



Black railway year 2017: How to make intermodal logistics more sustainable

Bernhard Kunz, CEO Hupac
VAP Herbstforum, 6.11.2017



We shape the future of intermodal transport

737,000 road shipments

110 trains per day

440 employees

5,500 rail platforms

CHF 470 million turnover

CHF 53.4 million cash flow



100% low-noise wagon fleet

Figures 2016



Combined transport: future-oriented system

EU target: transportation > 300 km on rail or ship; 2030 = 30%, 2050 = 50%

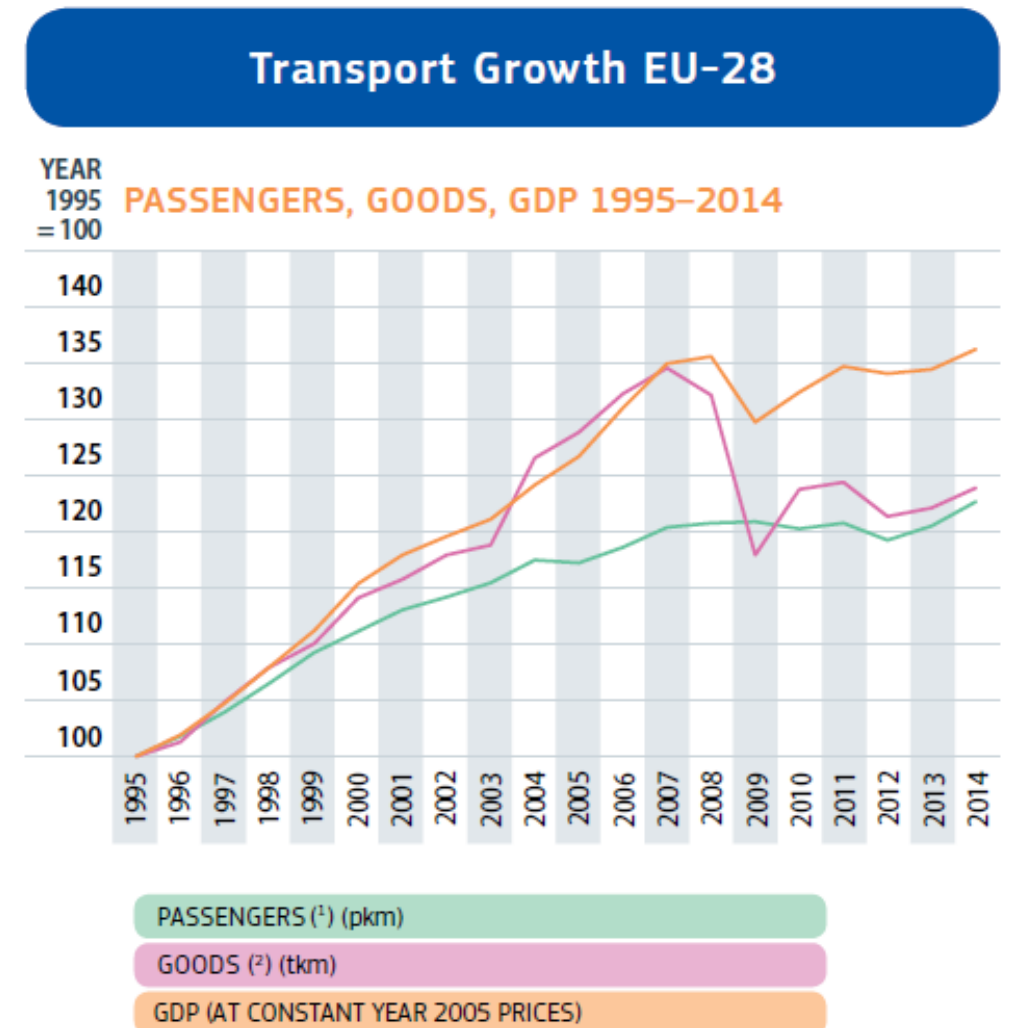
Standardized system	Advantages for all
	
<ul style="list-style-type: none"> > Hundreds of thousands of loading units (containers, swap bodies, semi-trailers) > 700 terminals and ports > 60,000 rail platform > 2,000 cargo locomotives > Long-term system commitment 	<ul style="list-style-type: none"> > 5.9 billion EUR turnover > 41,000 jobs > 18.1 million tons CO₂ reduction > 2.2 billion EUR less external costs

Black railway year 2017: did we loose focus ?



Economic crisis 2008: how it all began

- High offer, low demand
 - Prices under pressure
 - Cost reduction, low investments
 - Less reserves in the system
- Slowdown of market opening
 - Difficulties to access bank funding for private railways
 - Remonopolization
- Passenger trains: constant growth
- Reduced investments into rail and rail freight in various European countries



Since 2015: back on the growth path

Traffic is growing, system is not ready

- ➔ Strong traffic growth
- ➔ Resumption of investments into rail
- ➔ But lack of coordination

