

Novel ideas for Rail Logistics

Symbiosis of Rail, Logistics and High Tech



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Contents

- Vision
- FastRCargo
- High Performance Terminals

Vision

Rail cargo transport will become the main carrier for all types of cargo

Consensus upon infrastructure investment priorities

Rail transport gets an excellent image in science, education, media and in the heart of the public - superior to trucks

Facts

Commercials

- Rail cargo transport needs the highest initial invest per ton for carrying goods
- Rail cargo offers highest throughput potential (to/km/hrs)
- Rail cargo transport costs are not competitive due to very high loading process and interface cost

Technologies

- Determination of logistics features and technologies by non-rail entities
- Rail Cargo focuses on rail carrying mainly
- Rail Cargo is based on interlinked autonomous operating rules

Hypothesis

Commercial

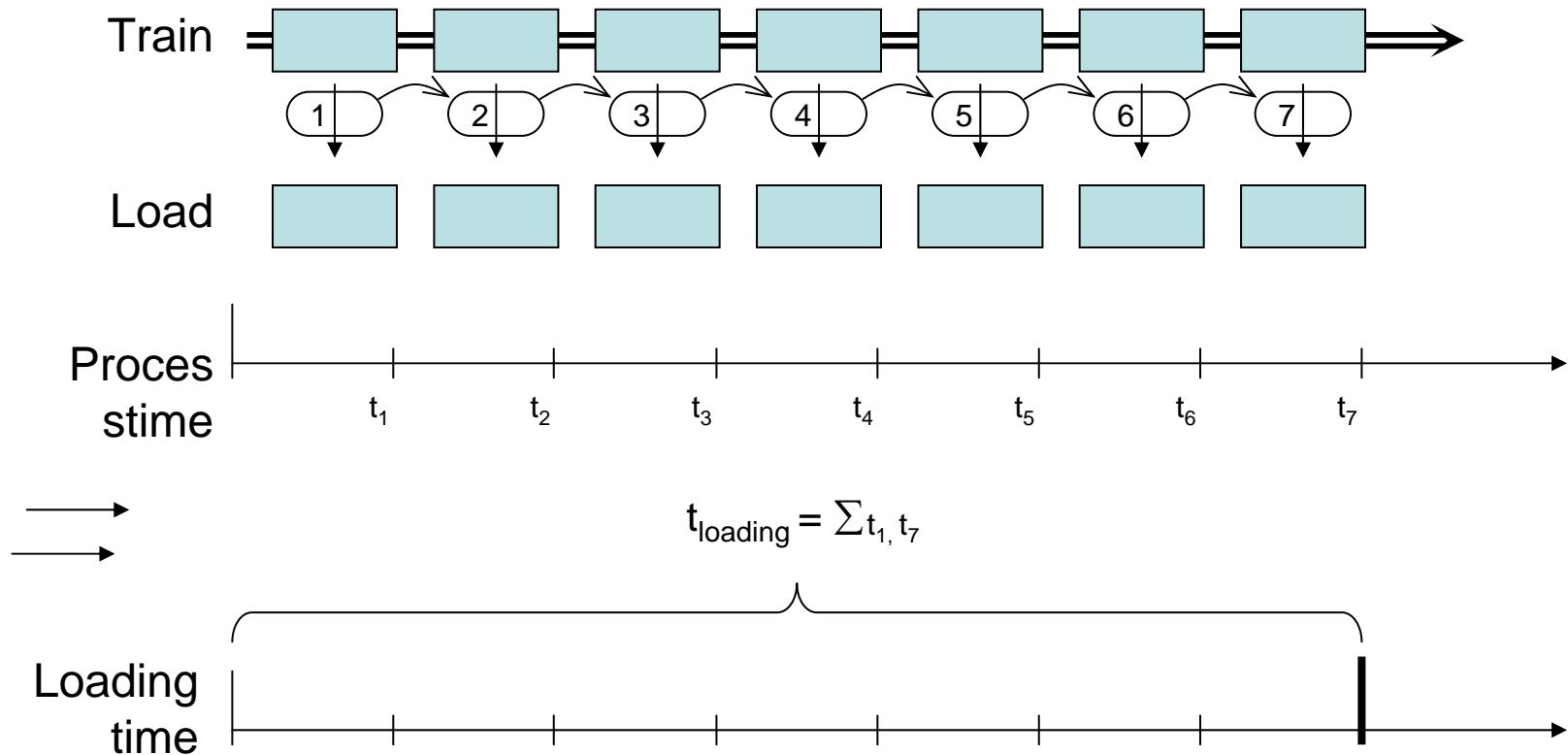
- Rail cargo yields profits
- Rail cargo is
 - Competitive
 - Easy to access
 - Mainly operated by private enterprises
- Rail cargo transport operation is as easy as truck operation

