



# Deutsche Bahn ECO

Railways for the world of tomorrow.

**International Conference Brazil on Rail**

**Public Portofilio**

Brasilia, 18<sup>th</sup> November 2019



2 Introduction and benefits of multimodality

3 Success factors efficient multimodal supply chain

4 Case Studies

5 Contact

1

# The Deutsche Bahn Group and the DB International





The Deutsche Bahn group is active since 1835 and became one of the world's leading mobility and logistics operators

- **42.7** billion EUR revenues
- **320,000** employees
- **130** countries presence
- **4.4** billion passenger per year transported in trains and buses
- **443** million tons of freight transported per year
- **35,000** trains managed per day in the German network

**DB BAHN**



**Passenger Transport:**

Domestic and European-wide mobility services

- **DB Bahn Long Distance**  
Long-distance rail pass. transport<sup>1</sup>
- **DB Bahn Regio**  
Regional/urban pass. transport (GER)
- **DB Arriva**  
Regional/urban pass. transport (EU)<sup>2</sup>

**DB SCHENKER**



**Transportation and Logistics:**

Intelligent logistics services via land, air and the sea

- **DB Schenker Rail**  
European rail freight transport
- **DB Schenker Logistics**  
Global logistics services

**DB NETZE**



**Infrastructure:**

Efficient and future-oriented rail infrastructure in Germany

- **DB Netze Track**  
Rail network
- **DB Netze Stations**  
Traffic stations
- **DB Netze Energy**  
Traction current

**DB Services<sup>3</sup>**

Integrated range of services

Source: Deutsche Bahn AG | 2018

<sup>1</sup> Within Germany as well as cross border traffic; <sup>2</sup> In UK with Arriva-affiliate 'CrossCountry' also long-distance passenger transport;

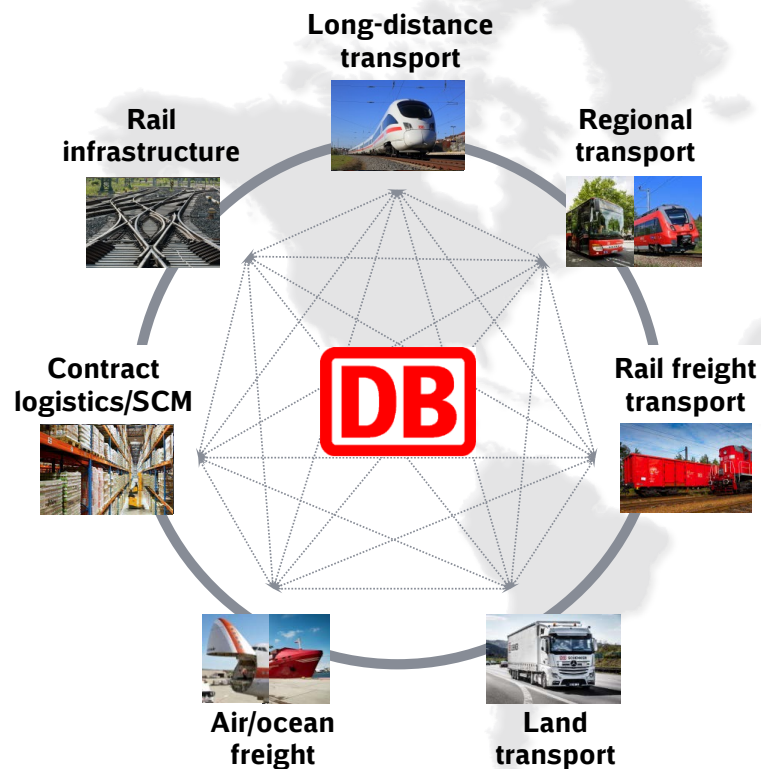
<sup>3</sup> Business unit is assigned to the Infrastructure and Services division

Today

We hold leading market positions in Europe and in the world




### Our transport networks



### DB Group in Europe

	<b>No. 2</b> Long-distance rail passenger transport		<b>No. 1</b> Rail infrastructure
	<b>No. 1</b> Local rail passenger transport		<b>No. 1</b> Rail freight transport
	<b>No. 1</b> Bus transport		<b>No. 1</b> Land transport

### DB Group worldwide

	<b>No. 3</b> Air freight		<b>No. 5</b> Contract logistics/SCM
	<b>No. 3</b> Ocean freight		

