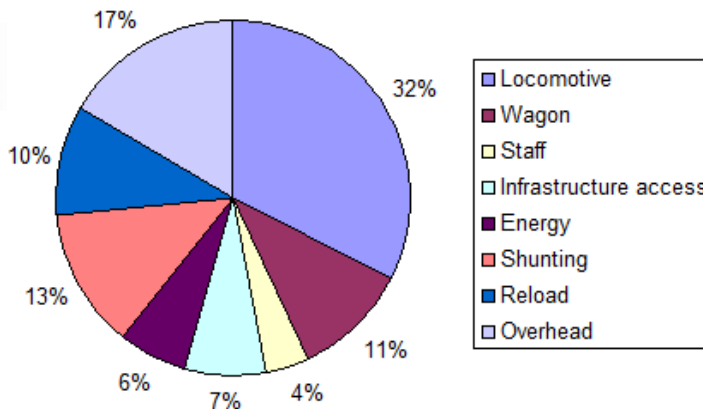
Heavy Cargo Relation 2 – Result



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- Transport costs per wagon Lipezk – Baltiysk: 1,550 €
- Costs per wagon-km: 0,97 €
- Costs per ton: 22,08 €



- Transport costs per wagon Lipezk – Sassnitz: 2.310 €
- Costs per wagon-km: 0,93 €
- Costs per ton: 32,97 €



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TRANSPORT CORRIDOR II

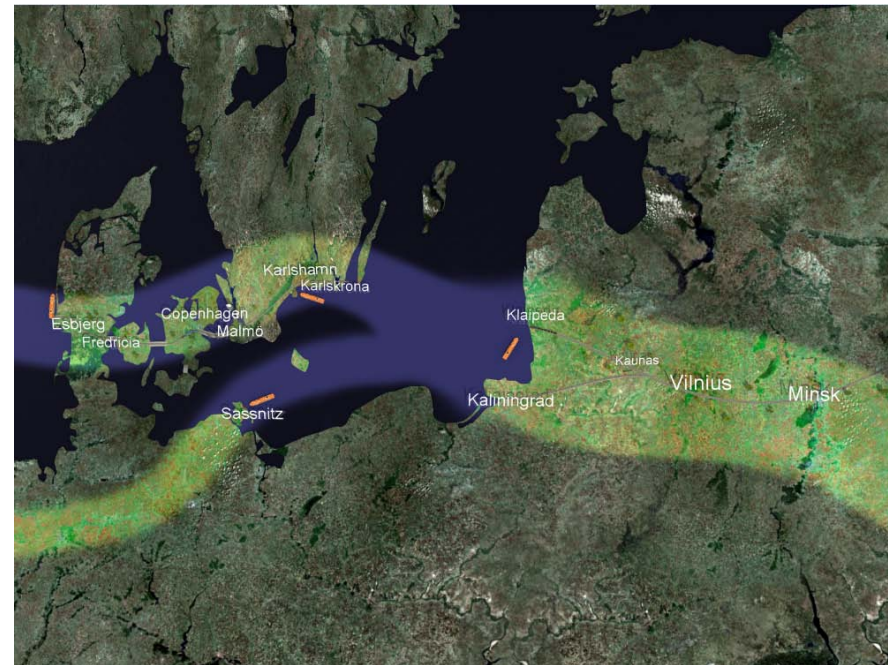


Port of
SASSNITZ

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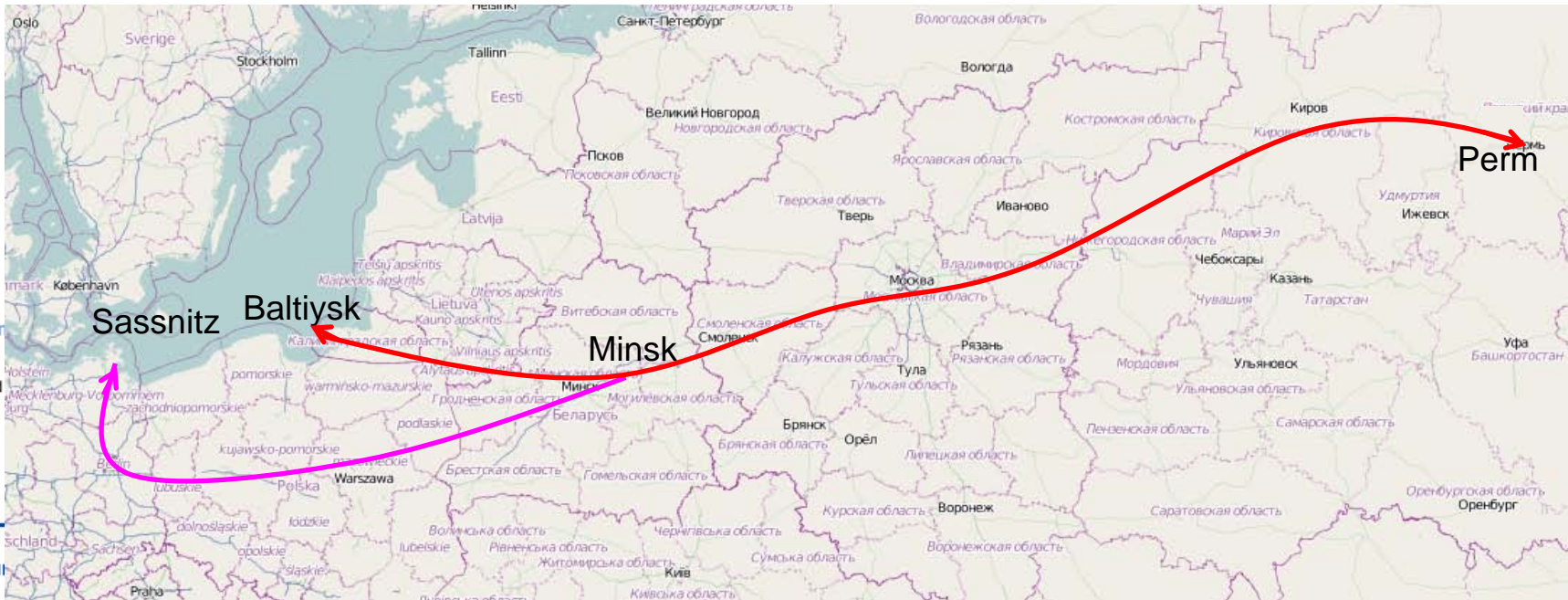
- Chemical Cargo - Summary -