Technologies

- ***Installing innovation in throughput-rising technologies***
- Easy Rail Cargo transport integration in Supply Chains
- Highly efficient rolling stock
- Rail Cargo is using emerging technologies
- Very sophisticated control and management systems

Today's Loading Process

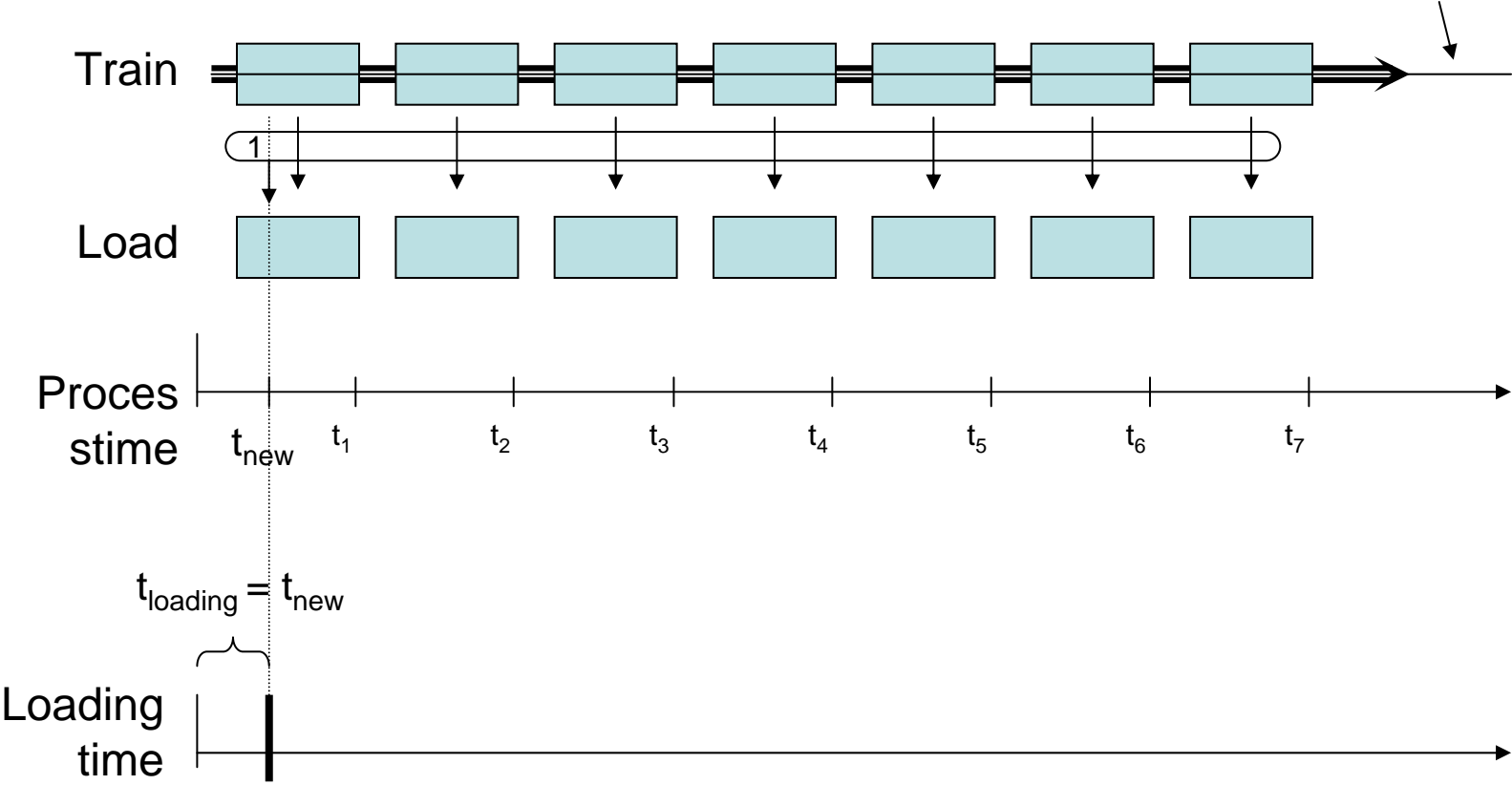
Today
(unloading)



