

The power of intermodality.



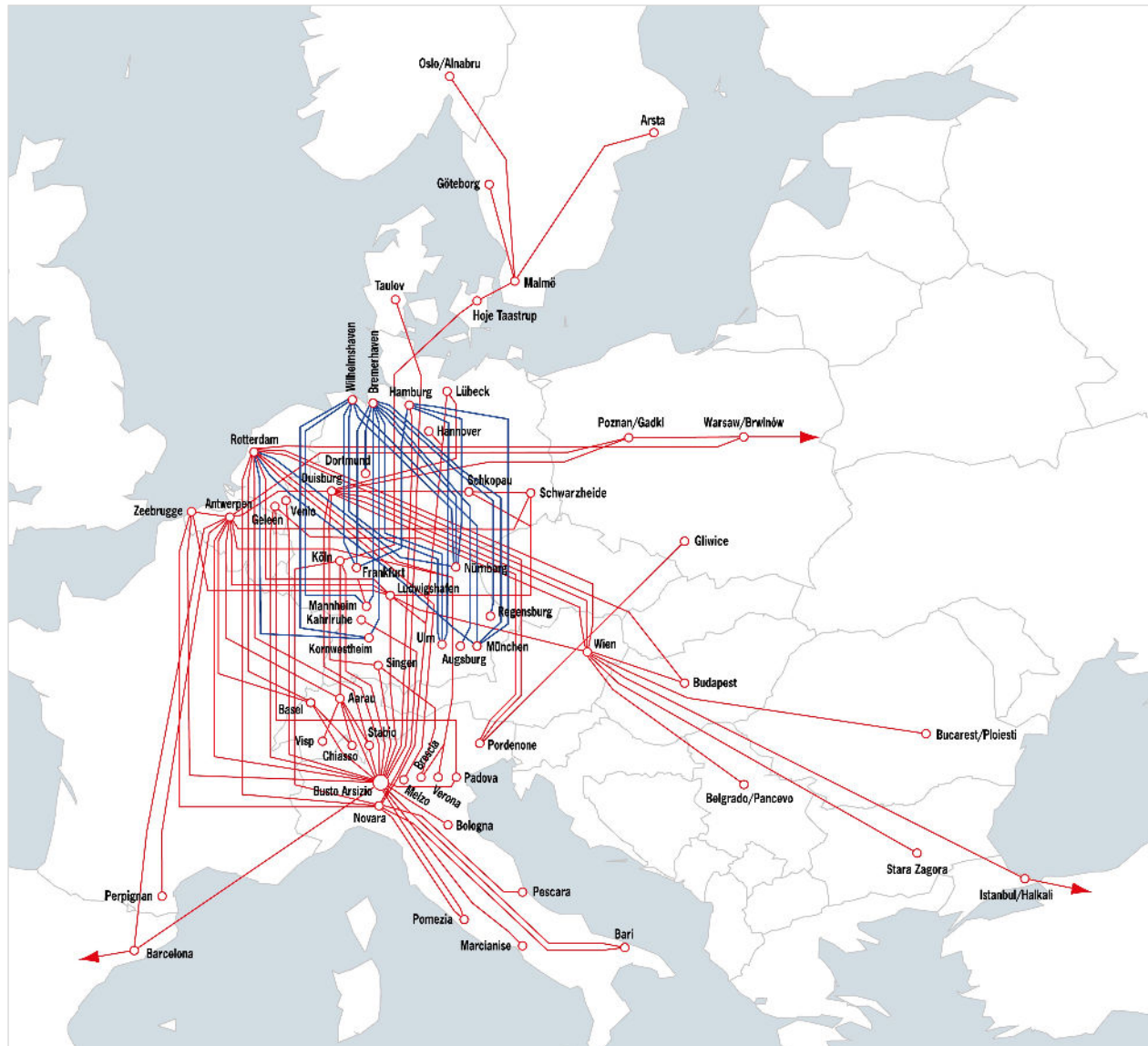
Investing into transport infrastructures