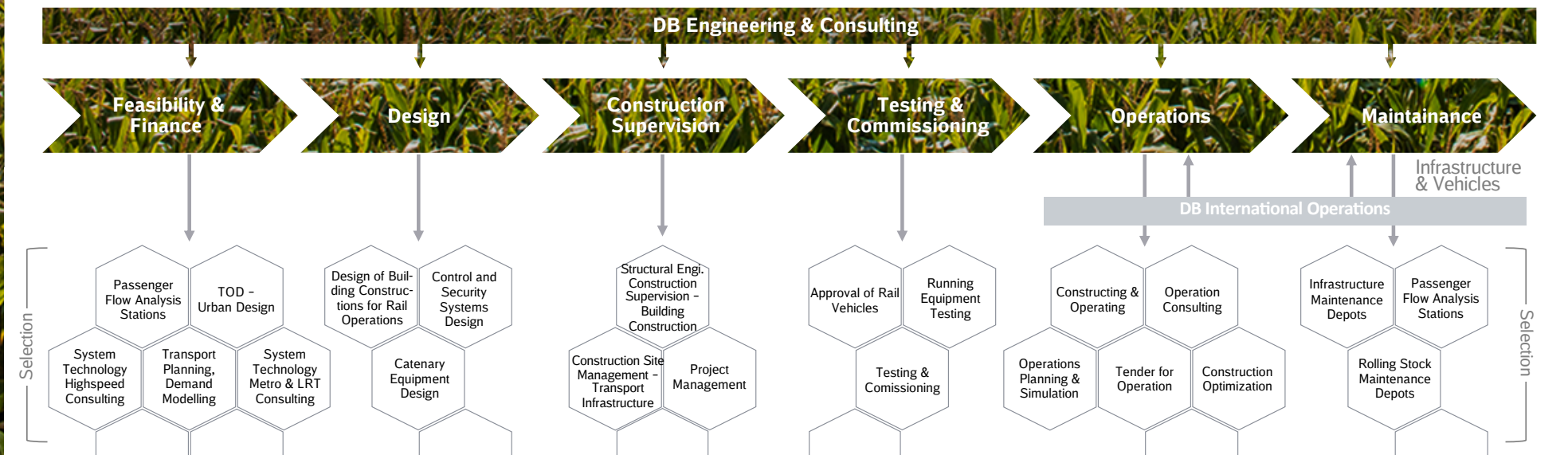
Source: Deutsche Bahn AG | 2018





Our services

## Customized products for every life cycle phase





# Product portfolio of DB ECO

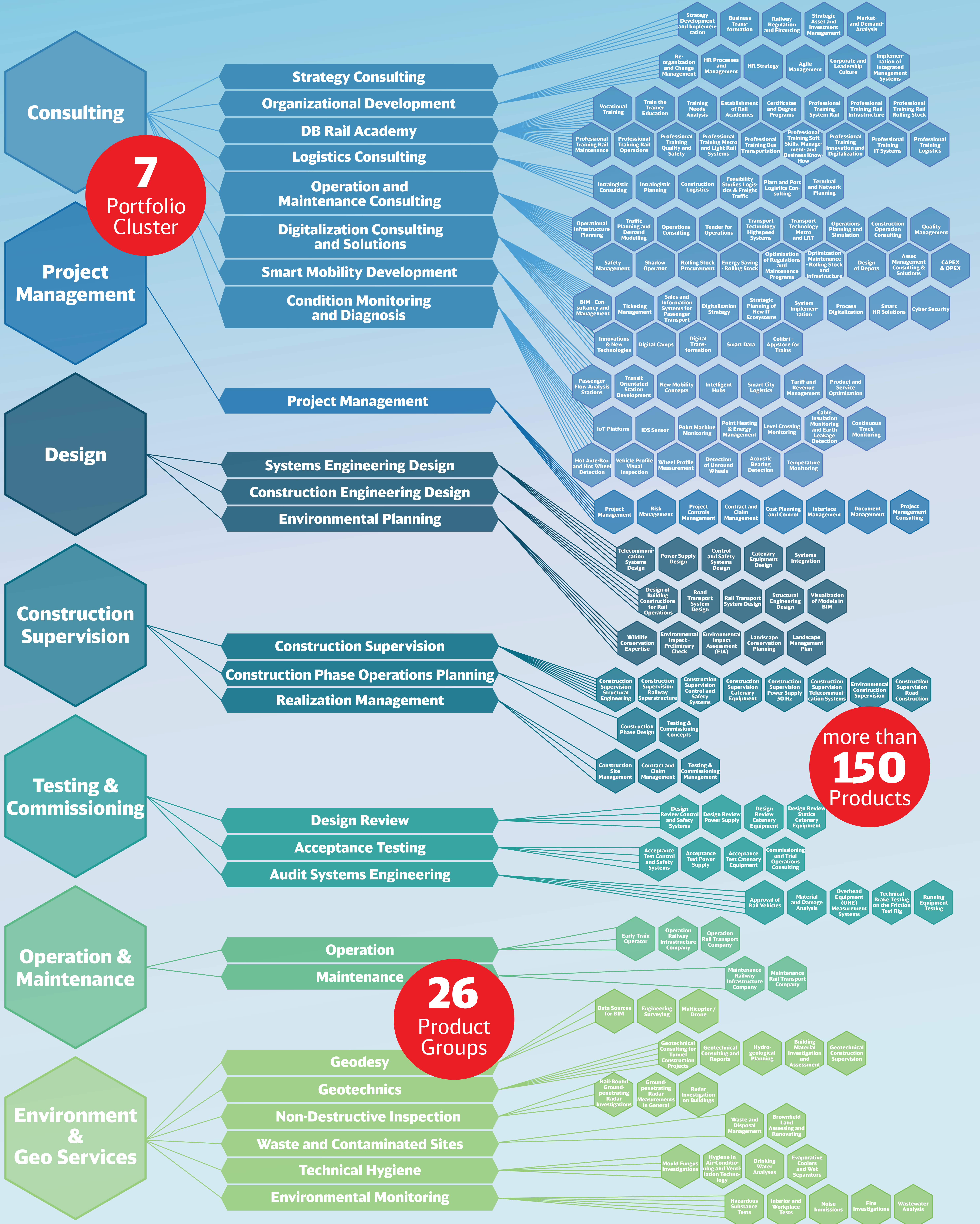


complex – innovativ – multiperspectival

## Portfolio Cluster

## Product Groups

## Products

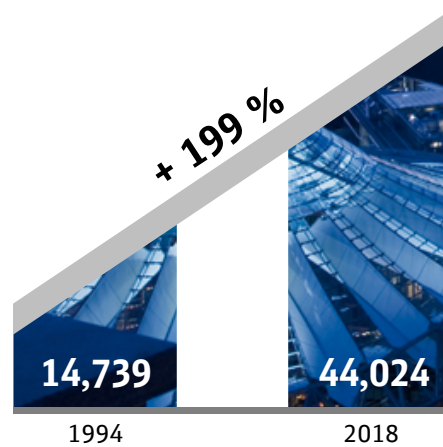




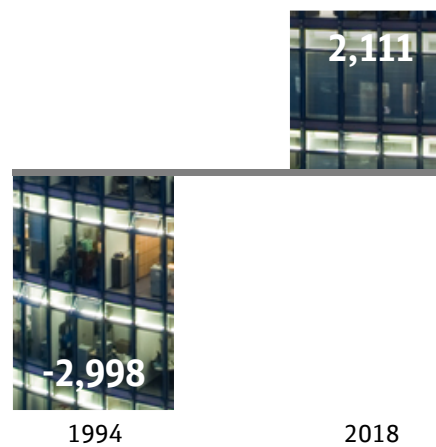
Our group

## Revenue and EBIT

Revenues (EUR million)



EBIT (EUR million)



Data as of Dec. 31, 2018

**The success is guaranteed by a full compromise of the government through a long term integrated planning and investments policy**

**.... as well as through a legal framework that sets clear, objective and transparent rules for the private sector to invest and operate**



**Bundesverkehswegplan Integrated planning** -> one infrastructure master plan, protected by Law, working as an integrated transport and logistics system



**Maximum intermodal competition** -> free competition among the private and public operators for the most efficient logistics solution



**Maximum intramodal competition** -> more than 400 rail operators, several truck and barges operators

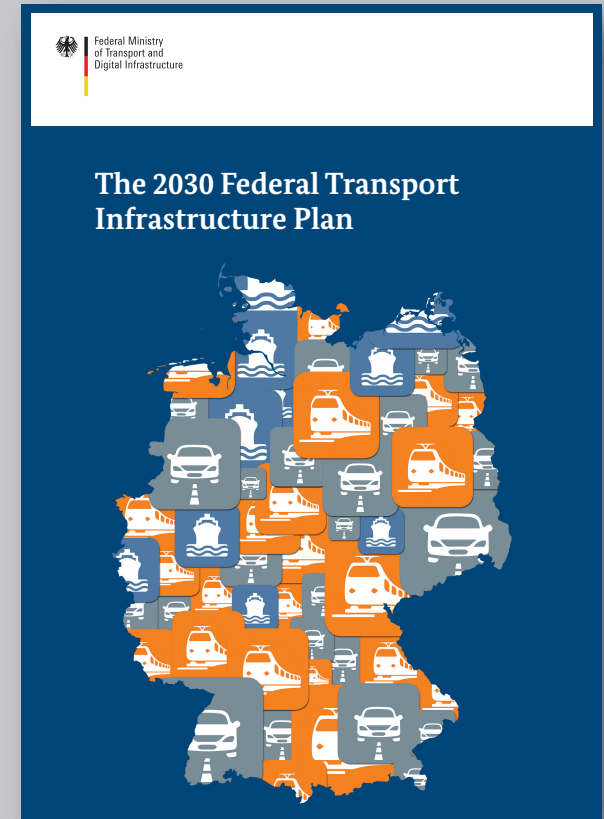


**As consequence, all efforts from the public and private sector converge to the maximization of results**



# The German Transports & Logistics Master Plan

- The Bundesverkehrswegeplan, is the **German Transport Infrastructure Master Plan**, in a **multimodal, efficient and integrated approach**
- The investment budget has the following highlights:
  - **1,000 projects** and over **13 year horizon**
  - About **270 billion euros investment**
  - **Approved in the form of Law** by the German Bundestag Parliament
- Overall, **70% is brownfield**, that is, **optimizing the existing infrastructure** before **building new, modernizing and upgrading highways, railways, waterways, ports and airports** to achieve greater efficiency



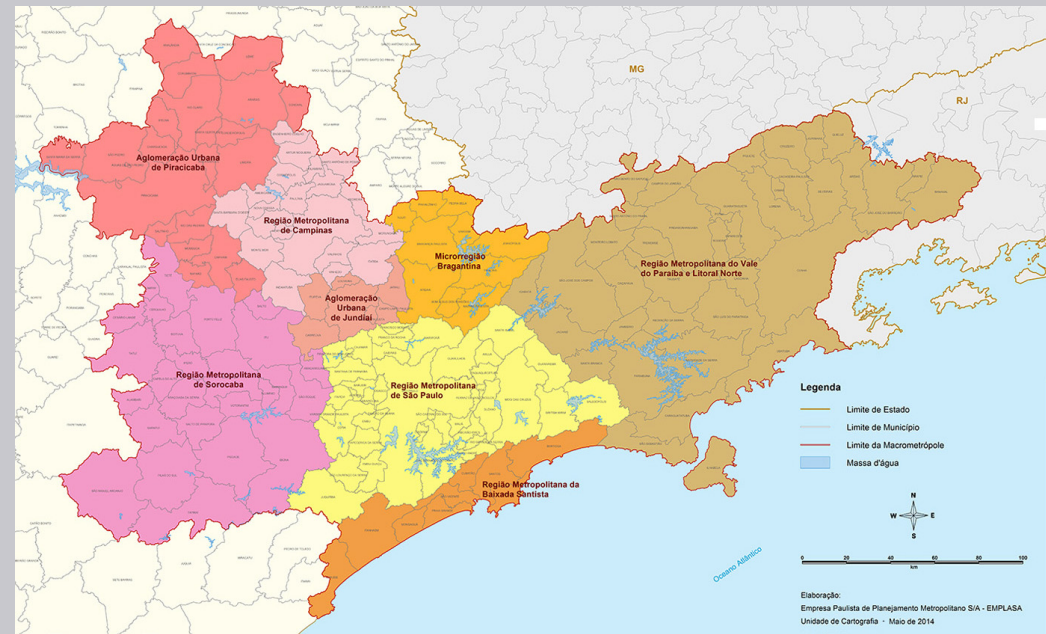
The Methodology of the Master Plan consists of 8 stages, where projects are selected according to a technical criteria

- (1) **DEVELOPMENT OF SCENARIOS AND DEMANDS** for the transport development
- (2) Modernization of the **METHODOLOGY FOR THE EVALUATION** of the **MULTICRITERIA MATRIX**
- (3) Verification of transport networks, requests and project proposals and definitions of projects -> **IDENTIFICATION OF BOTTLENECKS**
- (4) Evaluation of projects, and proof of technical, economic and financial feasibility -> **PROJECT EVALUATION**
- (5) **MATRIX OF PRIORITIES**, taking into account the available financial resources -> **SELECTION AND PRIORITIZATION OF THE PROJECTS TO INTEGRATE THE PIPELINE**
- (6) Coordination and consultation with departments, **federal, state and municipal governments and organizations**
- (7) Decision of the Office responsible for the Federal Transport Infrastructure Plan -> **PROJECTS AND BUDGET PROCESSED IN LAW**
- (8) Legislative process for the **expansion or adjustment of laws**