Basic concept for Rising Throughput

Future(unloading
)

electric power line



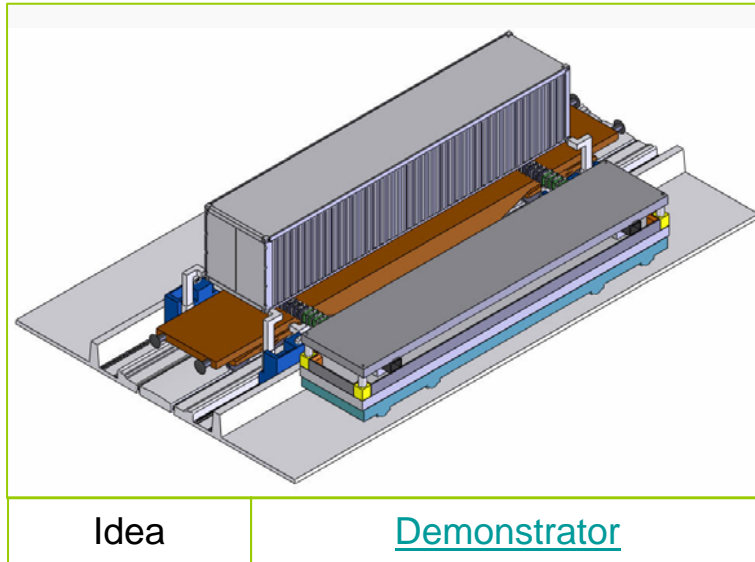
FastRCargo

Fast Transshipment Equipment and
Novel Methods for
RailCargo in Europe

FastRCargo Objectives

- Demonstrator
- Dependability
- System integration
- New Services

FastRCargo Demonstrator

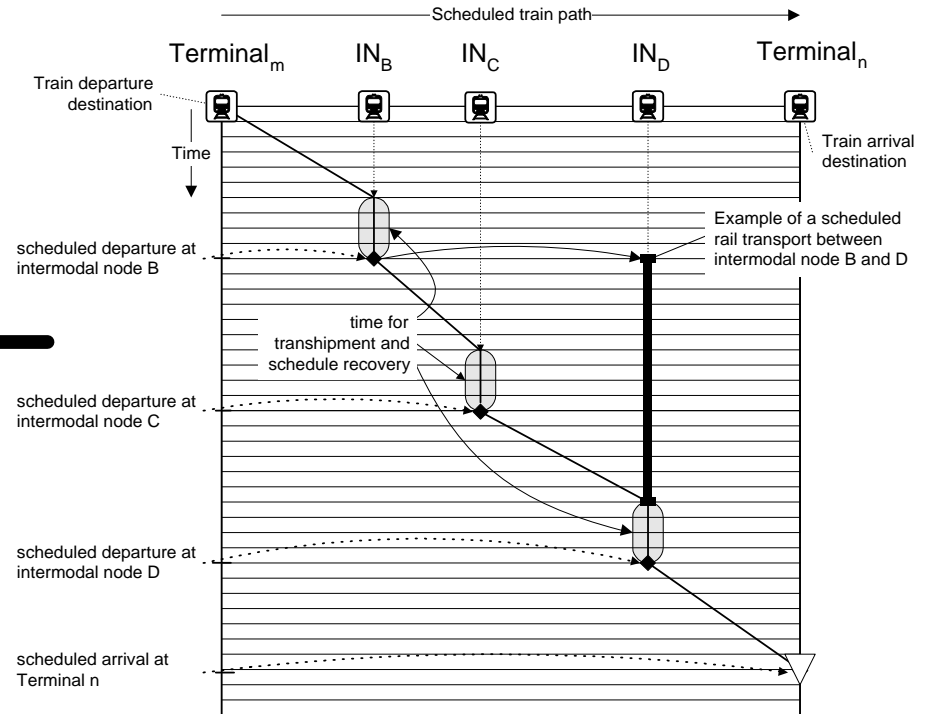
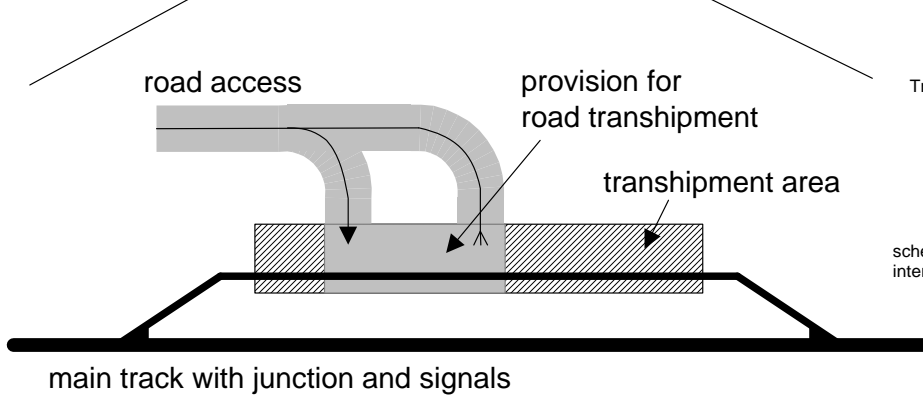
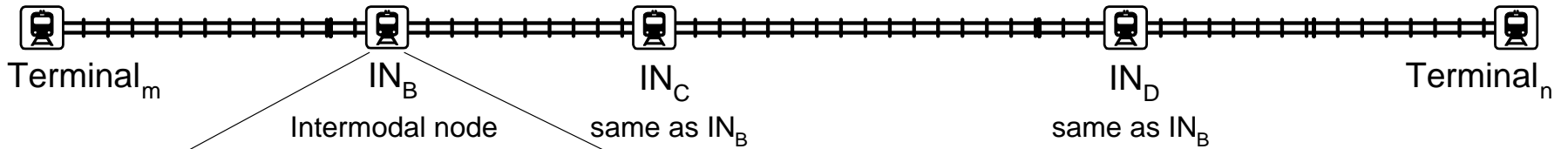


- Function
- Remote operation
- Full load
- Less than 1,99 minutes
- Different load units
- Late 2008

FastRCargo Dependability

- Automation for
 - Detection of position and condition
 - Load Unit
 - Bottom Corner Fittings
 - Floor Locking devices
 - Processing of sensitive operations
- Turning Best Practice into Machines
- Remote Operation
- Predictive Maintenance
- All weather operation