Vicious circle of bad quality

Low investments

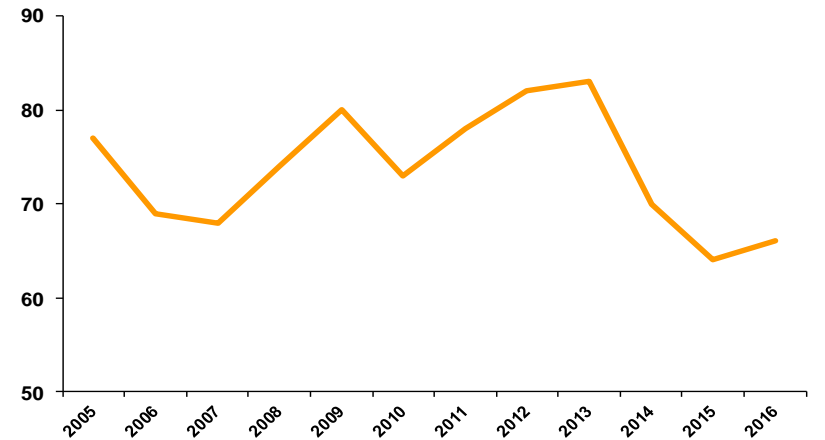
Low profitability



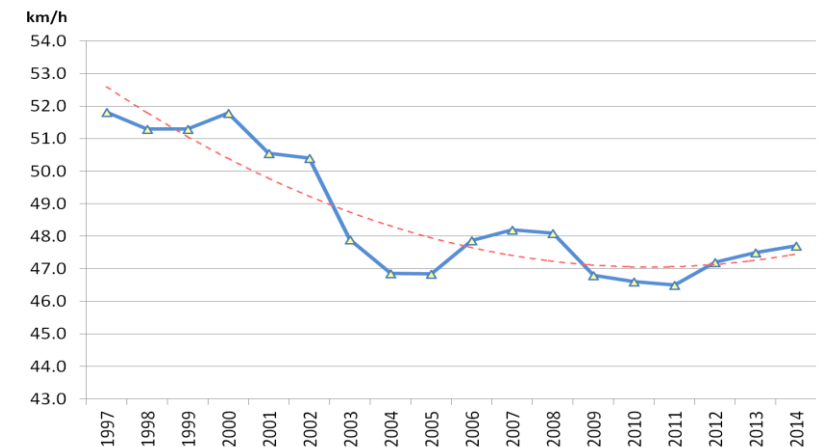
Low performance

Low customer satisfaction

Average punctuality (> 60 min delay) of Hupac trains



Average speed of Hupac trains (planning) on N-S axis



2017 – the black year for railways

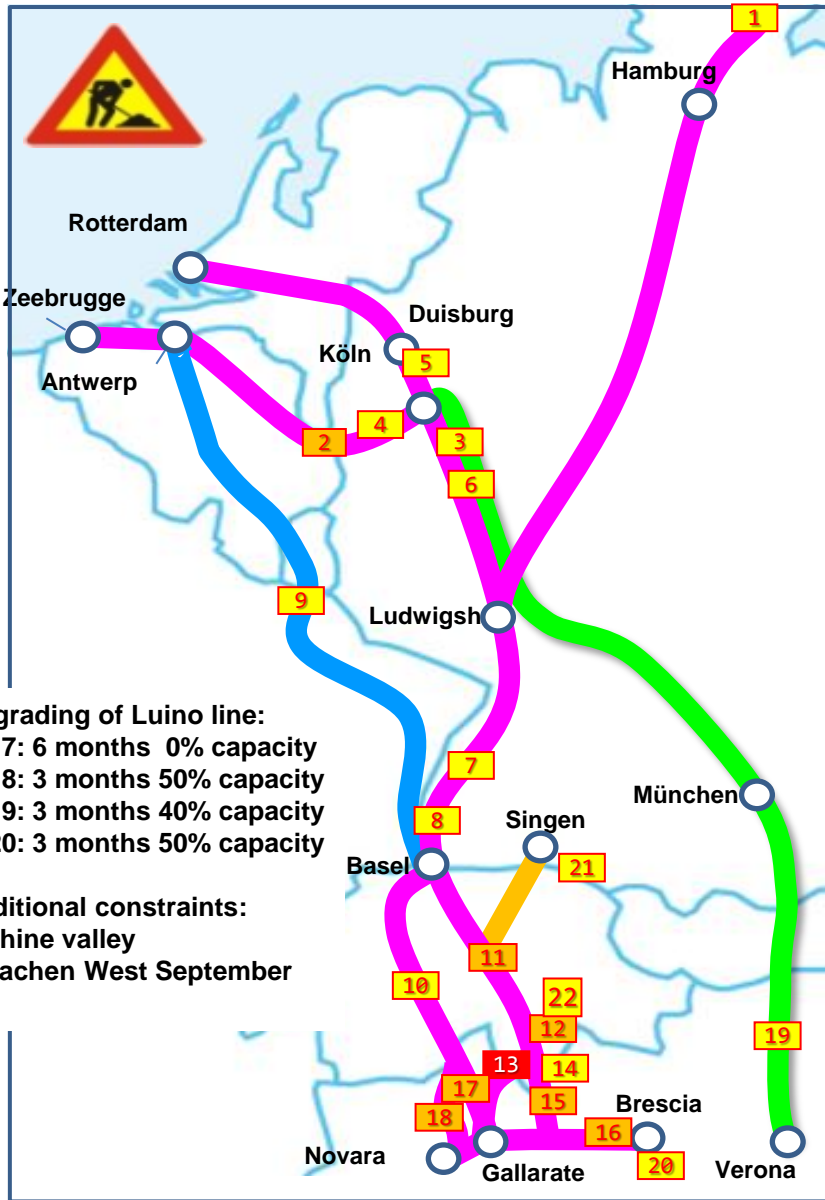
Uncoordinated infrastructure works on Europe's main rail freight corridor



Rastatt: heaviest infrastructure disruption in 50 years of Hupac activity



Multitude of construction sites = high vulnerability of system



Upgrading of Luino line:
 2017: 6 months 0% capacity
 2018: 3 months 50% capacity
 2019: 3 months 40% capacity
 2020: 3 months 50% capacity