Capacity, productivity and resilience for **MORE FREIGHT**

Irmtraut Tonndorf
Director Communication & Marketing
Florence, 27.10.2023



Hupac Group. We invest in sustainable logistics – since 1967



1,104,000 road consignments
2,104,000 TEU



1.5 million tonnes CO₂
greenhouse gas saved



150 trains per day
in the network of the Hupac Group



12 terminals
managed by the Hupac Group



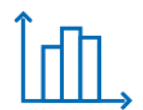
20 railway partners
selected for specific relations



9,100 rail platforms
completely low-noise



680 staff members
on a full-time basis



CHF 668.5 million – EUR 665 million
annual turnover

Daily infrastructure deficiencies create DISRUPTION in quality and capacity.

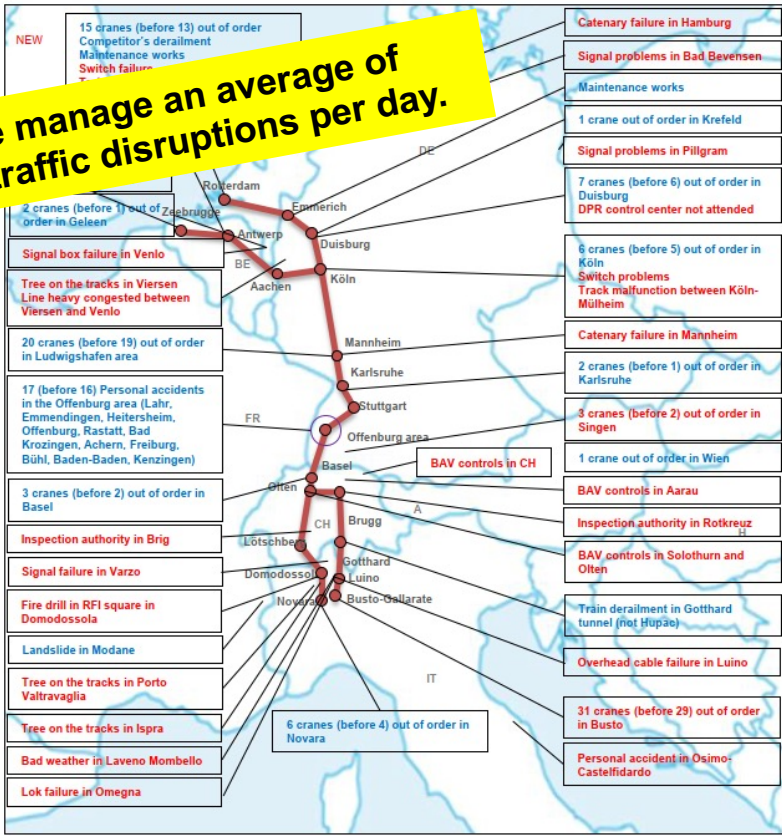
- Average delay 5-8 h per train
- More than 4 h delay destroys transport chains

10-20% of trains are canceled

Significant WASTE:
 Paths
 Locomotives & Drivers
 Terminals & Wagons
 Trucks and Drivers

RISK:
 Loss of productivity
 Loss of confidence
 Traffic relocation

Frequent disturbances on the Hupac train lines (until w38)



01.01.2023 – 22.0



PERSONAL ACCIDENT

Germany → 60	Italy → 19
Switzerland → 8	Netherlands → 7
Belgium → 2	Poland → 1
France → 2	Austria → 1



INFRASTRUCTURAL PROBLEMS

Germany → 52	Italy → 22
Switzerland → 8	Netherlands → 2
Belgium → 2	Austria → 2
Hungary → 1	France → 1



TERMINAL PROBLEMS

Germany → 62	Italy → 52
Switzerland → 5	Netherlands → 21
Belgium → 8	Austria → 2
Spain → 2	France → 2



