

CargoBeamer: Innovation in “Combined Traffic” Transport for all semi-trailers on rail

**Press Event in Calais
October 26th 2012**



About CargoBeamer AG

Key Facts

- ❑ Privately owned shareholders company
- ❑ 2003: Foundation in Germany
- ❑ 2008: Active start of technology implementation
- ❑ 2011: Technology Developments completed
- ❑ 2012: Market introduction and customer projects



Profile

- ❑ CargoBeamer® technology ownership and development
- ❑ Production & operation of CargoBeamer wagons, eLogistics
- ❑ Terminal realization and operation with partners

CargoBeamer objective:
Traffic shift to rail – focus on semi-trailers



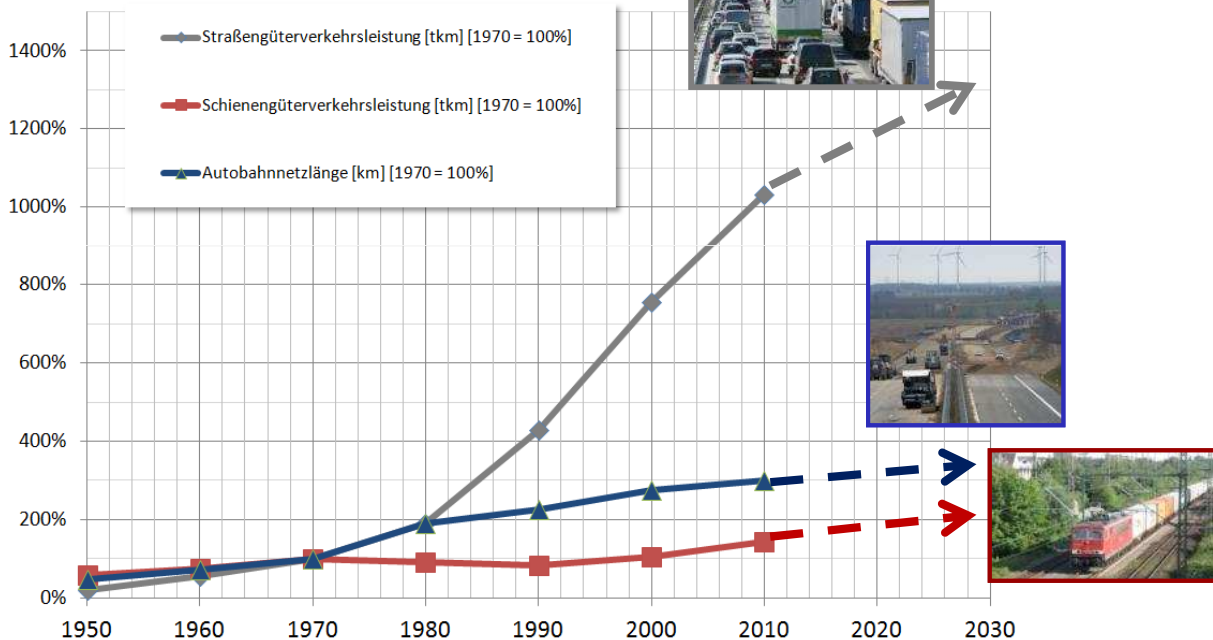
Forecast: additional increase in transportation by 75% until 2025
Road: increase of 115%
(source: Forecast 2050 BMVBS/Prograns)

Goal: profitable, efficient and worldwide effective transportation system for unmodified semi-trailers to relieve the long-distance roads and environment

Since the 1970's, road cargo transport has outperformed rail cargo volumes by a factor of five!



Road cargo, road infrastructure and rail cargo growth, 1970 = 100%



Combined rail-road traffic faces „3 main dilemmas“ today



1) Semi-trailers are not compatible with rail

Semi-trailers dominate long distance road cargo,
but 98% of the standard-trailers cannot be craned



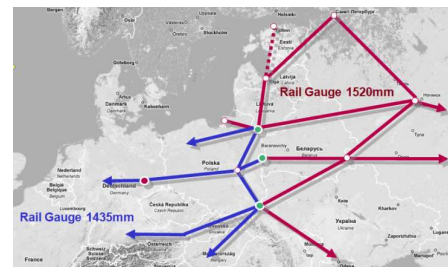
2) Limited performance in terminals

Trains stay 6 - 12 hours in the terminals
Limited capacity in terminals - slow growth
Waiting times for trucks & drivers



3) Limited flexibility & transport offers on rail

Limited capacity and transport routes
Almost no capacity towards East Europe
No capacity for trailer transports into Russia