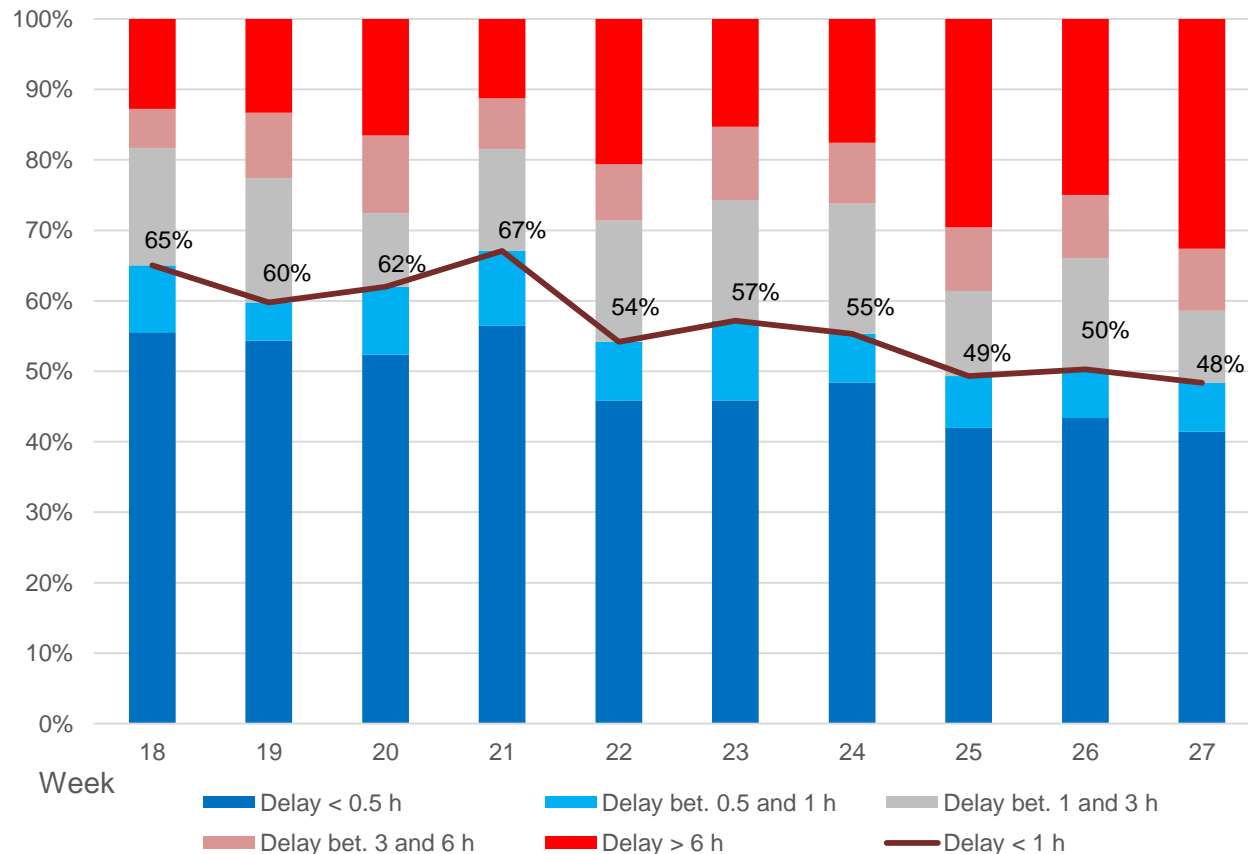
Additional constraints:
 > Rhine valley
 > Aachen West September

Activity	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Remark
1 Ringsted-East Fyn		■						Total closure
2 Aachen West			▬	▬				Restriction&Interruption
3 Troisdorf-Bonn Beuel	←	←	←	←	←	←	←	Daily scheduled
4 Düren		←	←	←	←	←	←	Daily scheduled
5 Krefeld	←	←						Daily scheduled
6 Weissenhrum	←	←						Daily scheduled
7 Emmendingen-Kenzingen		▬	▬					Single track (weekend)
8 Haltingen-Efringen-Kirchen		▬						Single track (weekend)
9 Metz-Nancy	←	←	←	←				Trains diverted LUX
10 Spiez	←	←	←	←				Reduced capacity (infra)
11 Arth Goldau-Altendorf	←	←	←	←	←	←	←	Reduced cap 50%
12 Giubasco-Bellinzona	←	←	←	←	←	←	←	Reduced cap 50%
13 Cadenazzo-Luino		▬	▬	▬	▬	▬	▬	Total closure
14 Maroggia-Melano	←	←	←	←	←	←	←	Tunnel P400
15 Balerna-Chiasso		←	←	←				Works at station
16 Chiasso-Milano	←	←	←	←	←	←	←	IPO
17 Domo-Arona/Gallarate	←	←	←	←	←	←	←	IPO
18 Domo-Borgomanero-Novara	←	←	←	←	←	←	←	IPO
19 Bressanone-Fortezza		▬	▬	▬				Total closure
20 Brescia		▬	▬	▬				Works at station
21 Thayngen		←	←	←	←			Night interruption
22 GBT	←	←	←	←	←	←	←	Reduced capacity