SIGNAL PROBLEMS

Germany → 76	Italy → 27
Switzerland → 13	Netherlands → 10
Belgium → 2	France → 2
Denmark → 2	Poland → 1
Croatia → 1	



BAD WEATHER

Germany → 11	Italy → 9
Switzerland → 0	Netherlands → 2
Belgium → 2	Austria → 4
Serbia → 1	



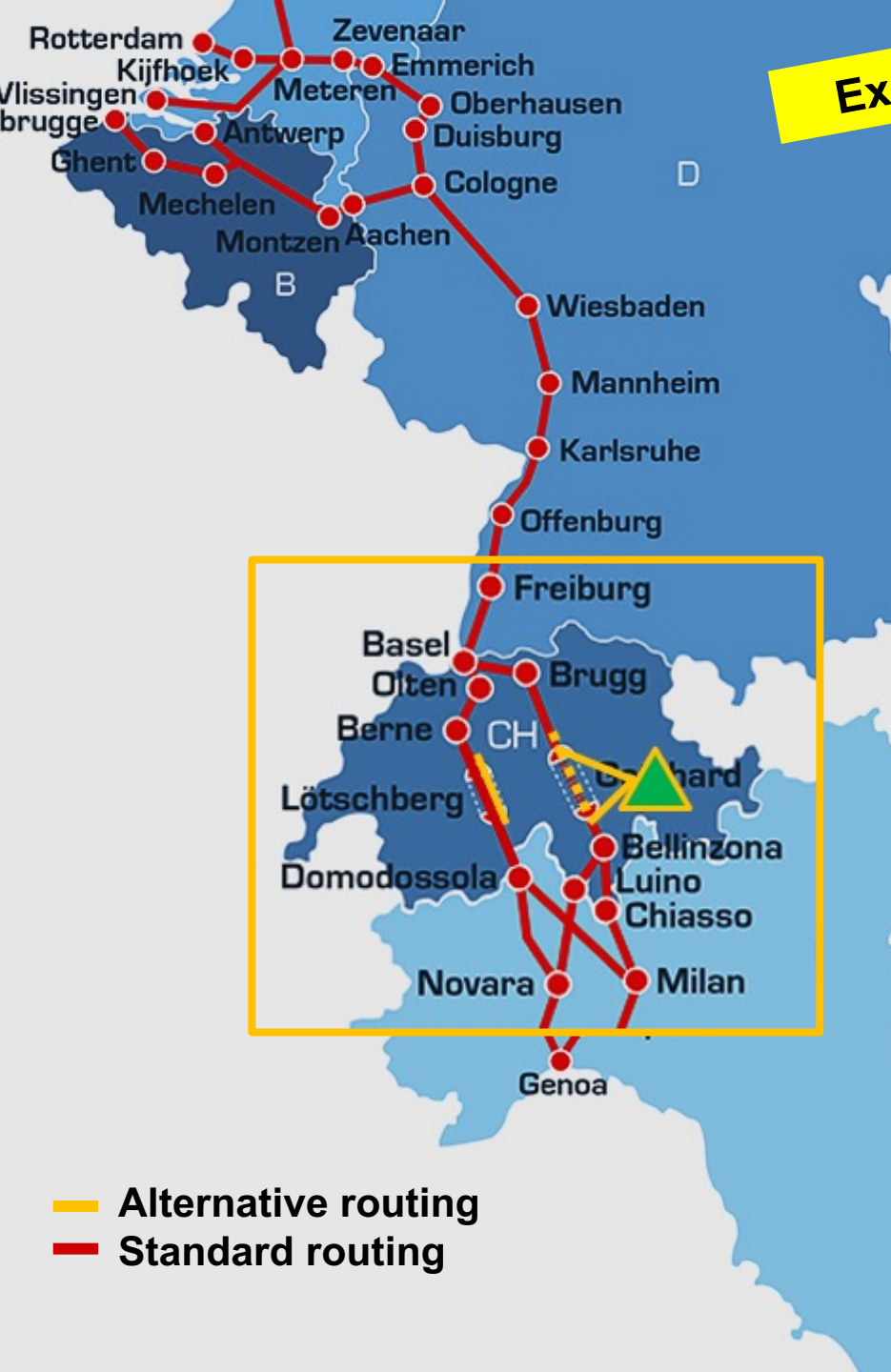
OTHER MOTIVATIONS

Germany → 119	Italy → 42
Switzerland → 51	Netherlands → 19
Belgium → 20	Austria → 4
France → 14	Luxembourg → 1
Sweden → 1	Serbia → 2

