



# Gotthard Base Tunnel – a huge chance for rail

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Pollegio, 30.1.2015

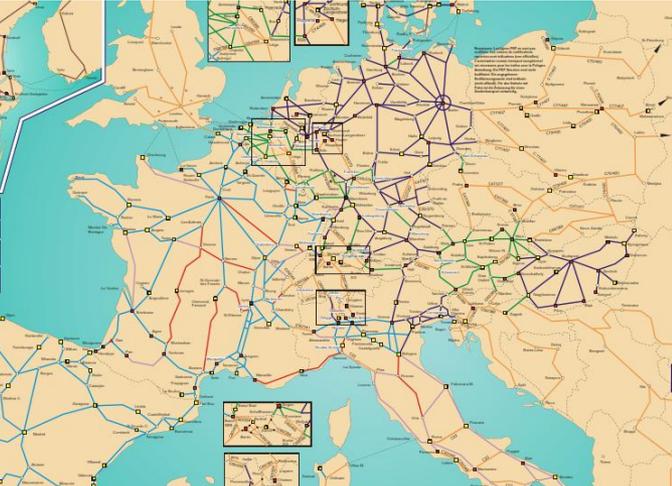




# Combined transport: a system with a future



EU politics: Transports > 300 km on the rail; 30% by 2030, 50% by 2050

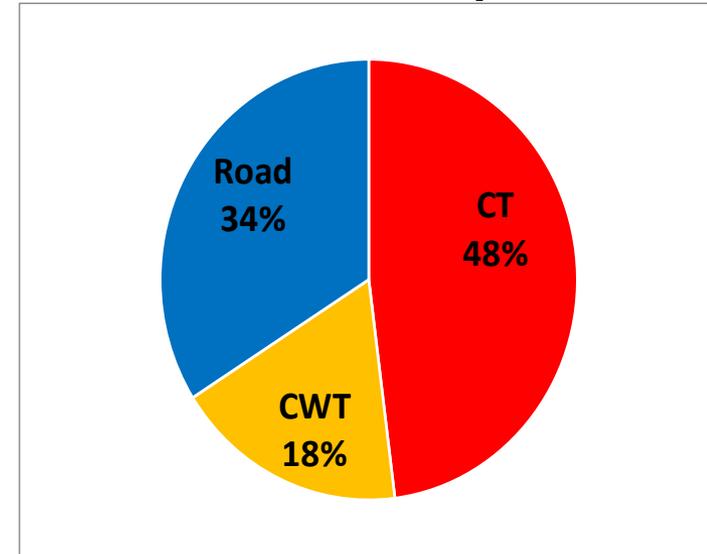
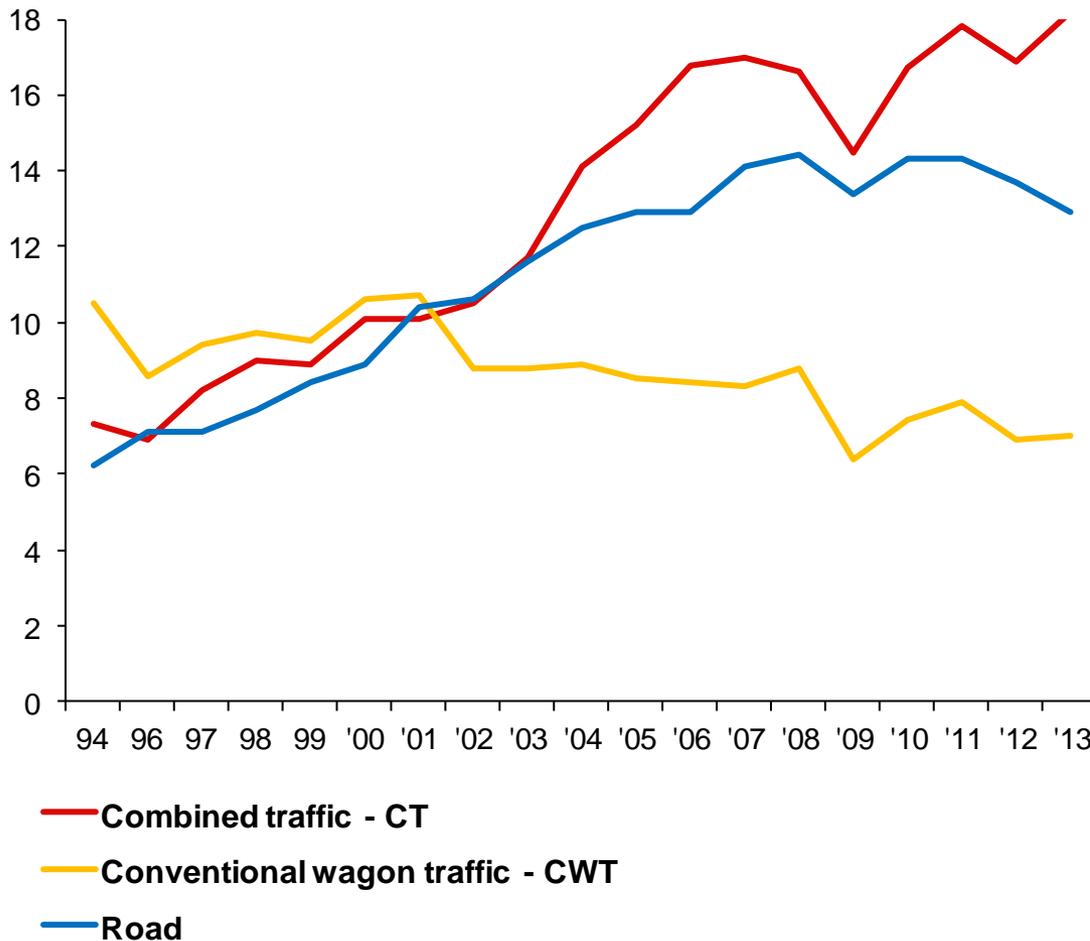
System UCT: Europe-wide standard	Advantages for all
 A map of Europe showing a dense network of lines representing the UCT (Unitized Combined Transport) system. The lines are color-coded in various colors like purple, green, blue, and red, indicating different routes or types of transport. The map covers the entire continent of Europe, with some inset maps showing details of specific regions.	 