Summer 2017: dramatic drop of punctuality

Increase of heavy delays > 6 h
Average delays at terminal Busto: 15 h

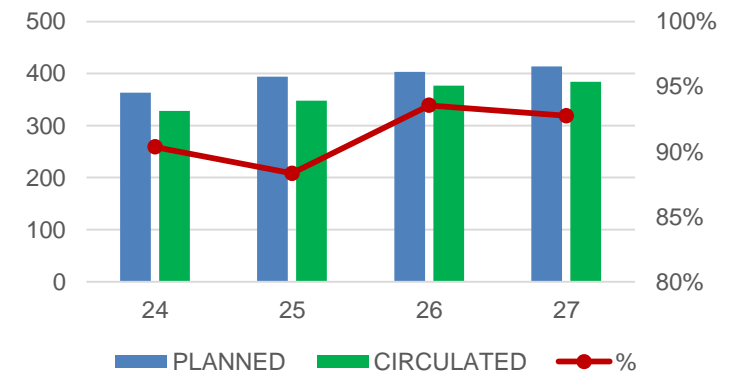
Punctuality of transalpine Hupac trains



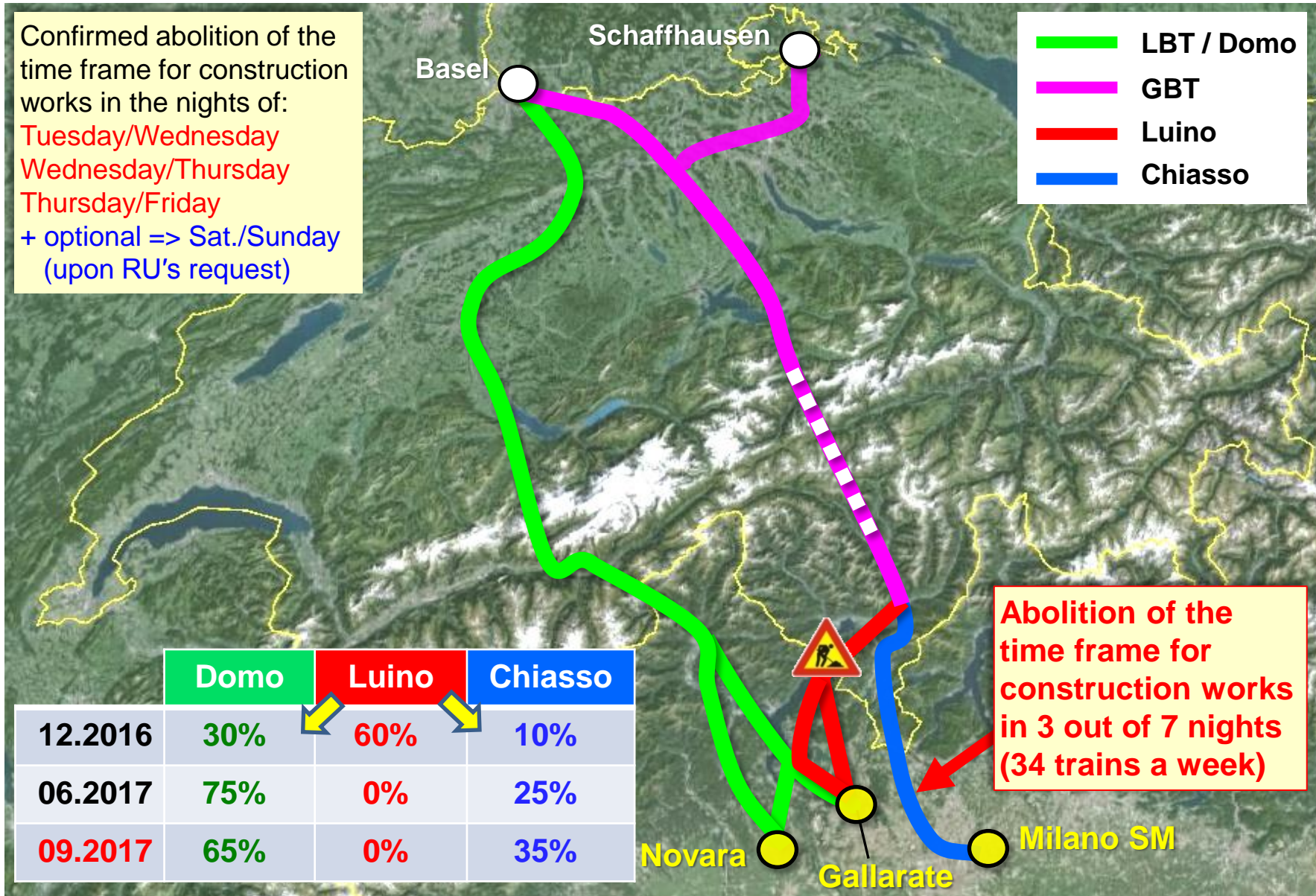
Consequences of infrastructure problems:

- > Loss of train path
- > Loss of engine/engine driver
- > Loss of terminal slot
- > Loss of wagon rotation
- > Loss of volumes/occupancy
- > Loss of customers/customer satisfaction
- > Additional cost for resources
- > Additional cost for recovery

10% of trains cancelled due to bad quality Lack of capacity for extra trains



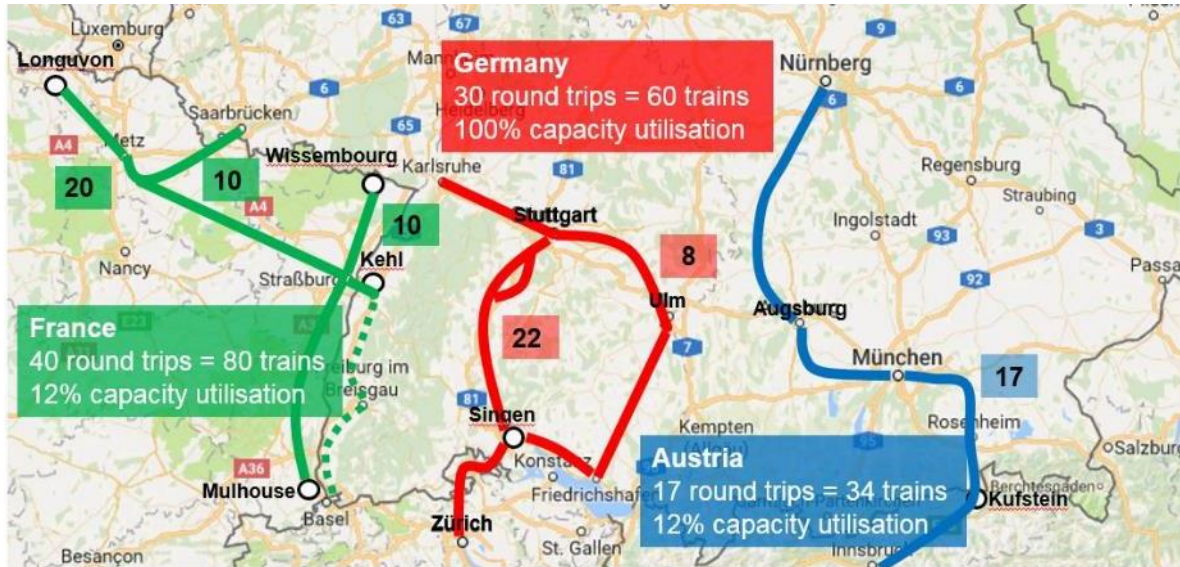
Luino: total closure Jun-Dec 2017 for a future of high performance



Rastatt disruption 12.8. - 2.10.2017: huge damage for industry and transportation