Example

Accident Gotthard Base Tunnel, August 2023

Capacity Rhine-Alpine corridor via CH



Alternative routings

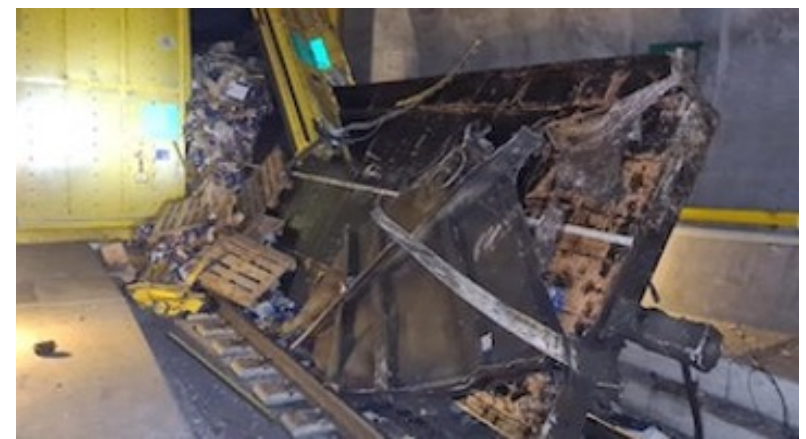
- > via Gotthard base tunnel, single track
- > via Gotthard mountain line, with limited parameters
- > via Lötschberg base tunnel, with limited parameters

Standard routing

- > via Lötschberg base tunnel

Total capacity via CH

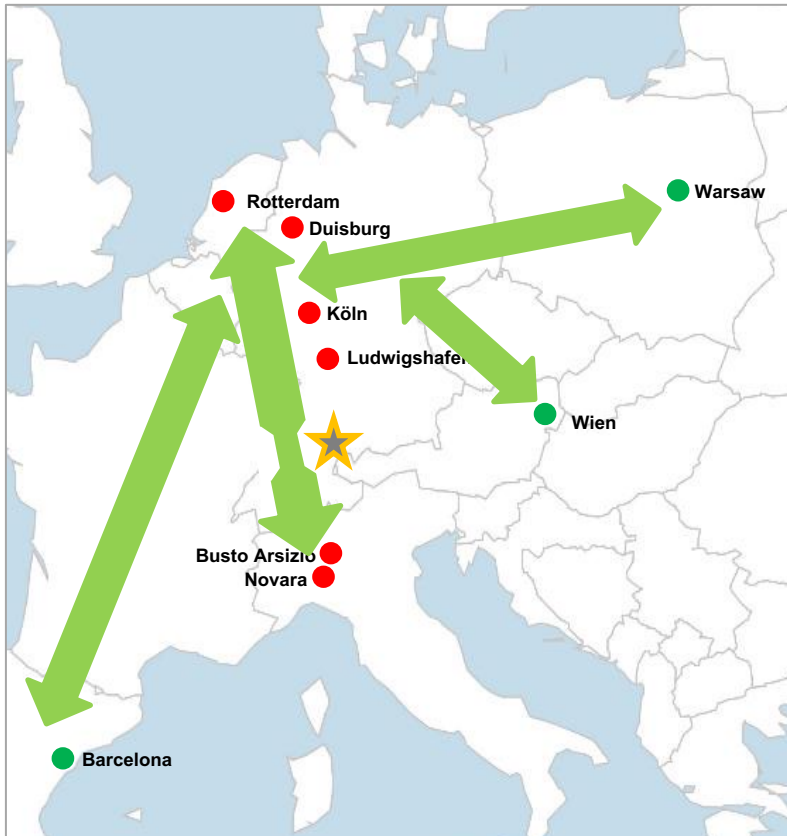
90% *at planning level, weekly buffer capacity needed for system recovery*