PAM-TL is an Action Plan of Transports and Logistics of the MMP (Macrometropolis Paulista) aiming at transforming the region and generating high economic growth

### The MMP (Macrometropolis Paulista)

- **35 million inhabitants (Equal to the population of Canada)**
- **Rank 25<sup>th</sup> GDP of the world (Equal to the GDP of Belgium)**
- **50,000 km<sup>2</sup> (20% of the State of Sao Paulo)**
- 173 municipalities (50% urban area of SP State)
- 18% of environmental protected area
- 74% of the population of the State of SP
- 83% of the GDP of the State of SP (high tech industries, commerce, services and agribusiness)
- Transport infrastructure and national importance of logistics, highly needing integration and connectivity systems
- 3.8 million people living in slums



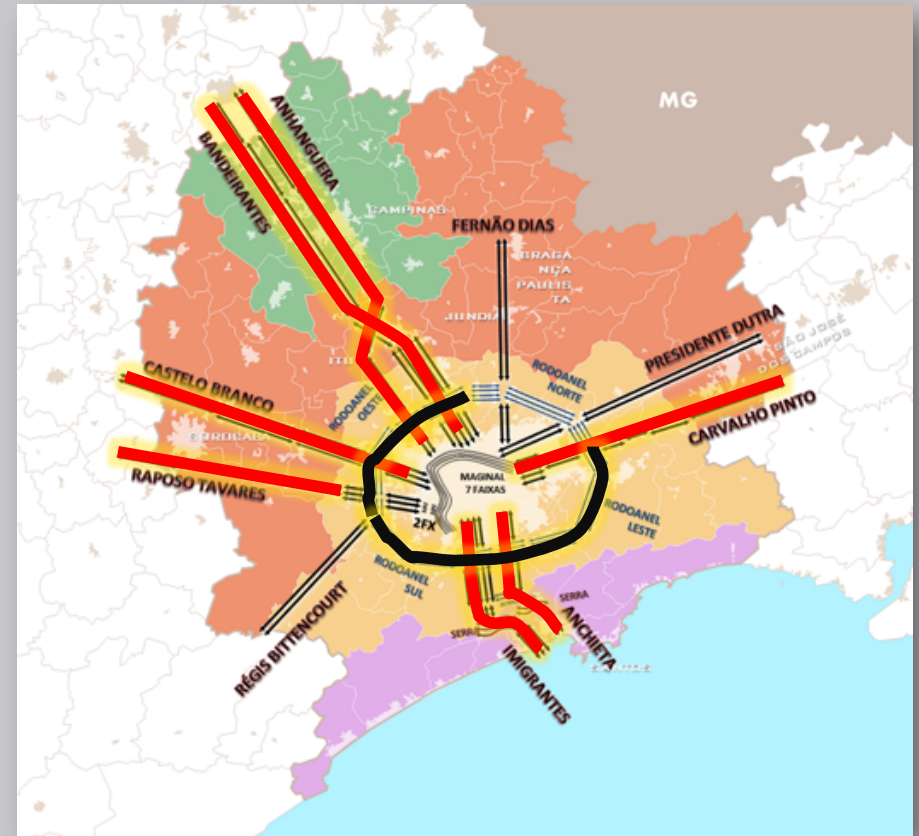
Source: Emplasa

The consequence is the future saturation of the main roads of SP, due to the lack of multimodality

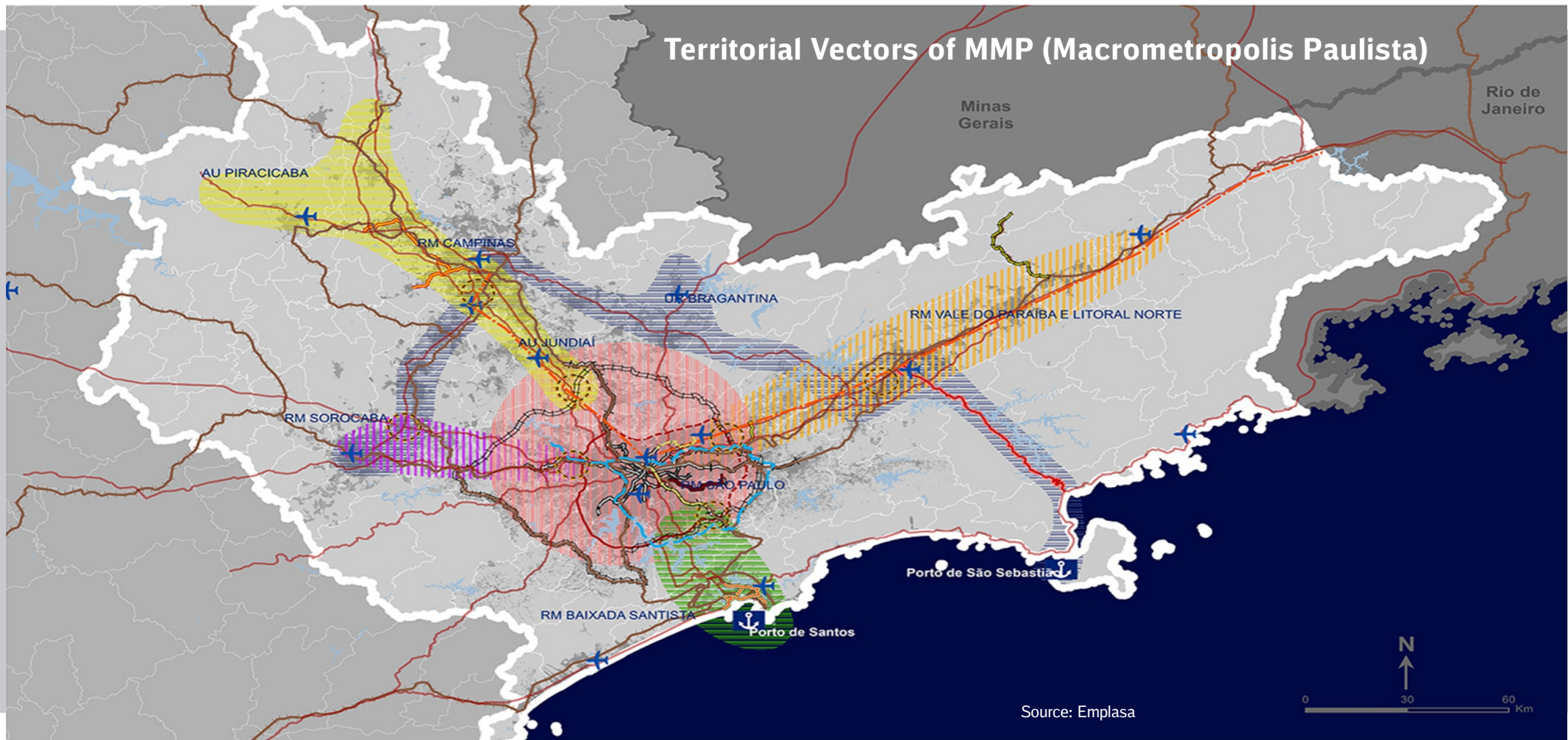
### The challenging future saturation of the main roads of the MMP (Macrometropolis Paulista)

Evolução do Nível de Serviço							
Rodovia	2010	2015	2020	2025	2030	2035	2040
Anhanguera	D	D	F	F	F	F	F
Bandeirantes	C	D	E	F	F	F	F
Anchieta	D	D	F	F	F	F	F
Imigrantes	C	C	D	D	F	F	F
Castello Branco	C	D	D	F	F	F	F
Raposo Tavares	C	D	D	F	F	F	F
Ayrton Senna	C	D	E	F	F	F	F
Dutra	D	E	F	F	F	F	F

Source: SLT Secretaria de Logística e Transportes do Estado de SP

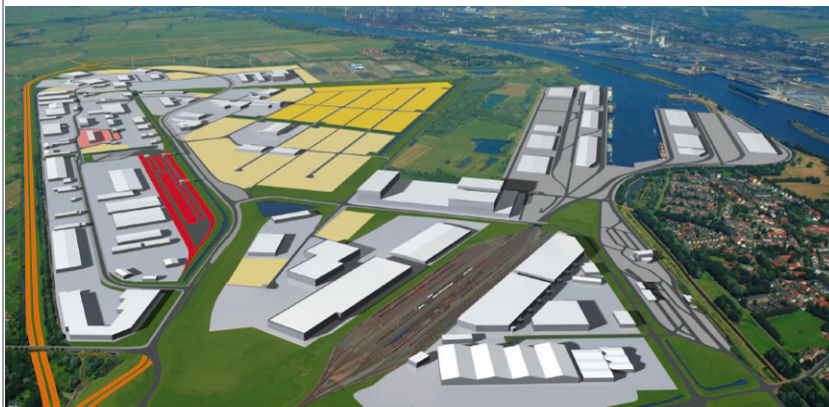


PAM-TL is a study contracted by STL and DER-SP, financed by BID, and executed by the Consórcio PRO-TL (lead by DB) to provide a multimodal solution for SP