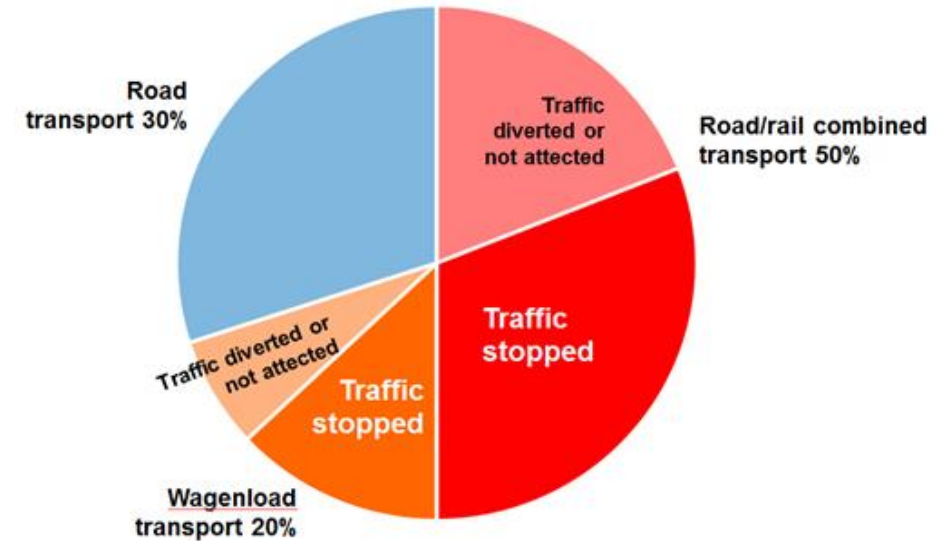
Rail diversions covered only 1/3 of demand



Market demand	200 trains/day
Theoretical capacity	174 trains/day
Technical capacity	150 trains/day
Effective trains	70-80 trains

- Main problems
- > Official language
 - > Route knowledge
 - > Driving licence
 - > Loco type approval

Transit via CH heavily impacted: No solutions for 45% of volumes to/from Italy



Basis: Swiss Federal Office of Transport, 2016

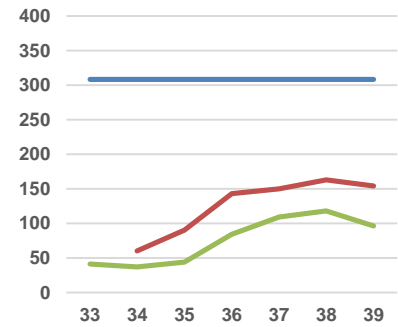
Main affected markets: UK-NL-BE-DE-DK-SE-IT

Hupac's emergency programme



Diverted trains

- via Stuttgart-Singen
- via Sibelit-Basel
- via Saarbrücken/Forbach-Kehl
- via Lauterbourg-Kehl
- via Brenner
- via Tauern

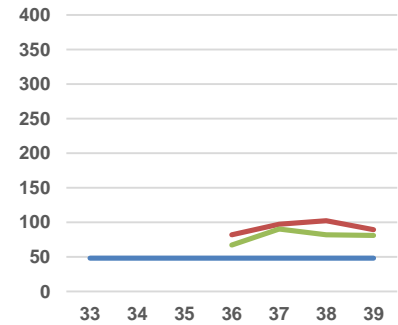


Market offer
Ø week 36-39

33%

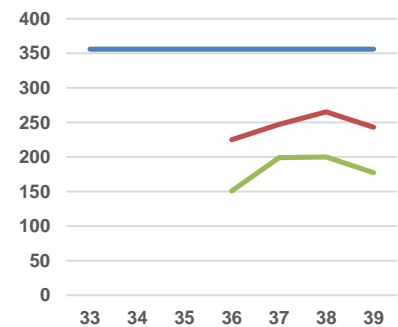
Additional trains south of Rastatt & barge

- Basel-Novara P400
- Basel-Busto Arsizio
- Singen-Busto Arsizio
- Rotterdam-Worms
- Worms-Basel