A photograph showing a yellow HUPAC crane lifting a yellow semi-trailer truck. The crane is a large, industrial machine with a long, articulated arm. The truck is suspended from the crane's arm. The scene is outdoors, with green grass in the foreground and a blue sky with some clouds in the background.
<ul style="list-style-type: none"><li>➔ Hundreds of thousands of standard loading units (containers, swap bodies, semi-trailers)</li><li>➔ 400 terminals and ports</li><li>➔ 60,000 rail wagons</li><li>➔ 2,000 cargo locomotives</li><li>➔ Long-term system commitment</li></ul>	<ul style="list-style-type: none"><li>➔ 5.3 billion EUR turnover</li><li>➔ 39,000 places of work</li><li>➔ 6.7 million tons CO2 reduction</li><li>➔ 2.2 billion EUR fewer external costs</li></ul>

# Combined transport on the overtaking lane



CH : 2013 modal split in %

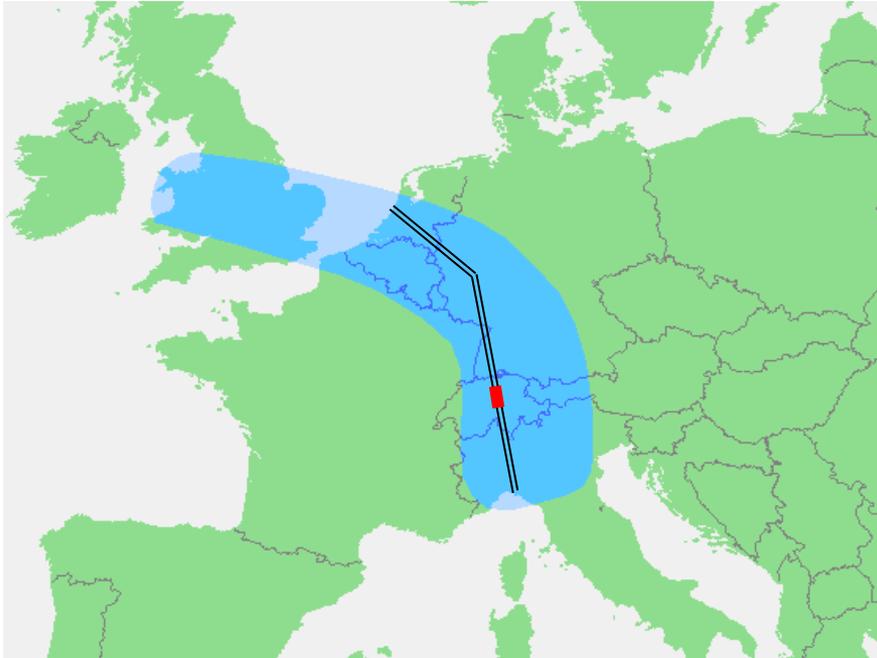
## Performances of Swiss alpine transit traffic in mio. t