The freight village in Bremen is ranked # 2 in Europe and created 8,000 jobs mainly through related services

### Bremen-Germany largest freight village



### Key facts

- **Site area:** 496 ha (+ 4 ha terminal for combined transportation)
- **Covered storage area:** 960,000 m<sup>2</sup>
- **Employment effect :** 8,000 people in 150 companies
- **Annual cargo turnover:** n/a
- **Total investment:** €460 million since 1985

### Customers (tenants)

- Retail logistics, furniture logistics, forwarders, international logistic providers, ship-owners

### Location and benefits

- The greater Bremen area is located in the heart of global trade flows; the **proximity to port** and airport in Bremen makes the region an **attractive industrial location**
- The Bremen Logistics Centre offers attractive land plots with **a high synergy potential** for transport and logistics companies to attract companies with a high affinity to the **logistics business** (e.g. **production companies and retailers**).

### Services provided

- Cooled warehouse
- Gas station
- Container terminal and service centre
- Biggest high rack storage in Europe

Source: DGG 2010: Ranking of Europe's Logistics Centers, DB International



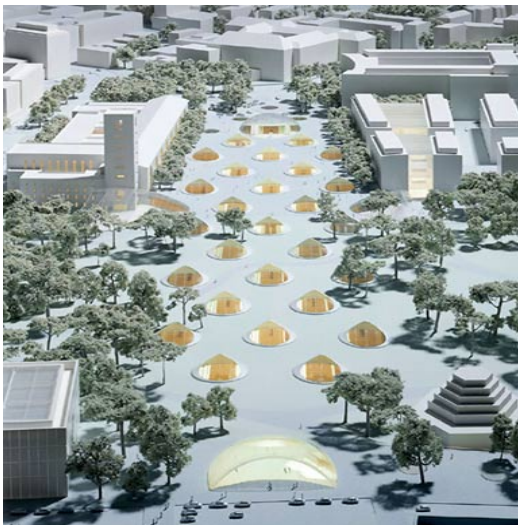
**Berlin Hauptbahnhof central station: Europe biggest multimodal station**  
60,000 m<sup>2</sup> / 3 shopping levels with 80 stores / 10 floors of offices



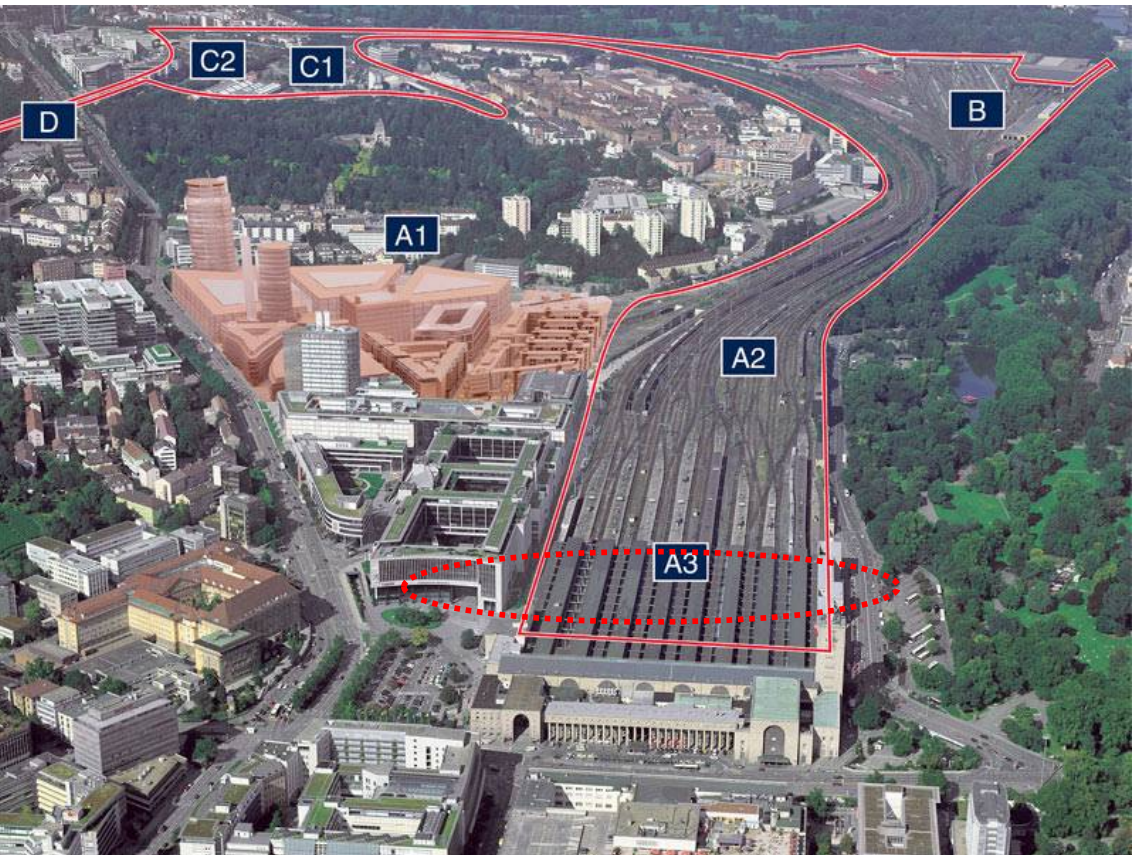
# Project References

– Station and urban development projects

## Stuttgart 21



Straßburger Platz  
The new Central Station

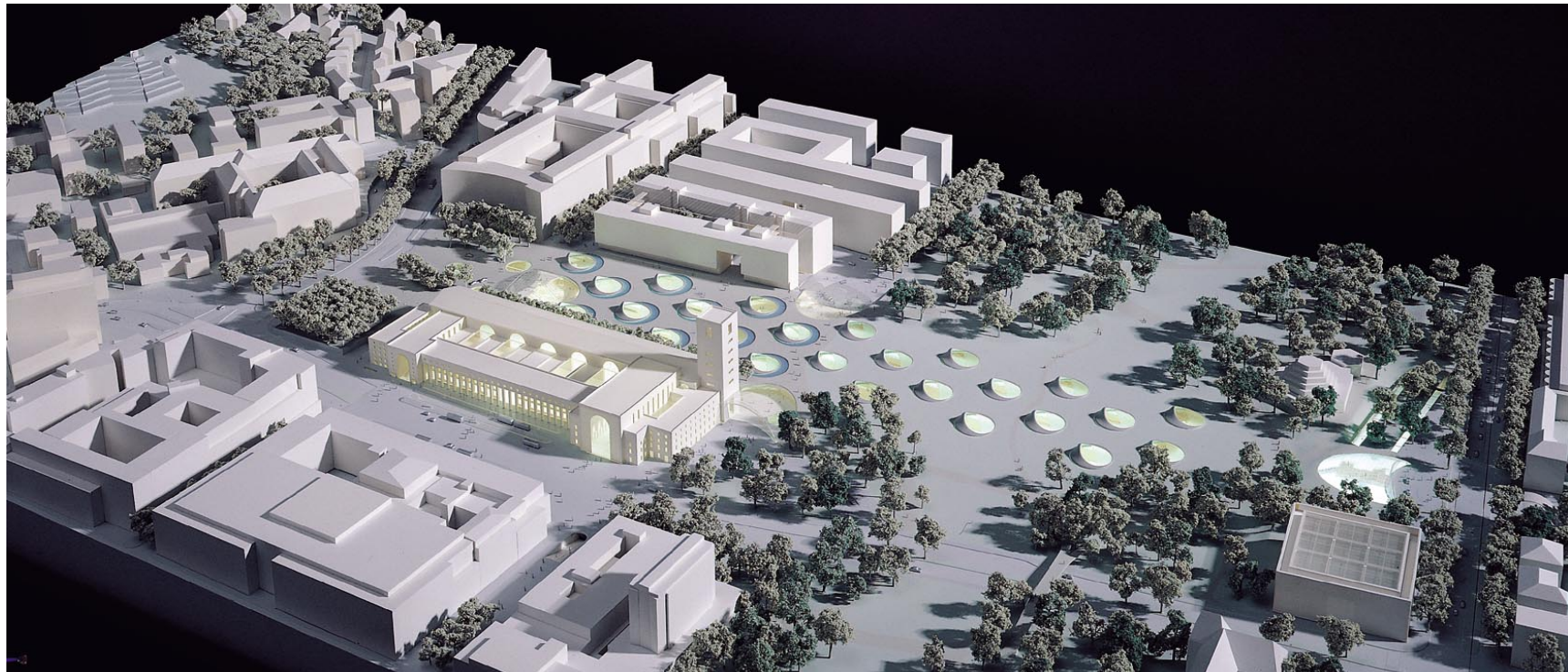




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## Contacts

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**DB International Brasil Ltda**