167%

Total offer to the market

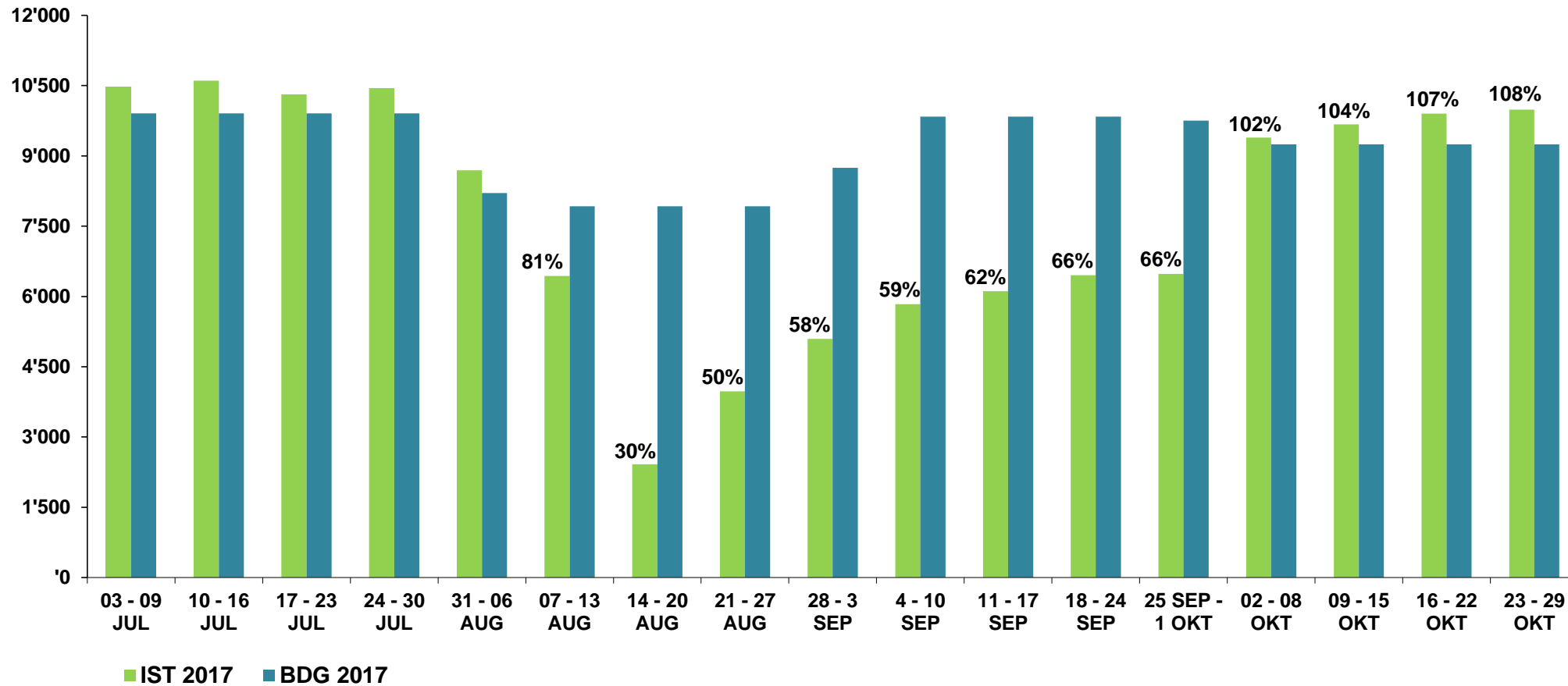


51%

- Normal
- Plan
- Actual

Rastatt: heavy impact on revenue

Hupac traffic development in transalpine traffic via CH
Road shipments



Learning no. 1

Improve organisation: joint 360° corridor management

Single office with staff from



Joint International Strategy

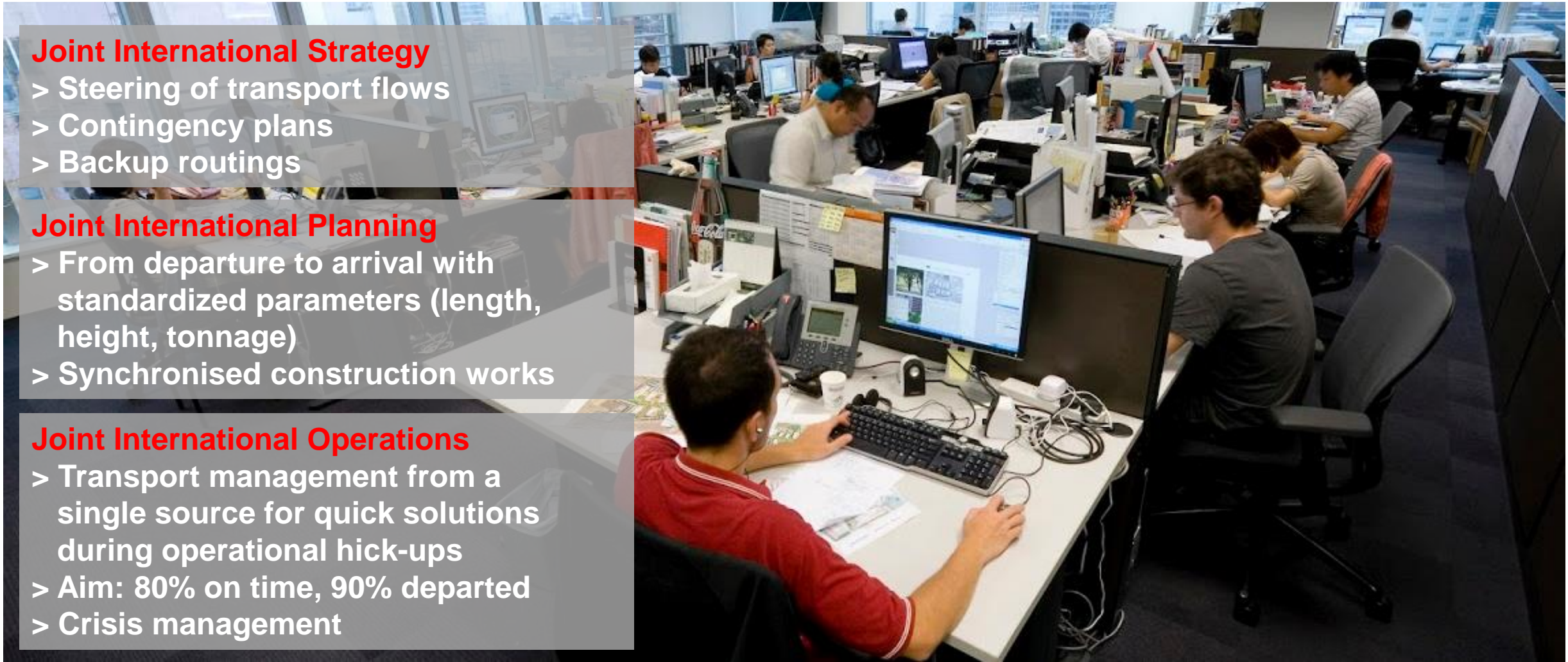
- > Steering of transport flows
- > Contingency plans
- > Backup routings

Joint International Planning

- > From departure to arrival with standardized parameters (length, height, tonnage)
- > Synchronised construction works

Joint International Operations

- > Transport management from a single source for quick solutions during operational hick-ups
- > Aim: 80% on time, 90% departed
- > Crisis management



Improve rules & principles

1) Secure capacity for freight – especially during disruptions

- > Planned disruptions: at least 75% of capacity must be secured
- > Unplanned disruptions: low speed single track operation for freight traffic as a priority
- > „Fair share“ of scarce train paths attribution (intermodal/conventional; RUs)