## CEFIC Study: Main total transport flows of the chemical industry

Origin	Total Volumes <sup>2</sup> 2011 (1000 t/a)	Total Intermodal Volumes 2011 (1000 t/a)	Avg. Intermodal Share (%)	Potential Intermodal Volumes 2020 (1000 t/a)	Potential Intermodal Increase (%)
FRANCE	2.094,8	333,2	15	371,2	11
GERMANY	2.884,6	1.195,6	56	1.502,8	32
GB	624,9	424,5	69	426,9	1
ITALY	298,0	122,8	63	124,5	1
BENELUX	2.020,2	1.116,5	54	1.149,1	2
POLAND	70,0	9,5	11	9,5	0
SPAIN	114,1	77,8	63	81,6	3

# Improvement of capacity, quality and interoperability on rail freight corridors!



	Today			Tomorrow/Object.
	Metres	Tons	Profile	Metres Tons Profile
NL + B + D	750 ↓	2000 1 loc ↓	P400 ↓	750 / 2000 / P400 1 loc ↓
CH	750 ↓	1600 3 loc ↓	P384 ↓ P400	↓
I	550 - 600 ↓	1600 1 loc ↓	P380 P390 ↓ P400	

## Alptransit:

- > 2016 Gotthard base tunnel
- > 2020 Ceneri base tunnel

Corridors for rail freight traffic should be expanded with regard to the following parameters:

- > train length 750 m
- > train weight 2000 t with 1 locomotive
- > P400 profile for 4-m semi-trailers

# AlpTransit project: timeline



## 2016: Gotthard Base Tunnel

- Cost reduction: shorter distances, need of fewer locomotives
- Productivity increase with new traction concepts

## 2019: Ceneri Base Tunnel

- Fully efficient infrastructure
- Strong reduction of subsidies

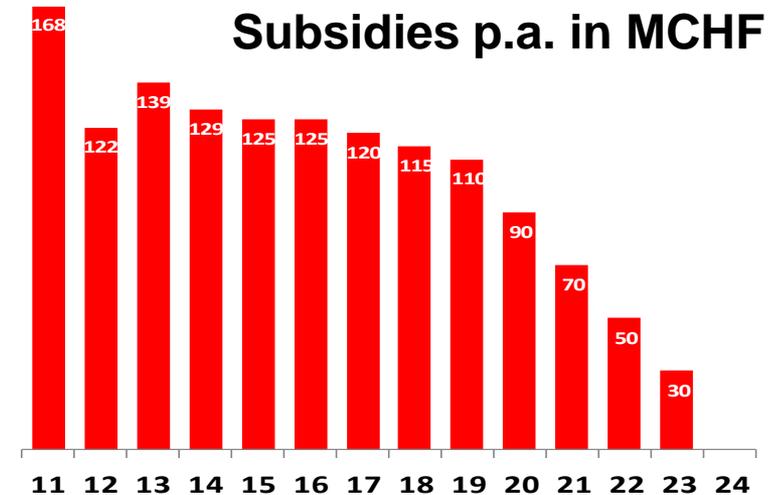
## 2020: 4-Metre Corridor

- Profile P400 and 750m-long trains to/from Northern Italy

## 2024: Suppression of subsidies

# A modern infrastructure instead of subsidies

Gradual reduction of the operating subsidies granted by Switzerland for intermodal transalpine transport



Which strategy?