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[www.db-ec.de](http://www.db-ec.de)



# BACK-UP



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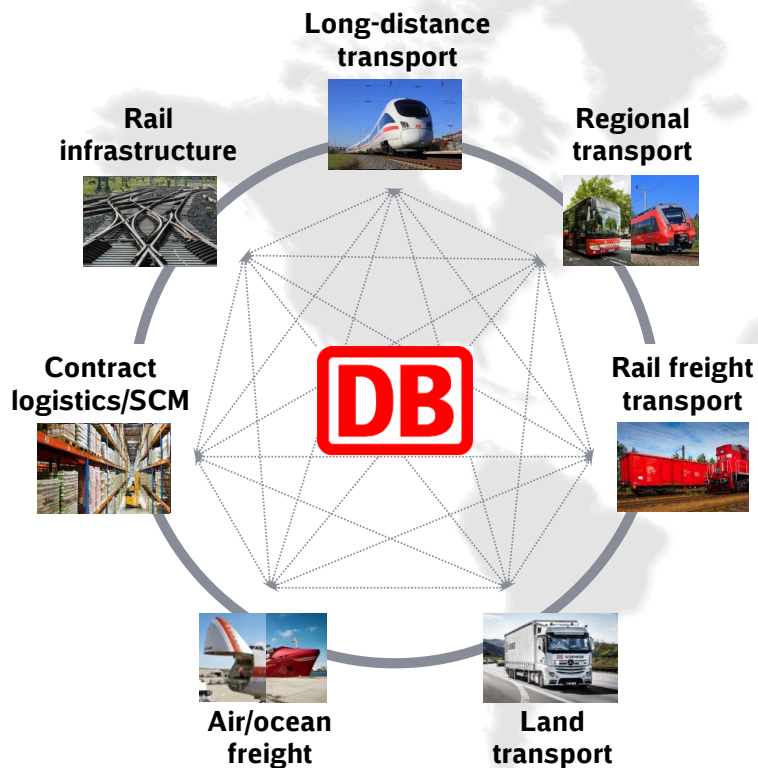
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### DB Group worldwide

	<b>No. 3</b> Air freight		<b>No. 5</b> Contract logistics/SCM
	<b>No. 3</b> Ocean freight		

Source: Deutsche Bahn AG | 2018



## Passenger Transport

DB is the second biggest provider in the entire European passenger transport market



- **4.4** billion passengers per year in trains and buses
- **13.3** million passengers per day
- **35,000** trains managed per day by DB in the German rail network
- **14** countries operated by DB passenger transport
- **9** neighboring countries can be reached directly via DB

### **BAHN**

#### DB Bahn Long Distance



#### DB Bahn Regional



#### DB Arriva



#### DB Bahn Sales<sup>1</sup>



Source: Deutsche Bahn AG | 2018

# DB operates the biggest rail network in the heart of Europe

- **5,400** train stations serve as railway gateways in Germany
- **60,300** km long rail network duplicated - three times as long as the German Autobahn network
- **25,000** bridges of DB make its way through rivers and valleys
- **5th** largest provider of energy in Germany - annual volume of available energy equal to energy consumed by Berlin metropolitan area

## NETZE

**DB Netze Track**



**DB Netze Stations**



**DB Netze Energy**



**DB Netze Projects<sup>1</sup>**





# DB is the third biggest worldwide freight transport and logistics services provider

- **> 2,000** locations in over 130 countries
- **4,400** freight trains per day through Europe
- **2** million TEU (export) ocean freight volume in 2016
- **> 8** million square meters of storage space in 700 locations around the world

## DB Cargo



## DB Schenker



Source: Deutsche Bahn AG | 2018

## Services



DB Services is DB's nation-wide, high-performing internal service provider

- **15,000**  
"Call a bikes" in numerous major cities make us Germany's largest bicycle rental company
- **12**  
facilities for refurbishing 200,000 brake components and 90,000 wheelsets
- **500**  
IT applications for the DB Group
- **3,700**  
security personnel in trains and at stations ensure the safety of our customers

### DB Services



Source: Deutsche Bahn AG | 2018



Who we are

## Our mission

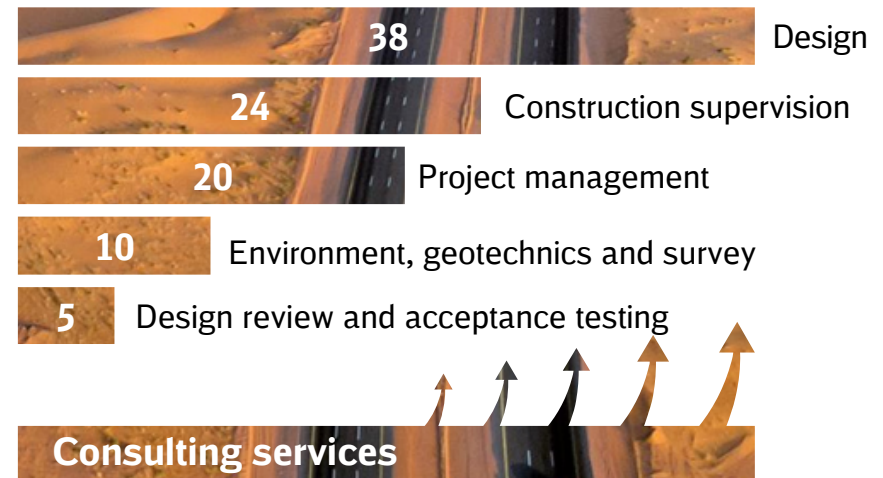
As one of the world's leading engineering and consulting firms, we shape the world of tomorrow - with customized and sustainable mobility and transport solutions.



4,800 employees  
from 78 countries  
for all technical disciplines

Who we are

## Our specialists

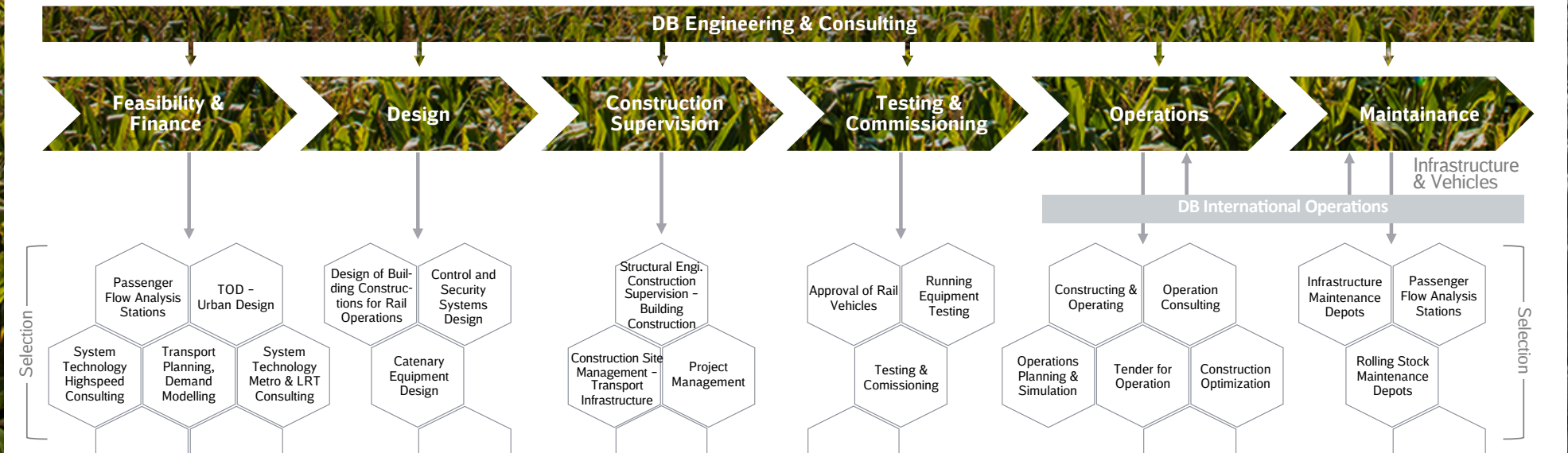


Functional percentage of production staff, 3 % other (as of Dec 2018)



Our services

## Customized products for every life cycle phase





Who we are

## In Germany



7 regions with more  
than 80 locations

Headquarters Berlin





Who we are

## Worldwide



Represented on every  
**continent**  
Projects in over  
**100 countries**  
since **1966**