CargoBeamer resolves „3 main dilemmas“ for combined rail/road traffic



1) Rail transport for all semi-trailers

Transport of all semi-trailers, including the 98% of the standard-trailers which can not be craned



2) Automated, parallel loading & unloading

Unload – load sequence of a full train with e.g. 36
deboarding and 36 boarding semi-trailers within 15
minutes – enabling short train stops

No need of the presence of the truck drivers while un- /
loading of the train – no waiting times for drivers



3) Automated rail gauge transshipment

Seamless interconnection between Mid-European and
Russian rail networks

➤ **CargoBeamer is revolutionary for its combined rail/road cargo transport to relieve roads, society and environment**



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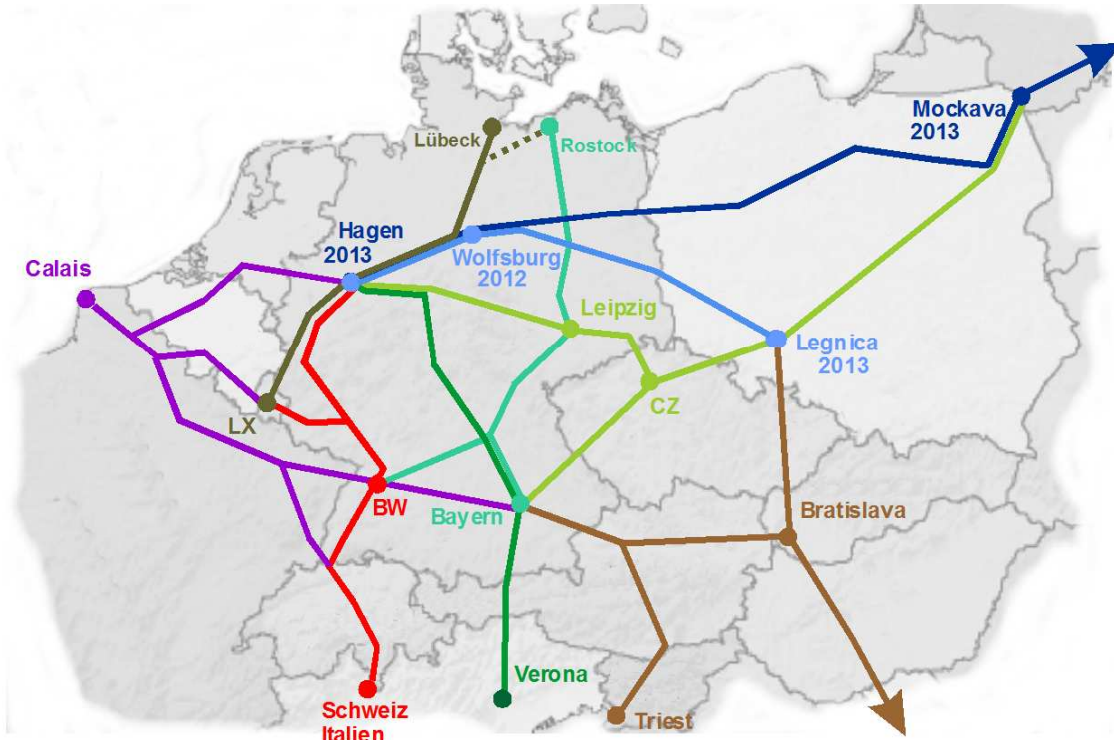
Huge additional benefits for environment and society

- ✓ CargoBeamer reduces energy consumption for transports by 74% ¹⁾
 - Per train and year, energy savings amount to 15,4 GWh
- ✓ Each CargoBeamer-train reduces CO₂-Emissions by 3.500 t p.a. ²⁾
- ✓ Each CargoBeamer-train reduces external cost of transport by € 3,6 M p.a. ³⁾
 - Road maintenance
 - Emissions
 - Accidents and related cost
- ✓ Each CargoBeamer – train reduces congestion cost by € 2,6 M p.a. ⁴⁾

Sustainable electro mobility for trucks.



First Routes in Europe



Next CargoBeamer Gate in France: CALAIS PREMIER

CALAIS PREMIER
The most Combiportal gate



- ❑ Investment: € 20-25 M
- ❑ 2013: Implementation in phases
 - Planning
 - Confirmation of rail connection by RFF
 - Authorisations & permits
 - Start of construction
- ❑ 2014: First operations using mobile cranes
- ❑ 2015: GateModules in Calais Premier
 - Start with 1-2 trains per day
- ❑ 2020: Full operation with 8-10 trains per day
 - Total employment: 25 - 30 FTE