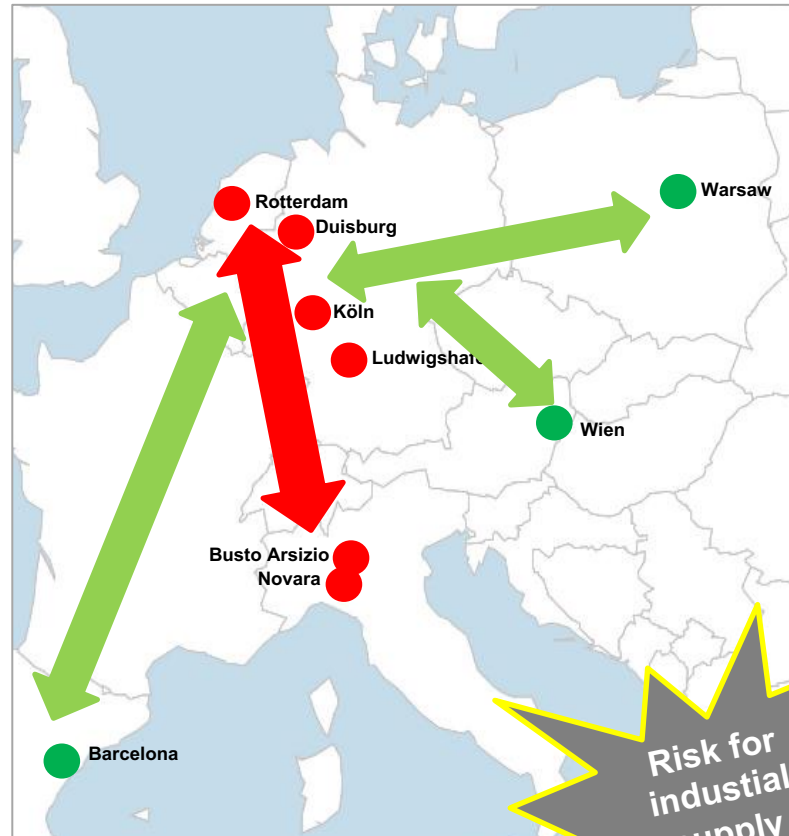
Learning from the Gotthard Base Tunnel closure