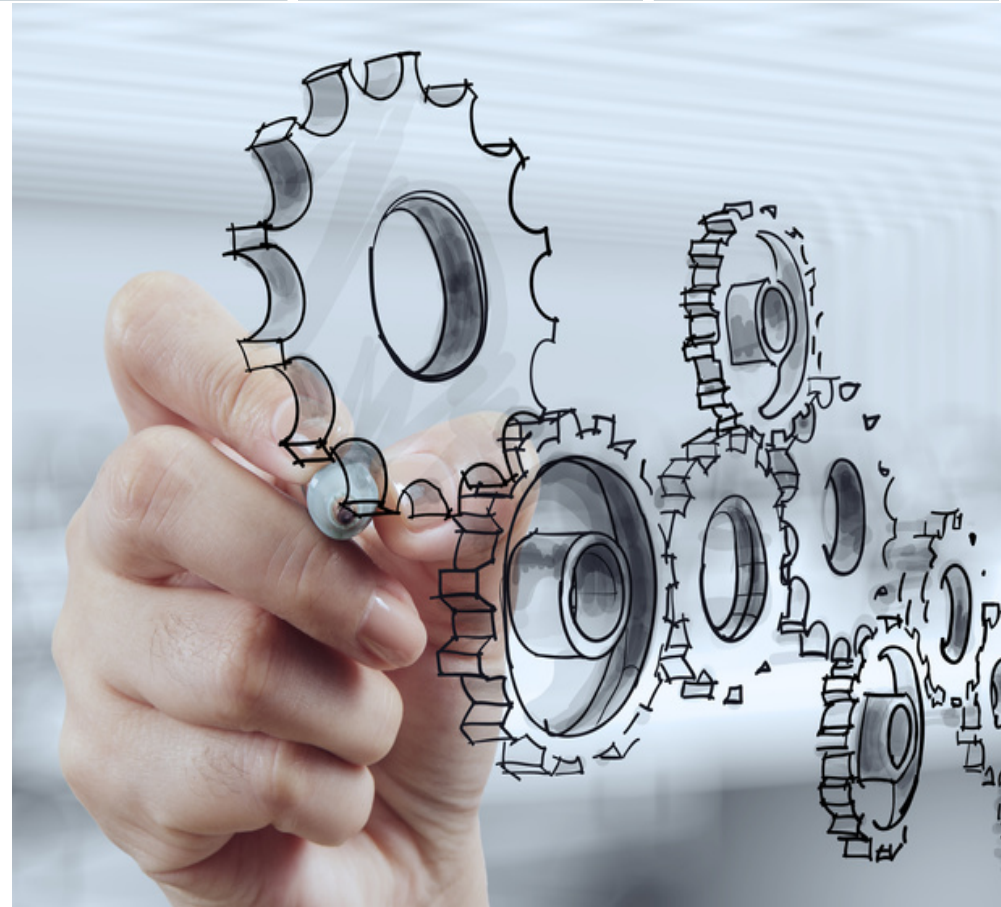
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## 2 | Introduction and benefits of multimodality





# Germany occupies the #1 position in the LPI Rank as the most efficient logistics nation in the world, Brazil is #55

## Logistics Performance Index (LPI) Rank

Rank	Country	Score
1	<b>Germany</b>	<b>4,23</b>
2	Luxembourg	4,22
3	Sweden	4,20
4	Netherlands	4,19
5	Singapore	4,14
6	Belgium	4,11
7	Austria	4,10
8	United Kingdom	4,07
9	Hong Kong	4,07
10	United States	3,99
12	Japan	3,97
13	United Arab Emirates	3,94
14	Canada	3,93
16	France	3,90
20	South Africa	3,78
21	Italy	3,76
22	Norway	3,73
23	Spain	3,73
24	South Korea	3,72
27	China	3,66
35	India	3,42
46	Chile	3,25
54	Mexico	3,11
<b>55</b>	<b>Brazil</b>	<b>3,09</b>
65	Uruguay	2,97
66	Argentina	2,96
69	Peru	2,89
99	Russia	2,57
160	Syria	1,60

### LPI Europe Rank

Rank	Country	Score
1	<b>Germany</b>	<b>4,23</b>
2	Luxembourg	4,22
3	Sweden	4,20
4	Netherlands	4,19
6	Belgium	4,11
7	Austria	4,10
8	United Kingdom	4,07
16	France	3,90
21	Italy	3,76
22	Norway	3,73
23	Spain	3,73
36	Portugal	3,41

### LPI BRICS Rank

Rank	Country	Score
20	South Africa	3,78
27	China	3,66
35	India	3,42
<b>55</b>	<b>Brazil</b>	<b>3,09</b>
99	Russia	2,57

### LPI America Rank

Rank	Country	Score
10	United States	3,99
14	Canada	3,93
40	Panama	3,34
54	Mexico	3,11
<b>55</b>	<b>Brazil</b>	<b>3,09</b>
65	Uruguay	2,97
66	Argentina	2,96
69	Peru	2,89

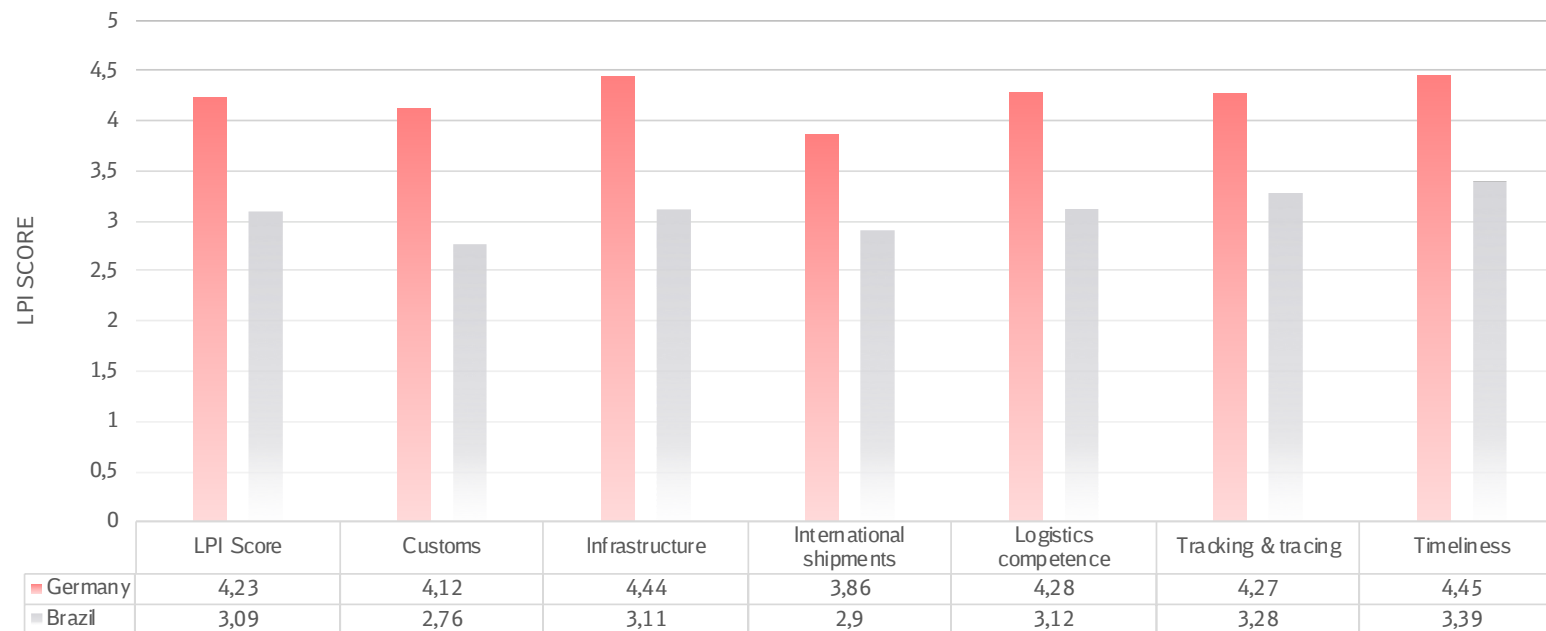
### LPI Asia Rank

Rank	Country	Score
5	Singapore	4,14
9	Hong Kong	4,07
12	Japan	3,97
24	South Korea	3,72
27	China	3,66
35	India	3,42

Source: <http://lpi.worldbank.org>

**Intermodality is a key factor for achieving a high competitive nation, for the flow of people and goods in an integrated efficient manner**