## Increased productivity to compensate subsidies

Longer and heavier trains (750 m, P400)

> Greater payload

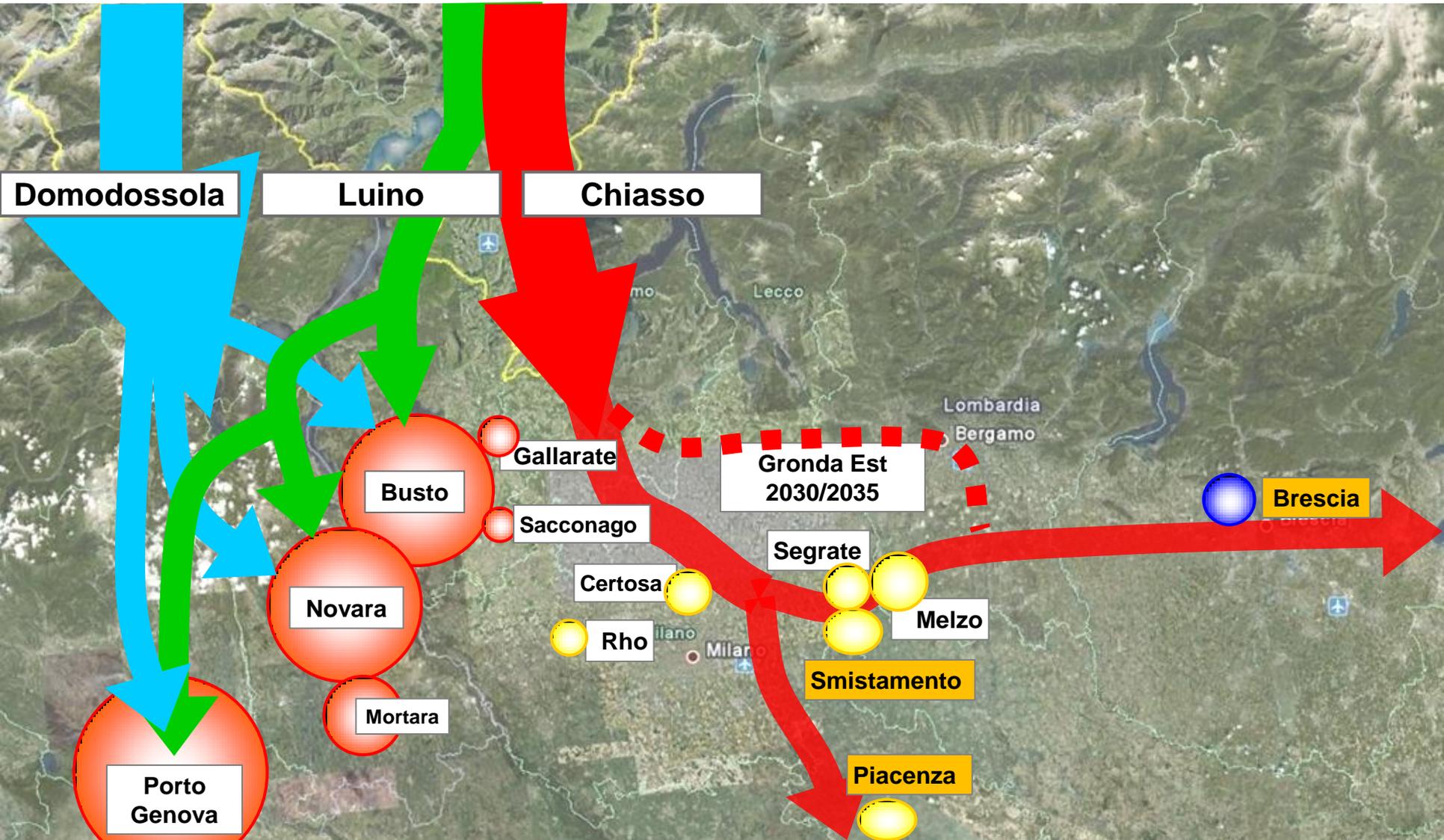


Lower gradient = fewer locomotives

> Lower production costs



# 4-metre corridor and Southern connections





### New Terminal Milano Smistamento

Surface 240.000 qm

Plant Module 1: 3 gantry cranes, 5 tracks of 750m  
Module 2: 3 gantry cranes, 5 tracks of 750m