Prioritise freight transport; avoid collapse of intermodal supply chains

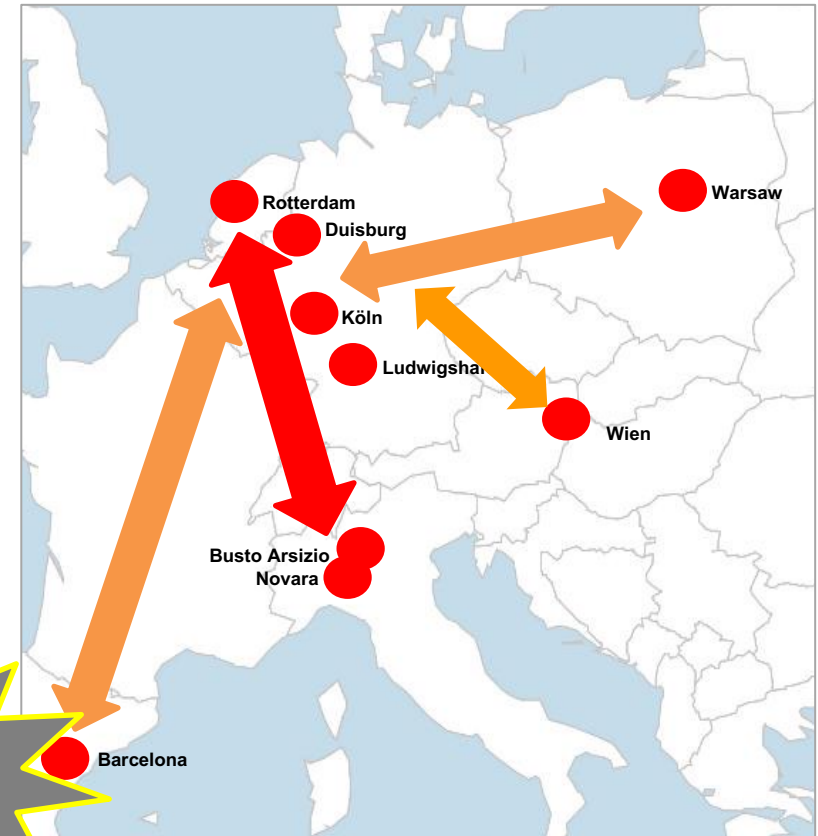
Scenario 1: Backlog in the terminals



Scenario 2: North-south axis collapses



Scenario 3: Europe-wide impact

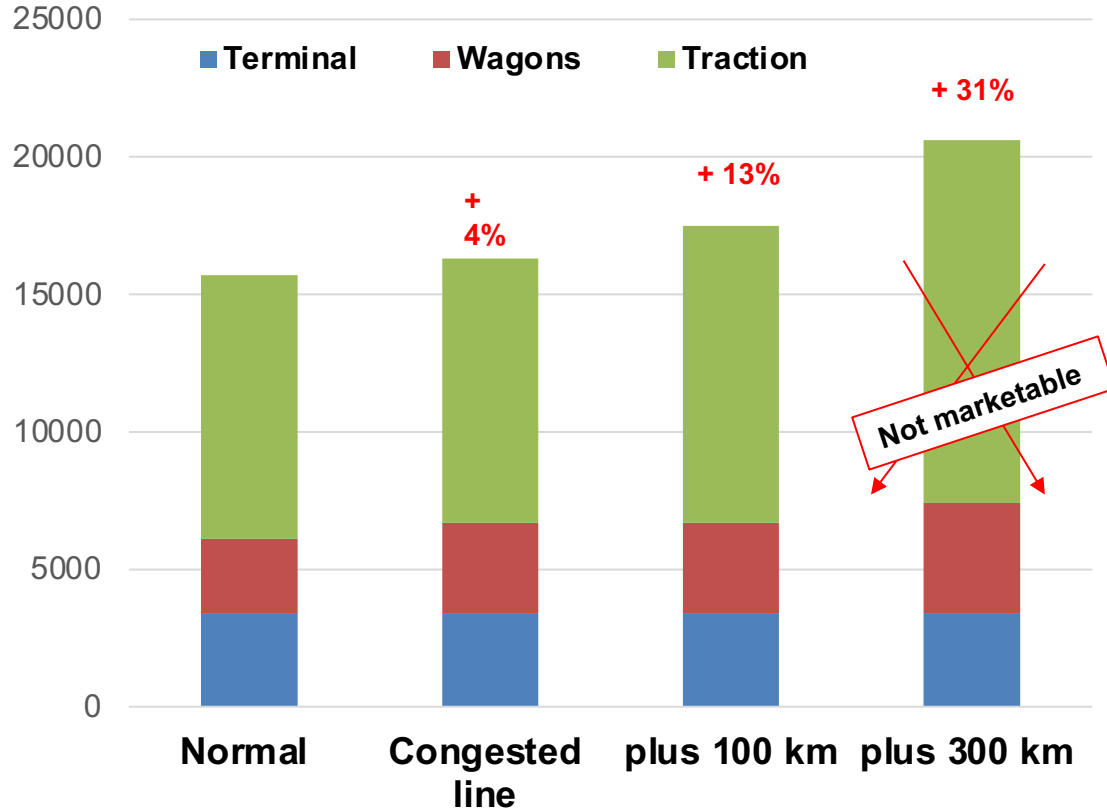


 Single track operation in Gotthard base tunnel
Detours via mountain route and Lötschberg