FastRCargo New Services



High Performance Terminals

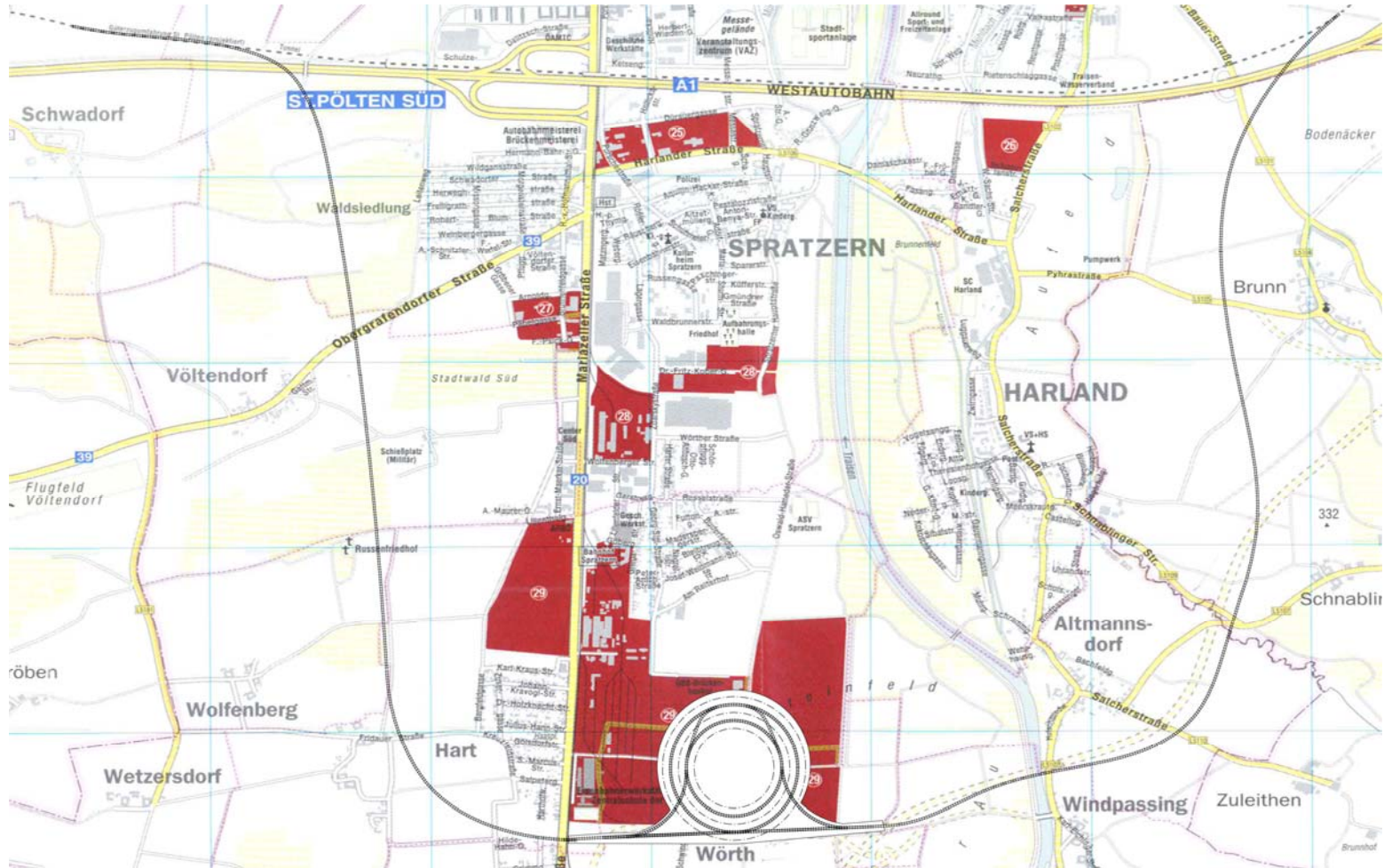
Challenges

- Time-efficient Rail Access for Logistics Centers
- Containers Crossing Borders with different Gauges
- Cost-efficient Servicing of Sidings