### LOGISTICS PERFORMANCE INDEX COMPARISON BRAZIL X GERMANY



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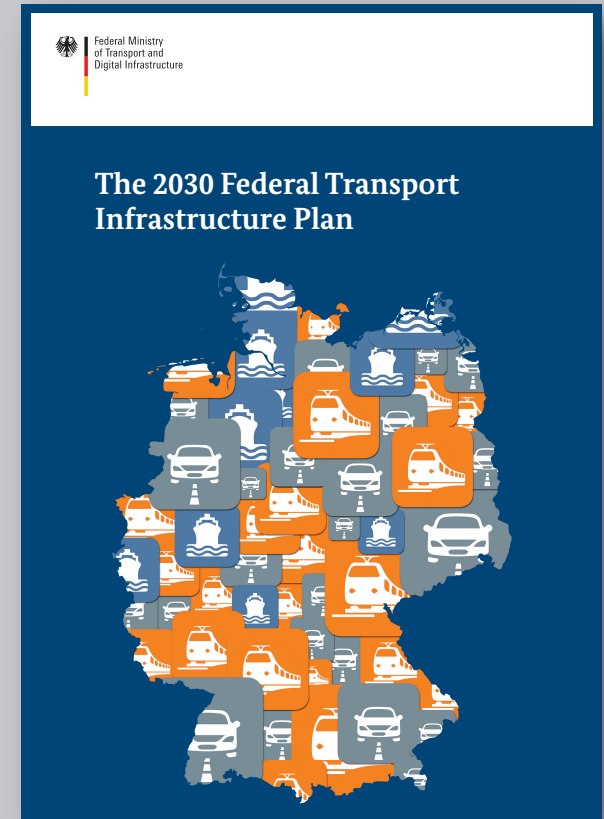
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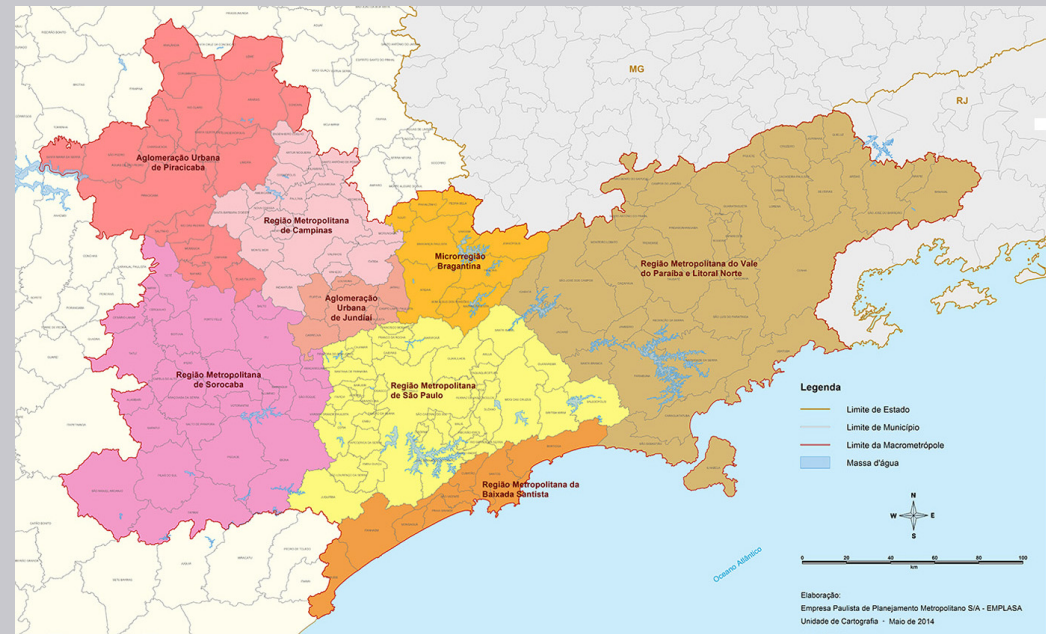
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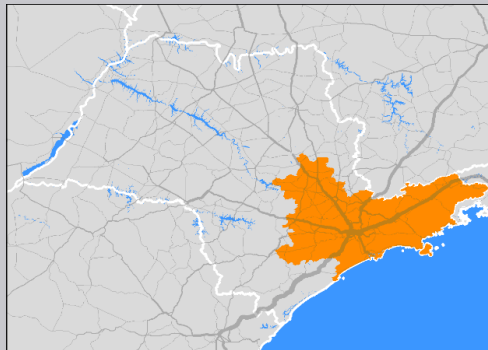
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- Transport infrastructure and national importance of logistics, highly needing integration and connectivity systems
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Source: Emplasa

Cargo Handled in the State of São Paulo in 2015: almost 700 million tons  
82% depending on the road transport, with low intermodality practiced



### Macrometropole (MMP)

**State of São Paulo  
Modal Share - 2015**

Mode	TKU millions	%
Road	245.000	82.4%
Rail	29.600	9.9%
Waterway	920	0,3%
Pipeline	6.670	2,2%
Coasting	11.400	3,8%
Air Transport	4.000	1,3%
<b>TOTAL</b>	<b>297.575</b>	<b>100,0%</b>

Products	Flow Direction			TOTAL
	inside to inside	inside to outside	outside to inside	
<b>General Cargo</b>	103,7	82,4	90,8	<b>276,9</b>
<b>Minerals</b>	51,4	29,8	101,7	<b>182,9</b>
<b>Agricultural</b>	3,1	4,8	54,8	<b>62,8</b>
<b>Fuels</b>	30,8	44,8	11,5	<b>87,1</b>
<b>Agroindustrial</b>	10,6	10,1	56,1	<b>76,8</b>
<b>Total</b>	<b>199,7</b>	<b>171,9</b>	<b>314,9</b>	<b>686,5</b>

million t

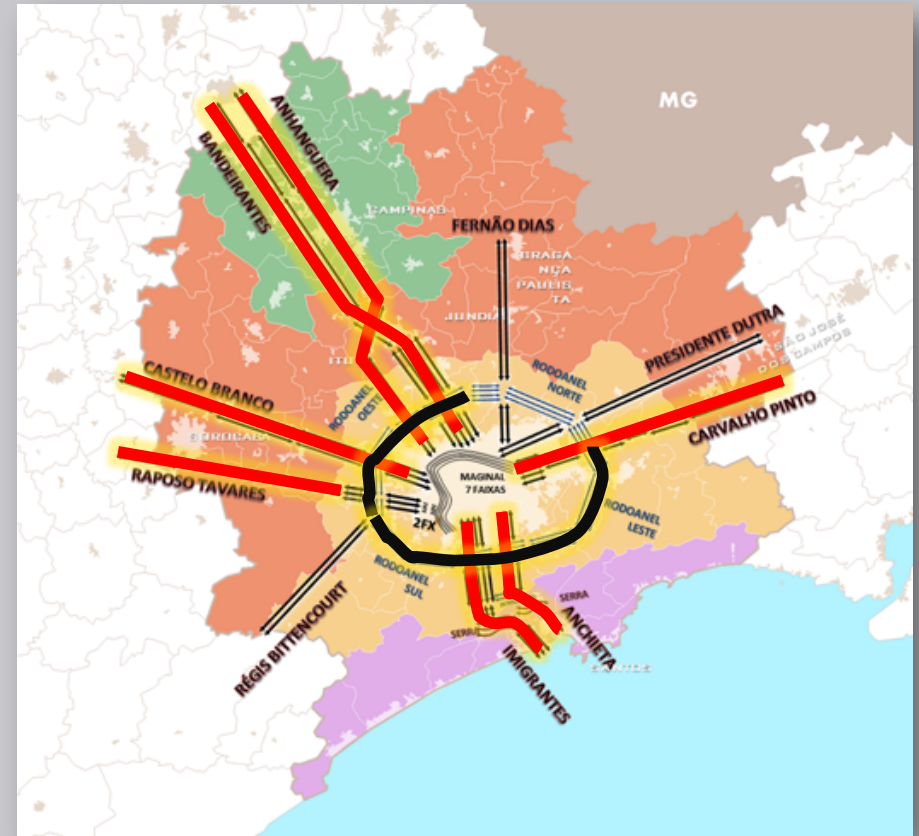
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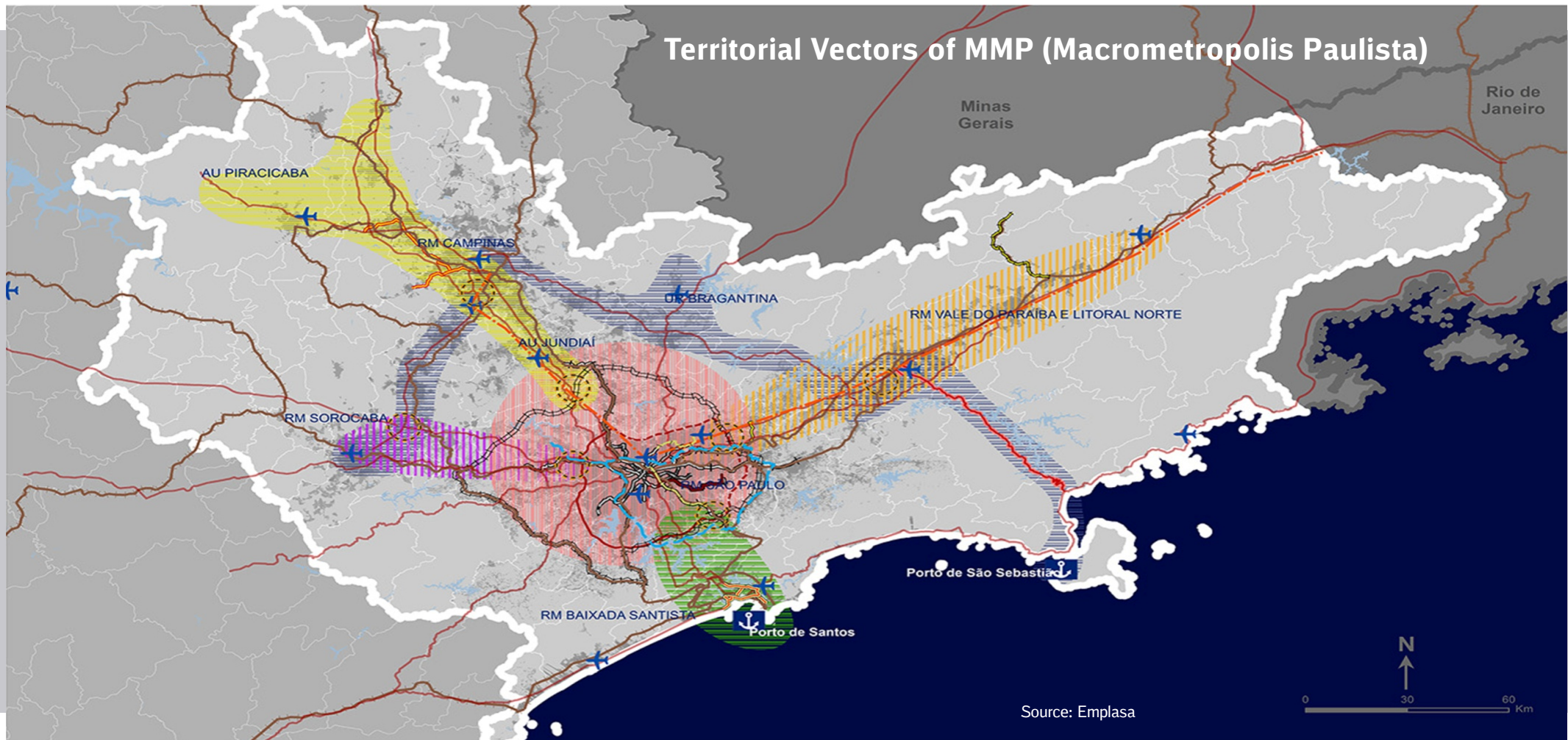
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Anhanguera	D	D	F	F	F	F	F
Bandeirantes	C	D	E	F	F	F	F
Anchieta	D	D	F	F	F	F	F
Imigrantes	C	C	D	D	F	F	F
Castello Branco	C	D	D	F	F	F	F
Raposo Tavares	C	D	D	F	F	F	F
Ayrton Senna	C	D	E	F	F	F	F
Dutra	D	E	F	F	F	F	F