Status Preliminary project and request of financing presented to FOT



### Terminal Piacenza

Surface 75.000 qm

Plant 3 gantry cranes

Status Feasibility study



### Terminal Brescia

Surface 50.000 qm

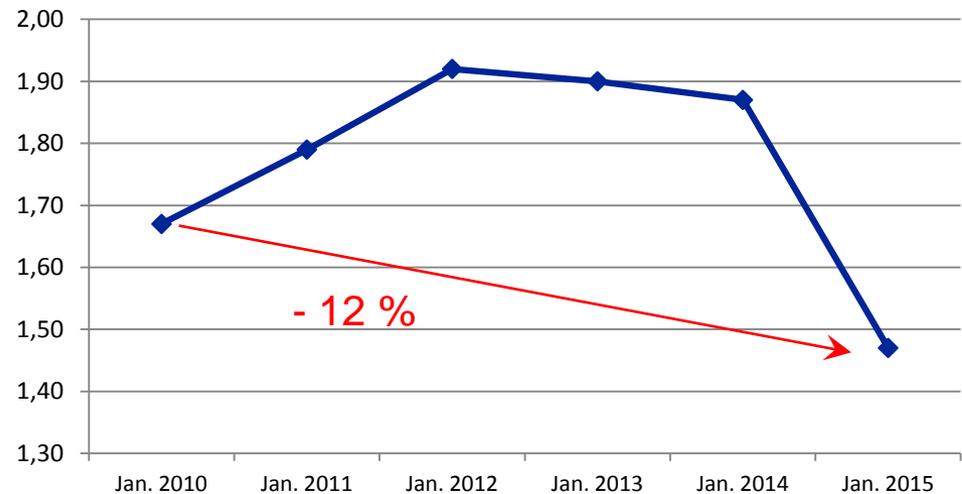
Plant 3 gantry cranes

Status Feasibility study

# Framework conditions: fuel price



**Diesel price in Switzerland:  
reduction of 12% in the period  
2010 – 2015**

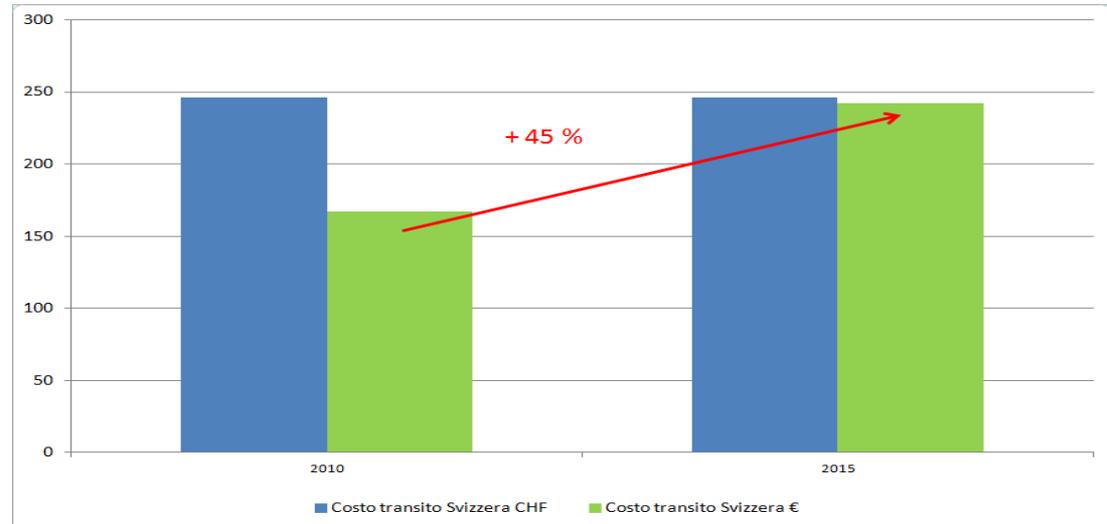


# Revaluation of CHF vs. EUR: impact on costs



**Heavy vehicle charges (HVC):** the strength of the Swiss franc has strong repercussions also on the costs of transport through Switzerland