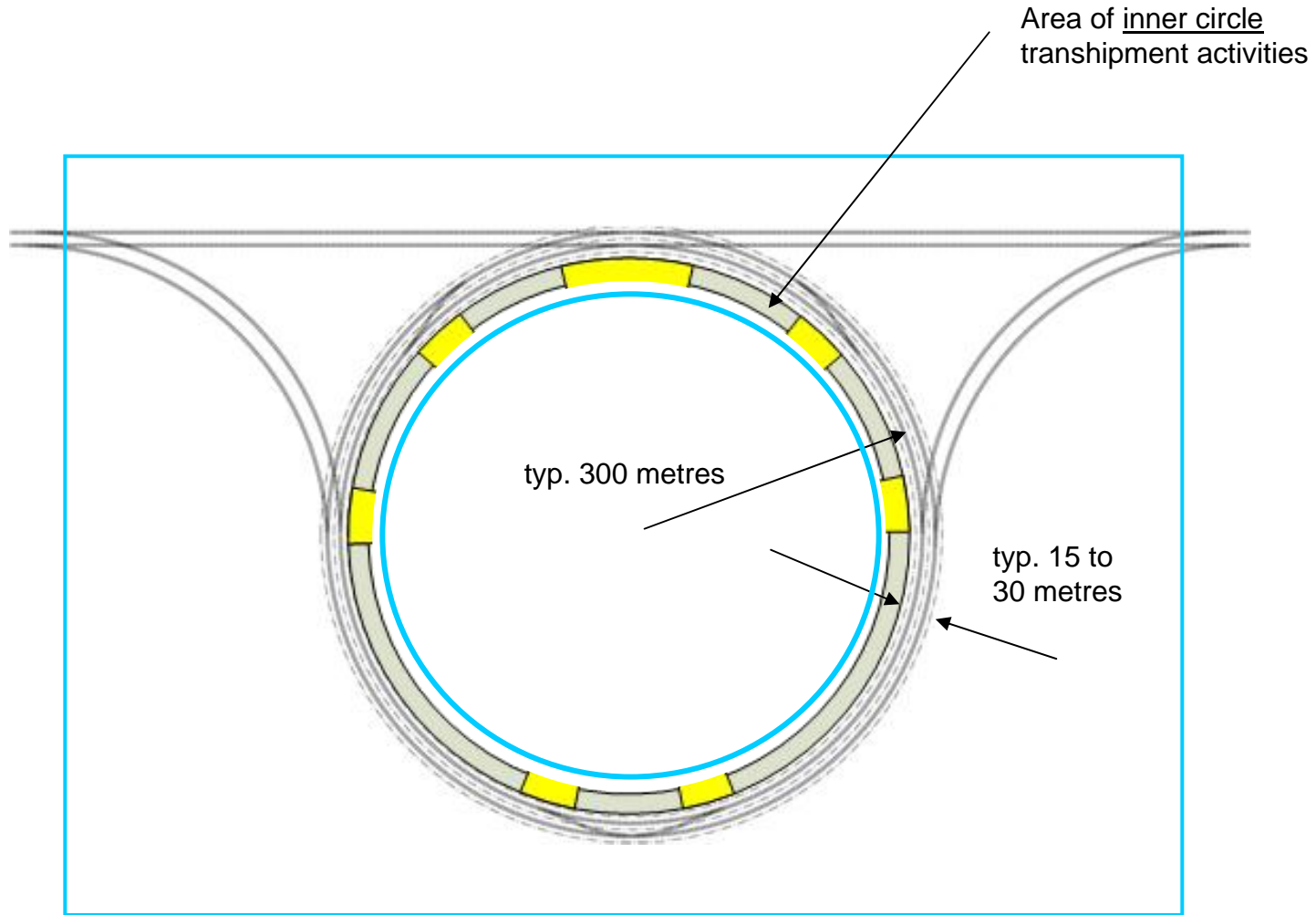
Time-efficient Rail Access for Logistics Centers