Temporary capacity restrictions – consequences for freight

Standard train 670 m, 1600 t, P400, 38 wagon platforms, route 800 km

Impact on cost per train



- Traction: without train path cost
- Considers rotation extensions from 4 to 24 hours
- Additional cost burdens not considered

Impact on capacity and productivity

Range

Capacity gap due to lack of paths end-to-end	- 0% to -30%
Capacity gap due to inferior parameters (train length, train parameters, gauge profile)	-10% to -30%
Capacity gap due to deterioration of the timetable (= extended or disrupted rotations)	-10% to -20%
Train cancelations due to overload of line / RU / terminal	-10% to -20%

WORST CASE – an example

- IM can offer only 80% of detour paths
- Parameters are inferior (shorter trains, lighter trains, P400 only partially possible)
- Deviation lines are operationally complex (change of loco, congested lines etc.)



- Empirical values for the Rhine-Alpine freight corridor
- The gap between planned capacity (number of train paths) and realised market performance is 15-40%.

TEN-T network upgrade: focus on capacity, productivity and resilience

That's how we meet the challenge.

- > Freight-friendly parameters on corridors AND rerouting lines:
 - > 740 m train length
 - > 2000 t train weight with 1 loco
 - > High profile for semitrailer transport (P400)
 - > Electrification
- > Management of construction works: 100% end-to-end rerouting capacity for freight transport must be secured
- > More than 50% of rail freight transport is international.
?? WHO is makes sure that a corridor focus is kept in terms of planning, financing AND execution of works?

Example: General renovation of the German network 2024-2030



Revision of TEN-T Guidelines regulation – Proposal of EU Commission 2021

Rail infrastructure including last mile connections to terminals and ports (Art. 14 d)	Core network by 2030✓	Extended core network by 2040	Comprehensive network by 2050
Art. 15 2 a) Fully electrified	✓	✓	✓
Art. 15 2 b) Track gauge 1435	✓	✓	✓
Art. 15 2 c) Axle load of at least 22,5 t	✓	✓	✓
Art. 15 2 d) Train length 740 m			
Art. 15 2 d i) on double track lines, at least for 50% of freight paths, not less than 2 train path per hour and direction	✓	✓	✓
Art. 15 2 d ii) on single track lines, at least 1 train path per 2 hours and direction	✓	✓	✓
Art. 15 2 e) P400		✓	✓
Art. 16 2 a) 100 km/h for freight trains on freight lines		✓	
Art. 16 3 a) 100 km/h for freight trains on freight lines	✓		
Art. 16 4 a) P400 on freight lines	✓		

Reality 2

Revision of TEN-T Guidelines regulation – Detail on parameter 740 m

Parameter 740 m	Core network by 2030	Extended core network by 2040	Comprehensive network by 2050
Original proposal - 2021			
Double track	Min. for 50% of freight paths OR Min. 2 train paths / 1h x direction = 96	Min. for 50% of freight paths OR Min. 2 train paths / 1h x direction = 96	Min. for 50% of freight paths OR Min. 2 train paths / 1h x direction = 96
Single track	Min. 1 train path / 2h x direction = 24		
New proposal – December 2022			
Double track	Min. 1 train path / 2h x direction = 24	Min. 1 train path / 2h x direction = 24	Min. 1 train path/1h x direction = 24 ONLY for port/terminal connection OR rerouting line OR > 10 freight trains/d x direction
Single track	Min. 1 train path/3h x direction = 16 ((min.12))	Min. 1 train path / 2h x direction = 24	Not foreseen

Best way to reach the modal shift?

Our AMBITION:

Combined transport remains THE solution for logistics and climate

The REQUIREMENT:

Capacity, capacity, capacity - in short and long term perspective

