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# Rail Freight Corridor Rhine – Alpine

## Improving the Infrastructure for long trains

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Download study: <http://www.corridor-rhine-alpine.eu/infrastructure-terminals.html>

# Improving the Infrastructure for long trains

## 1 - Demand: Corridor trains will be longer

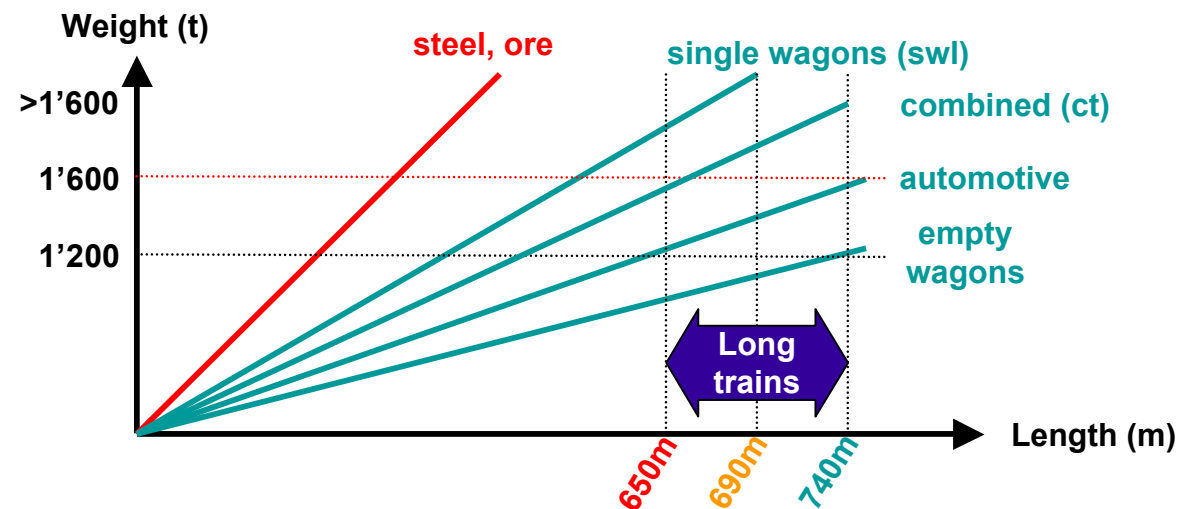
### Corridor clients need to improve productivity

- Upgraded and new line sections (base tunnels) allow faster train paths
- Simple traction – one multisystem loco (6MW) takes most trains on entire run
- **Trains can be longer by 13% - from 600m / 650m up to 740m.**

Types of longer trains: Empty wagons / automotive / **combined** / single wagons.