**Calculation basis:** Vehicle Euro 6, 40 tonnes, route of 300 km.

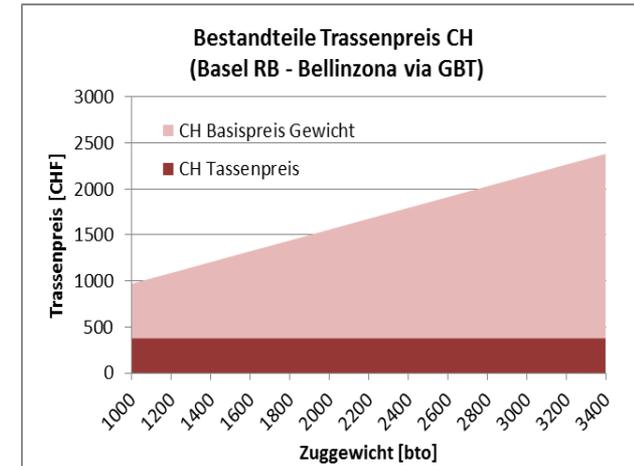
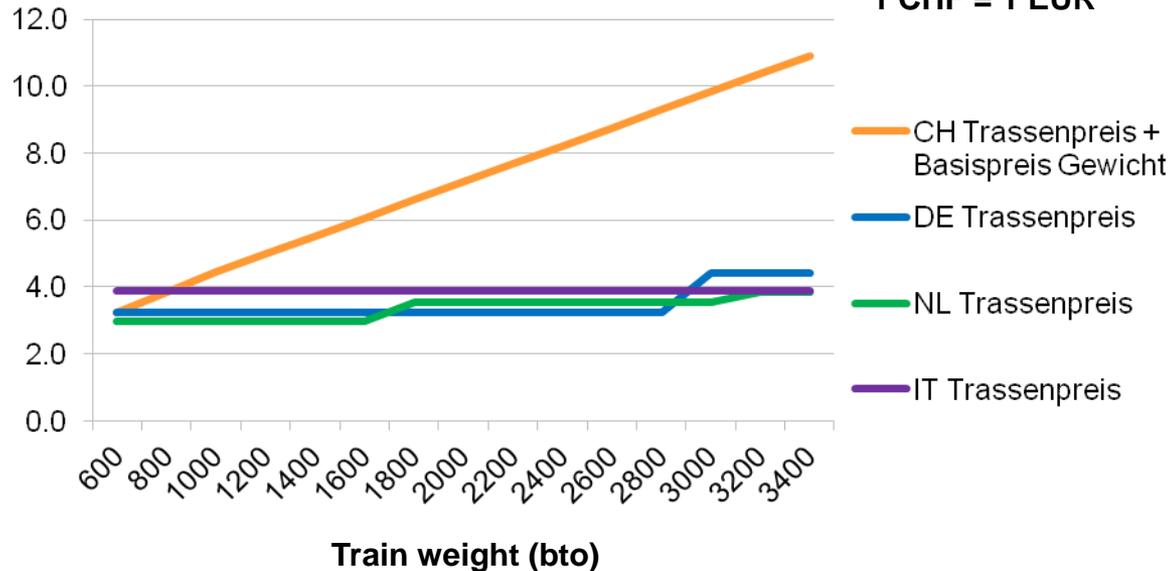