Chemical Cargo Relation



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- Cargo: Chemical liquid
- Relation 1: Perm (RU) – Minsk (BY) – Vilnius (LT) – Baltiysk (RU), 2,805 km
- Relation 2: Perm (RU) – Minsk (BY) – Brest (BY) – Warschau (PL) – Seddin (DE) – Sassnitz (DE), 3,695 km

Chemical Cargo Transport time

To Port Baltiysk

| Country | From | To | Traction system | Distance (km) | Mean speed (km/h) | Travel time (h) | Reserve time (h) | Time on border (h) | Time in operation (h) |
|-----------|----------|----------|-----------------|---------------|-------------------|-----------------|------------------|--------------------|-----------------------|
| Russia | Perm | Krasnoye | Diesel | 1.952 | 45 | 43,4 | 24 | 2 | 69,4 |
| Belarus | Krasnoye | Sumskas | Diesel | 428 | 40 | 10,7 | 24 | 2 | 36,7 |
| Lithuania | Sumskas | Kybartai | Diesel | 227 | 40 | 5,7 | 24 | 2 | 31,7 |
| Russia | Kybartai | Baltiysk | Diesel | 198 | 45 | 4,4 | 24 | 0 | 28,4 |

2.805

Summe:

166,2



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To Sassnitz

| Country | From | To | Traction system | Distance (km) | Mean speed (km/h) | Travel time (h) | Reserve time (h) | Time on border (h) | Time in operation (h) |
|---------|---------------|---------------|-----------------|---------------|-------------------|-----------------|------------------|--------------------|-----------------------|
| Russia | Magnitogorsk | Krasnoye | Diesel | 1.952 | 45 | 43,4 | 24 | 2 | 69,4 |
| Belarus | Krasnoye | Brest | 25 kV AC | 604 | 40 | 15,1 | 24 | 48 | 87,1 |
| Poland | Brest | Frankfurt (O) | 3 kV DC | 668 | 40 | 16,7 | 24 | 2 | 42,7 |
| Germany | Frankfurt (O) | Sassnitz | 15 kV AC | 471 | 50 | 9,4 | 12 | 0 | 21,4 |

3.695

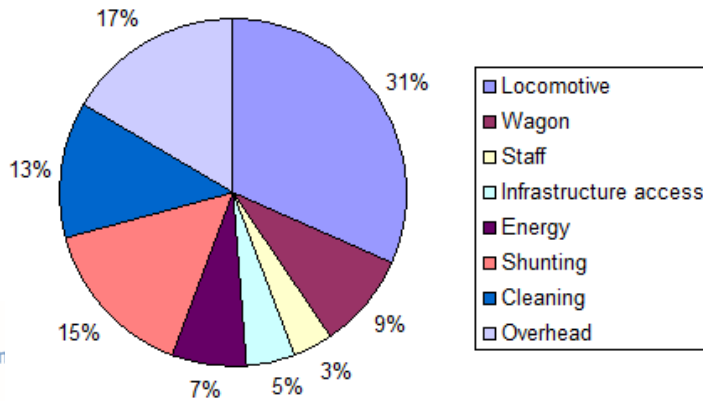
Summe:

220,6



- Transport time between Perm and Baltiysk: 166.2 h
- Transport time between Perm and Sassnitz via Seddin: 220.6 h

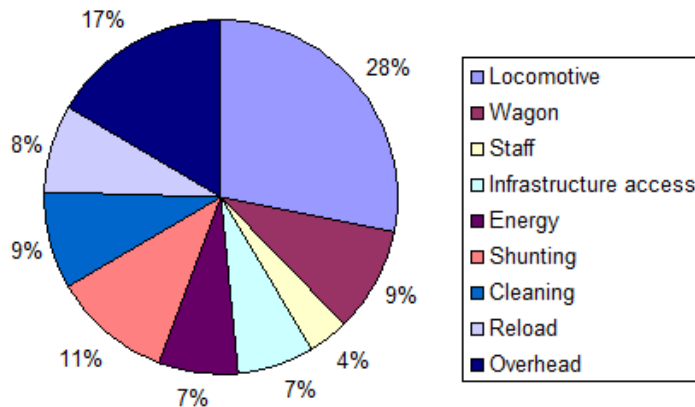
Chemical Cargo Result



- Transport costs per wagon Perm – Baltiysk: 1,970 €
- Costs per wagon-km: 0.70 €
- Costs per ton: 32.89 €



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- Transport costs per wagon Perm – Sassnitz: 2,810 €
- Costs per wagon-km: 0.76 €
- Costs per ton: 46.89 €