- Objectives
 - High load unit throughput
 - Low processing times
 - Cost efficient operation for Rail Undertakings
 - Balanced risk for investors
 - Cost competitiveness for operators
 - Accessibility for users

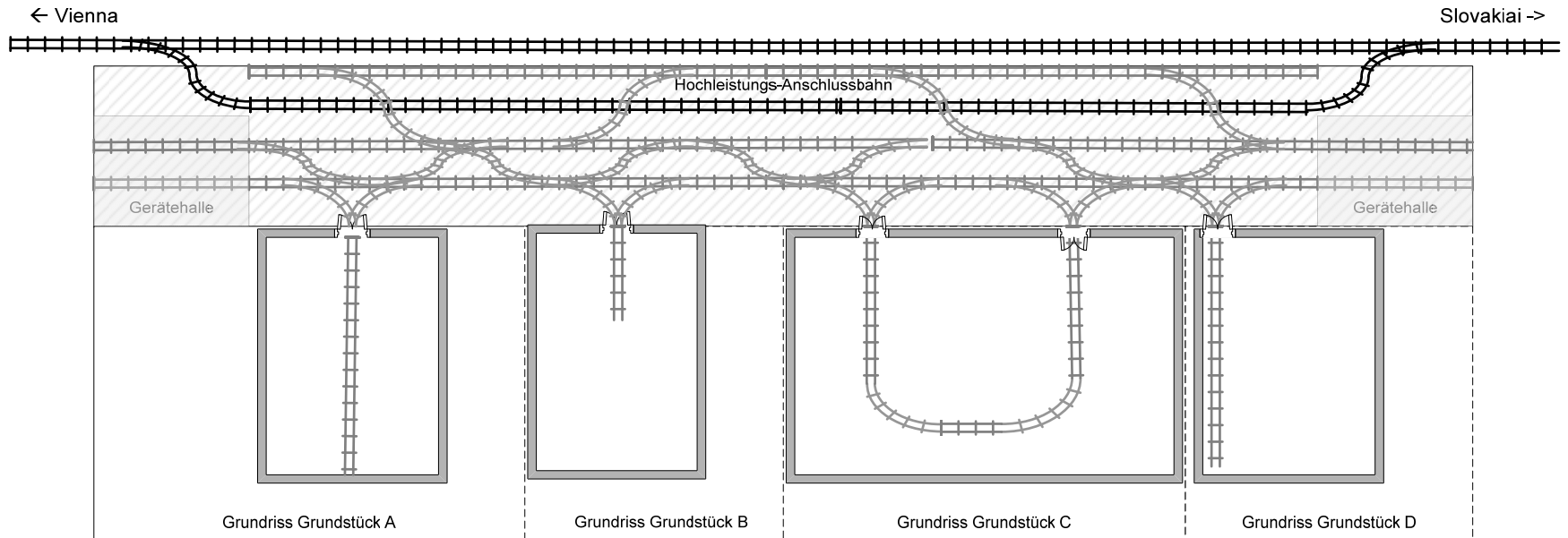
High Performance Logistics Terminal





High Performance Logistics Terminal



Cost-efficient Servicing of Sidings



Legende

- Main rail track 
- Sorting rail track 

Summary

- Vision for a significant upgrade to existing intermodal networks with new transshipment
- Project FastRCargo supports this idea
- Demonstrator mid 2008
- Implementation 2012 and beyond
- High performance terminal systems become reality
 - Rail Logistics Terminals
 - Container Loading Interfaces
 - Sidings

Thank you for your attention

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passion for innovative solutions