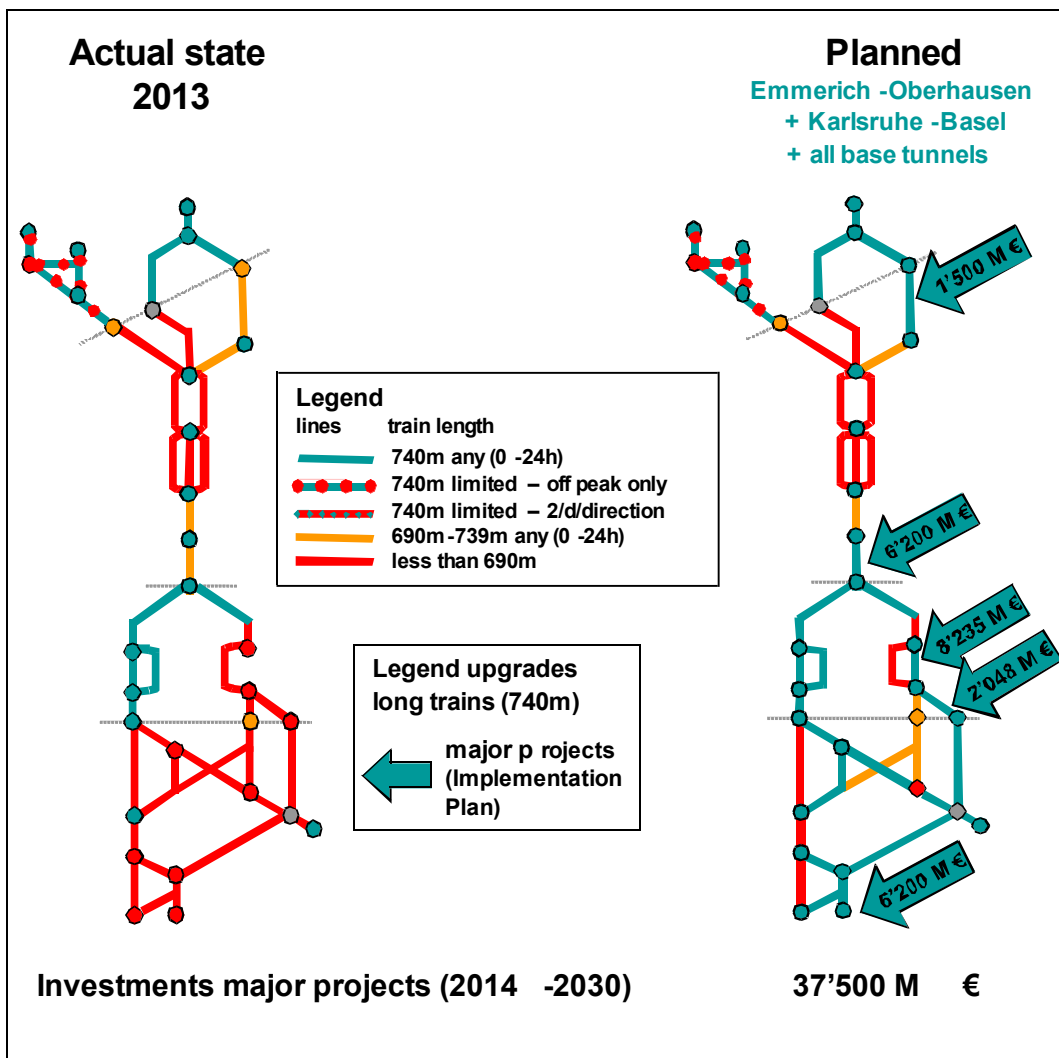
*Definition: Long train is **over 650m**, up to **740m** including loco.*

### Relation train weight / length



# Improving the Infrastructure for long trains

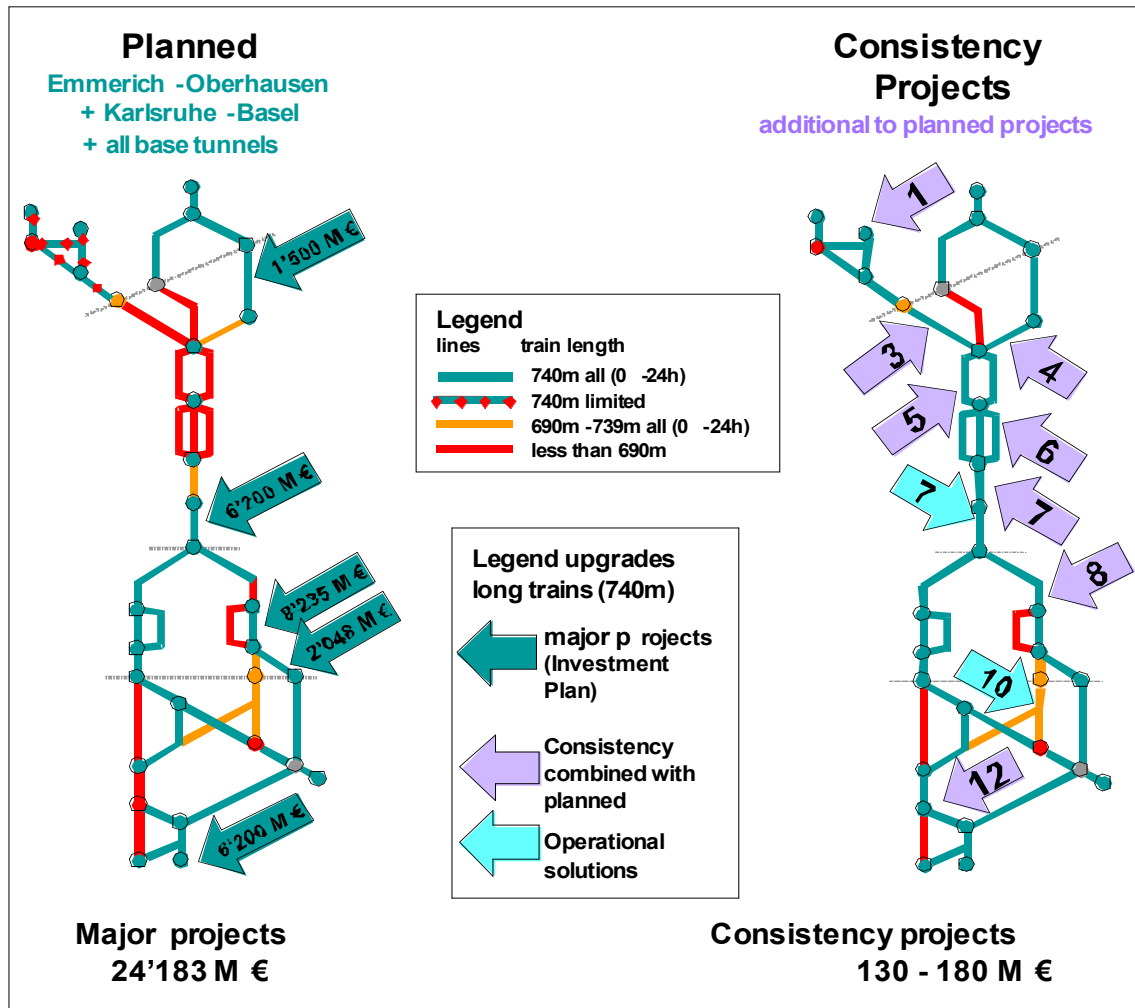
## 2 - Maximum train length with planned projects