# Reduced competitiveness endangers the modal shift

## GBT : Promotion of heavier trains in the train path pricing model



Path price CHF/km

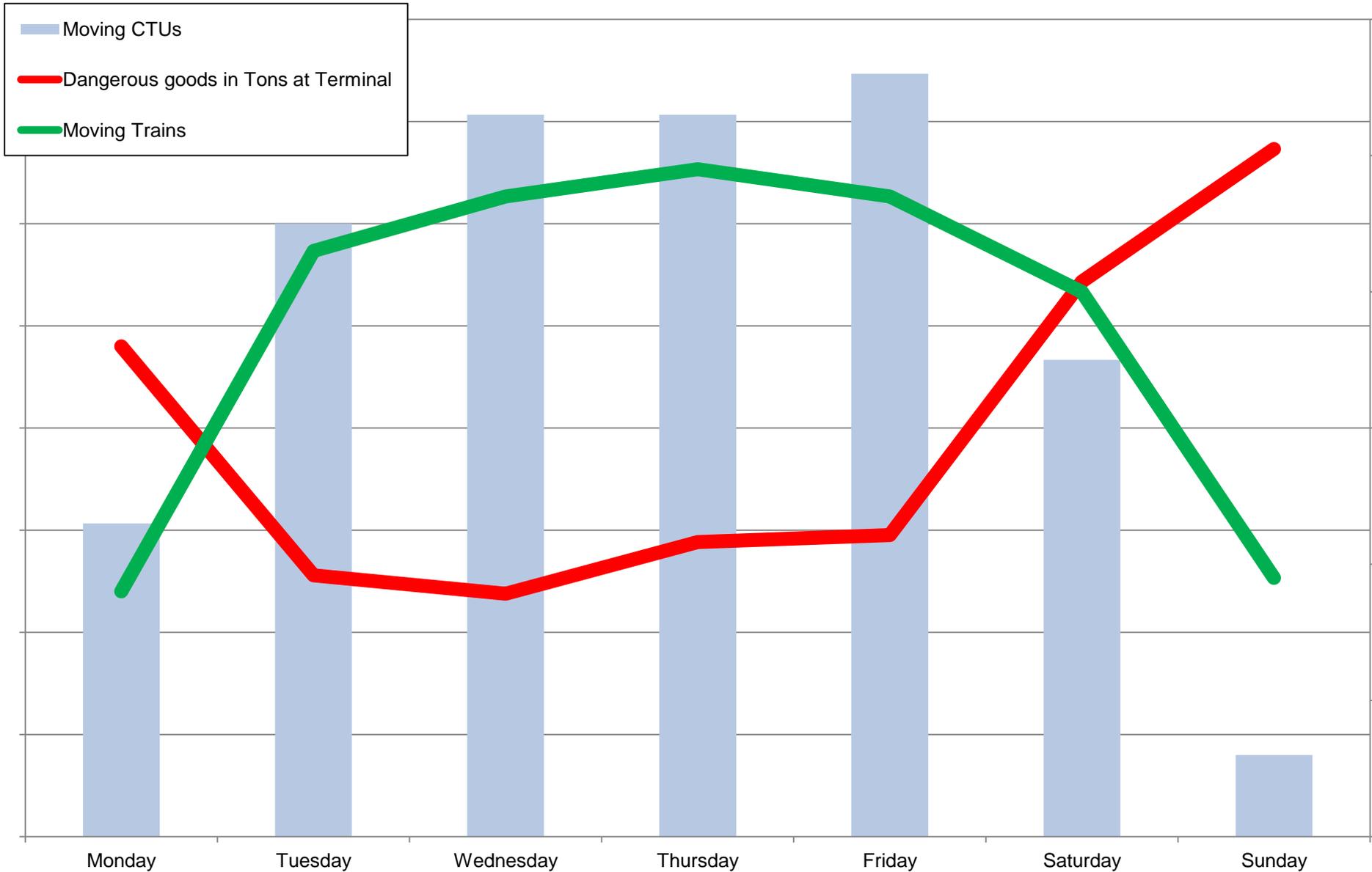


- ➔ The train path pricing system (TPS) D, I & NL provides an incentive for heavy trains, as the path price is only slightly dependent on weight
- ➔ The sum of the TPS components CH per km is well above the path price per km in D, I & NL
- ➔ The heavier the train, the greater becomes this difference

### Hupac's objective:

A simple and harmonized corridor in terms of train path pricing system NL- CH -IT that promotes productivity and enables the growth of combined transport in Alpine transit, without any operating subsidies

# Better utilization of the intermodal infrastructures & Last mile: harmonised regulations on dangerous goods





**Thank you for your attention.**