2) Strengthening of interoperability

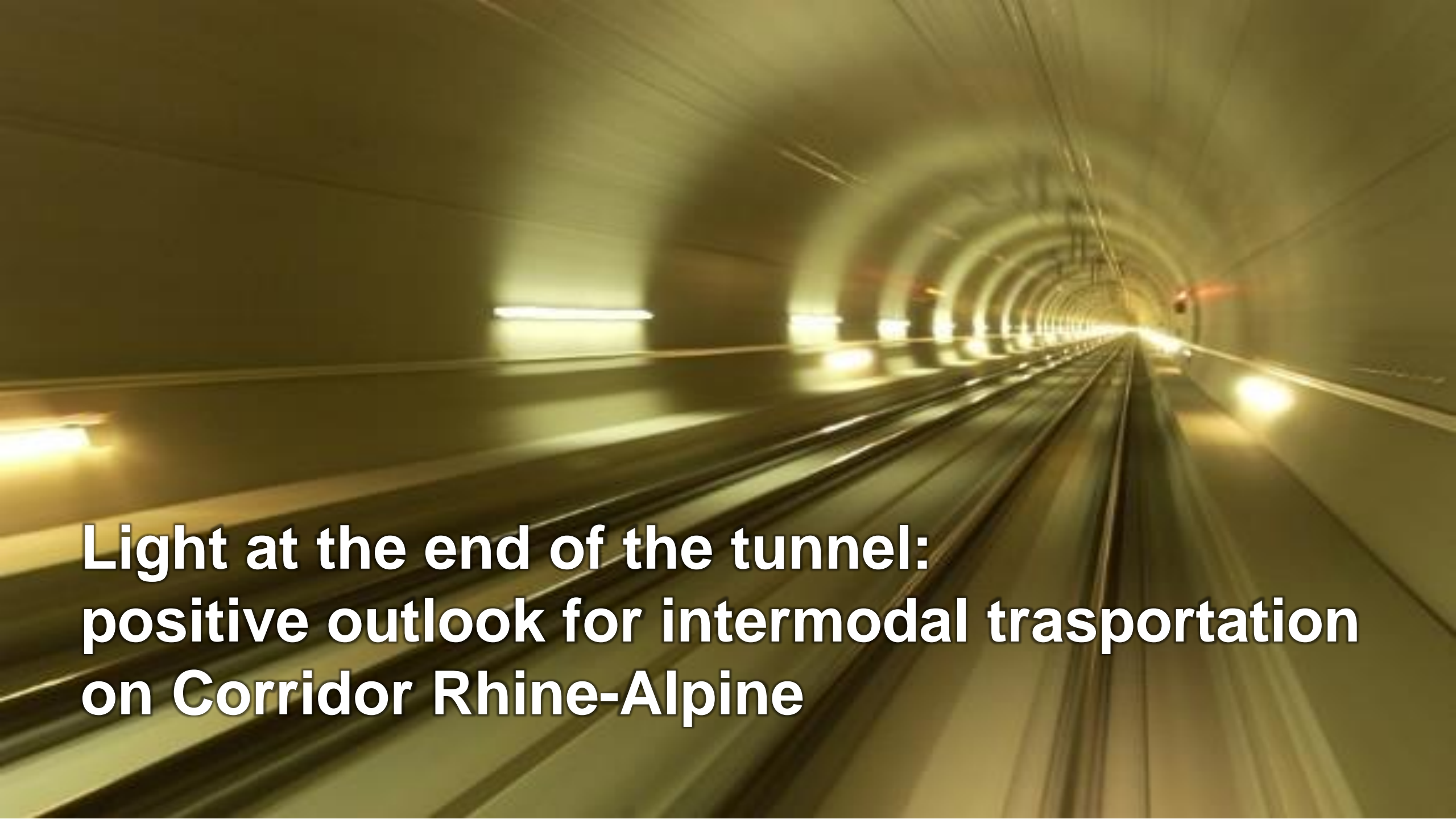
- > Overcome language barriers: second operational language with standardised wordings
- > Review of route knowledge processes
- > Simple, harmonised operational rules
- > Single pan-European office for locomotive approvals & registrations

3) Assume responsibility for disruptions

- > Bonus-malus system that minimizes traffic disruption (Recast Directive 2012/34)
- > Positive example: UK provides for financial compensation in case of planned and unplanned disruptions (partial compensation of damages; steering effect)



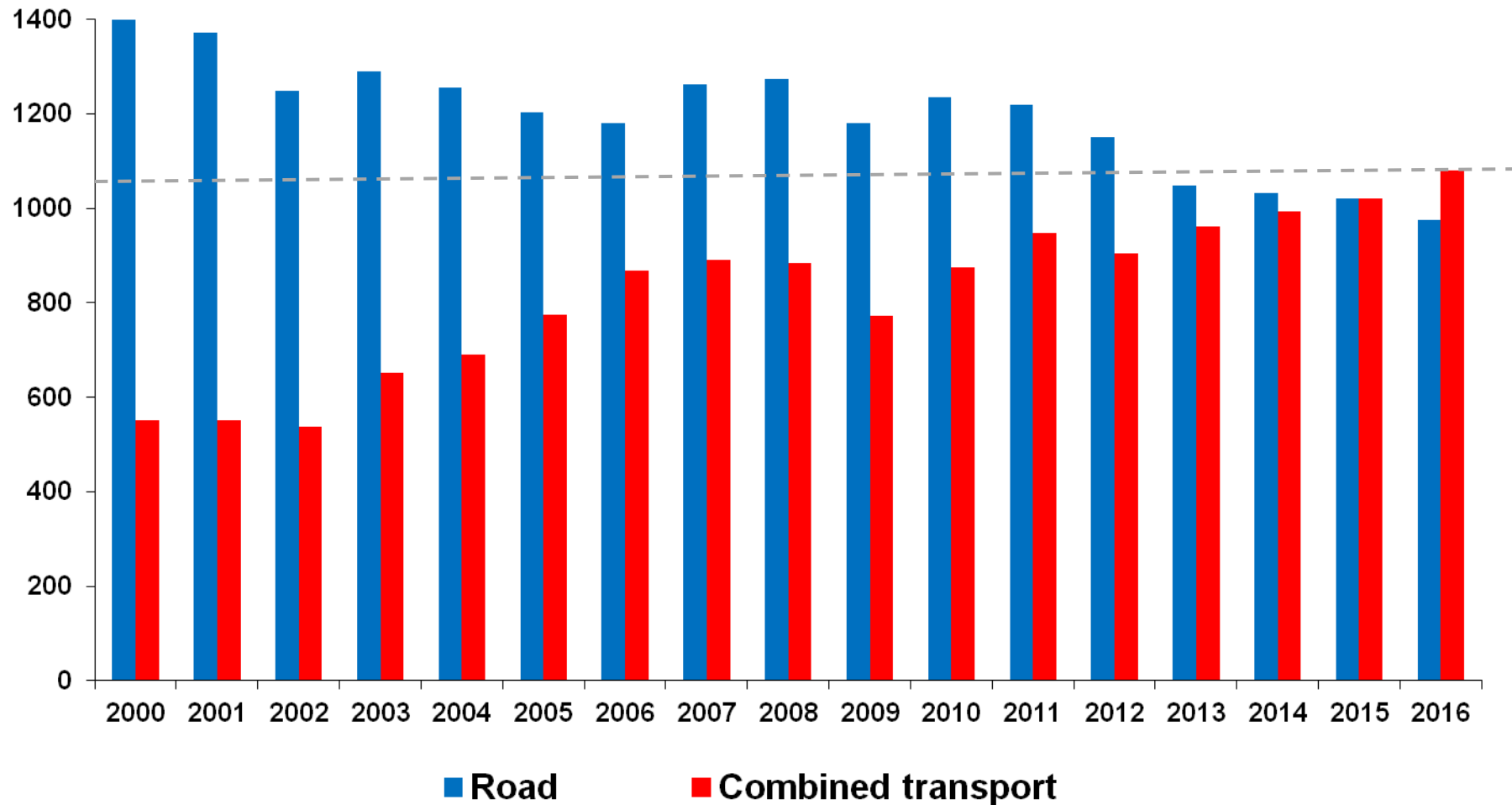
Rastatt: who pays the bill?