- Many projects in planning or realisation phase  
→ base for study
- Major projects enable long trains (740m)
- Major projects
  - relief bottlenecks
  - increase capacity
  - improve quality / punctuality
- Nasty hinderings remain
- Limited funding blocks more large projects
- Study other solutions for “missing links”

# Improving the Infrastructure for long trains

## 3 - Closing the missing links for long trains



- Detailed national studies for all missing links
- Different approaches for short and medium/long time horizons applied
- No construction projects on short time horizon
- Identified national “consistency projects” combined in study for Corridor level
- “Consistency projects” allow full benefit of major projects for long trains on most line sections.

# Improving the Infrastructure for long trains

## 4 – Solutions exist - financing to be solved

**Additional investments (130 - 180 Mio. €) allow to open the Corridor for long trains**

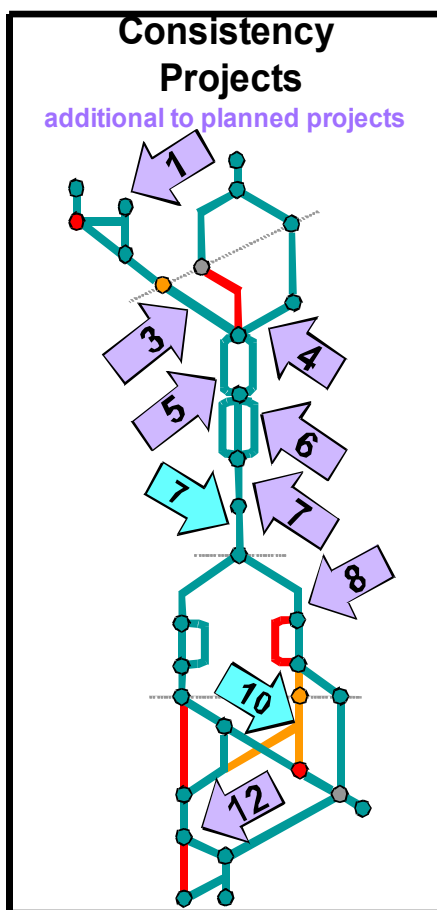
**Short time horizon,  
two operational solutions:**

### **7 Mannheim – Basel**

Opening for some long trains with one project in Basel to be finished

### **10 Luino line**

Time slice operation mode is studied for feasibility.



**Medium/long time horizon,  
eight consistency projects:**

- 1 Belgium lines (peak hours)**
- 3 Aachen-Köln**
- 4 Duisburg-Köln**
- 5 Köln-Mainz**
- 6 Mainz-Mannheim**
- 7 Mannheim-Karlsruhe**
- 8 Gotthard North access**
- 12 Novara-Alessandria**

***Plus: Workarounds for the rest of lines sections***