A perspective view of a long, brightly lit tunnel. The tunnel has a series of tracks running down the center, and the walls are lined with lights. The light at the end of the tunnel is very bright, creating a strong contrast with the darker interior. The overall atmosphere is one of hope and progress.

**Light at the end of the tunnel:
positive outlook for intermodal transportation
on Corridor Rhine-Alpine**

2016: For the first time less than 1 million trucks crossing the Alps via CH

Modal split in Alpine transit via Switzerland
Road shipments / Truck trips in 1000



2016: Opening of Gotthard base tunnel
 2017: Upgrade of Luino line phase 1

2021: Implementation of European train parameters length, weight, gauge



- > Smooth operations
- > Stable quality for crossing the Alps
- > Productivity: one locomotive less on the route via Luino



2017		
m	t	P
750	2000 1 loco	P400
690	2000 1 loco	P400
Via Chiasso		
600	1600 3 locos	P384
Via Luino		
600	1600 1 loco	P380
600	1600 1 loco	P390

2021
m/t/P
750 m 2000 t P400

Quality: our contribution to fulfill market needs

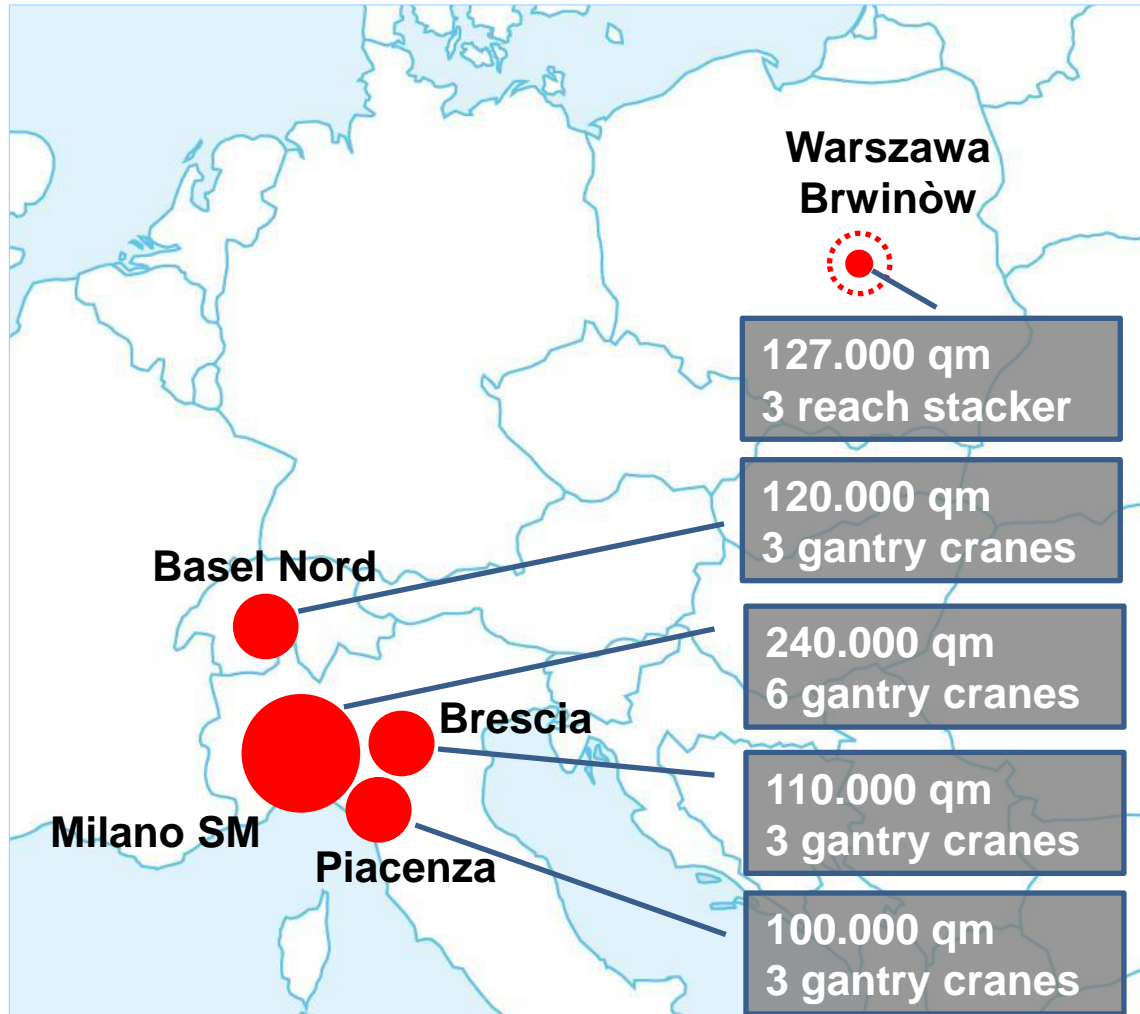


- > Backup compositions and spare wagons
- > Parked at central locations for contingency
- > Production team 24/7 in Chiasso



- > 8 DACHINL multisystem locos - June 2018
- > Managed by railway partners
- > Aim: increase productivity and quality

Terminal projects: getting ready for transshipment capacity



	Building permit	Funding	Building start	Entry into service
Brwinów	2017	-	2018	2019
Basel Nord	2017	2017	2018	2020
Milano SM > Phase 1 > Phase 2	Q4 2017 Q4 2017	✓	2018 2020	2020 2021
Brescia	Q1 2018	Q1 2018	Q3 2018	2020
Piacenza	✓	Q2 2017	Q4 2017	2019



Thank you!