Source: SLT Secretaria de Logística e Transportes do Estado de SP

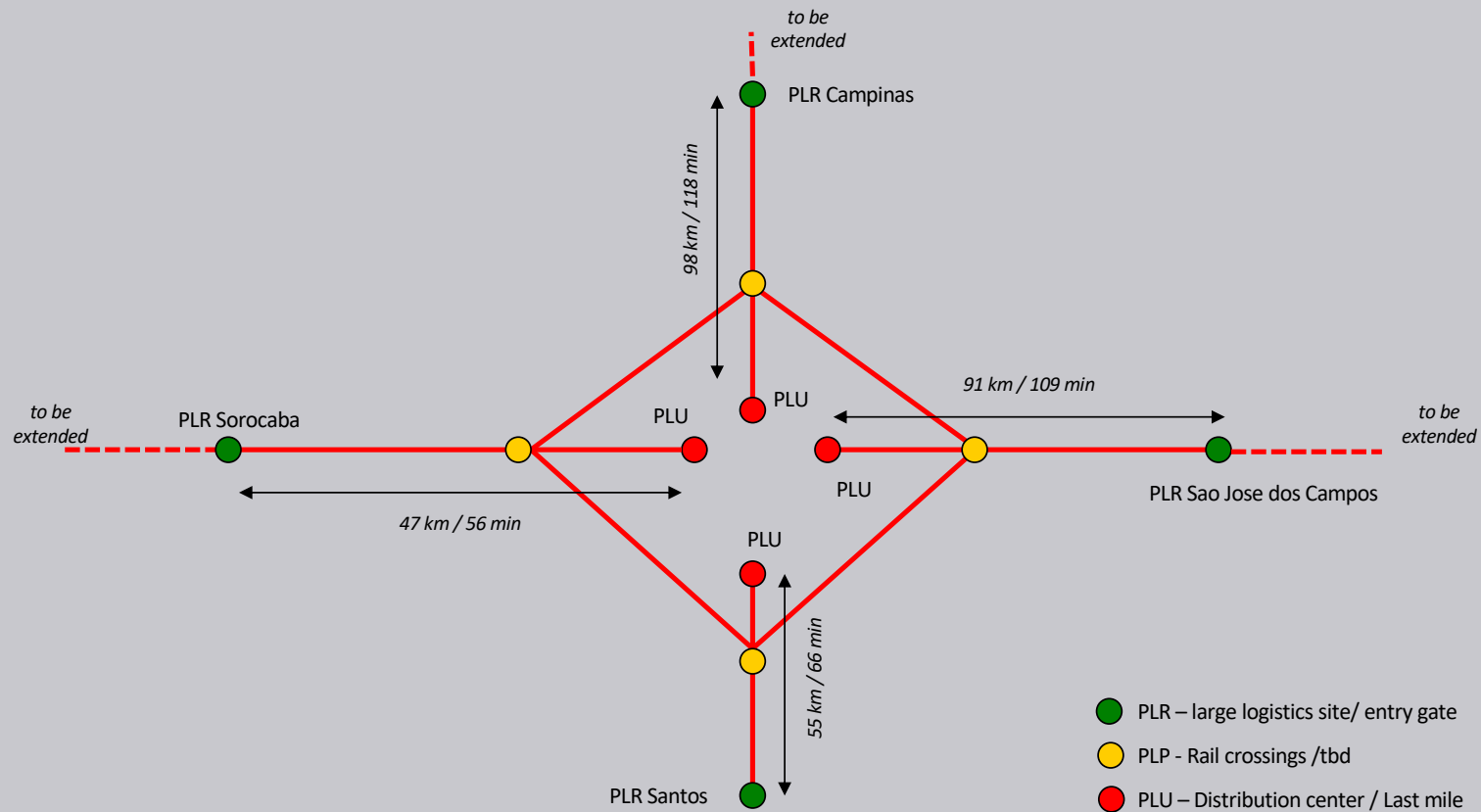




PAM-TL is a study contracted by STL and DER-SP, financed by BID, and executed by the Consórcio PRO-TL (lead by DB) to provide a multimodal solution for SP

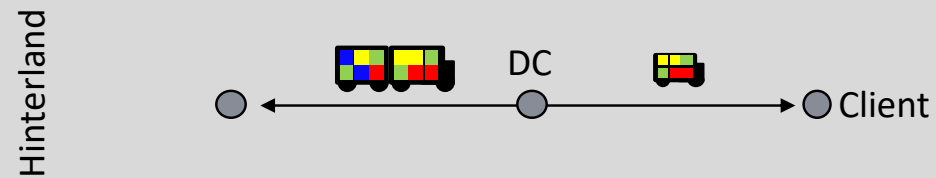


# Future rail network vision – A mixture of linear connections and the rail ring with a speed of 50 km/h on rail

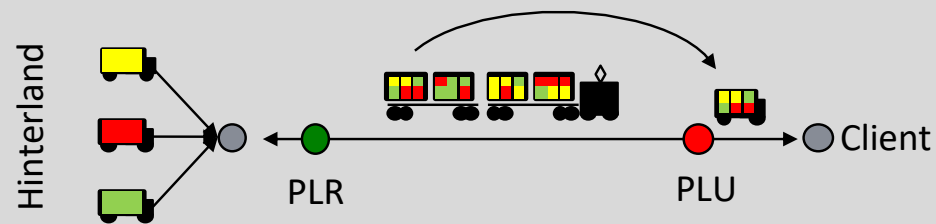


Direct rail links into the inner city of Sao Paulo will increase the speed of transportation and reduces the number of trucks

### Today's transportation



### Future transportation



PELC-RJ is a Master Plan of Logistics of the Rio de Janeiro State, aiming at attracting investors/operators and generating high economic development to the region

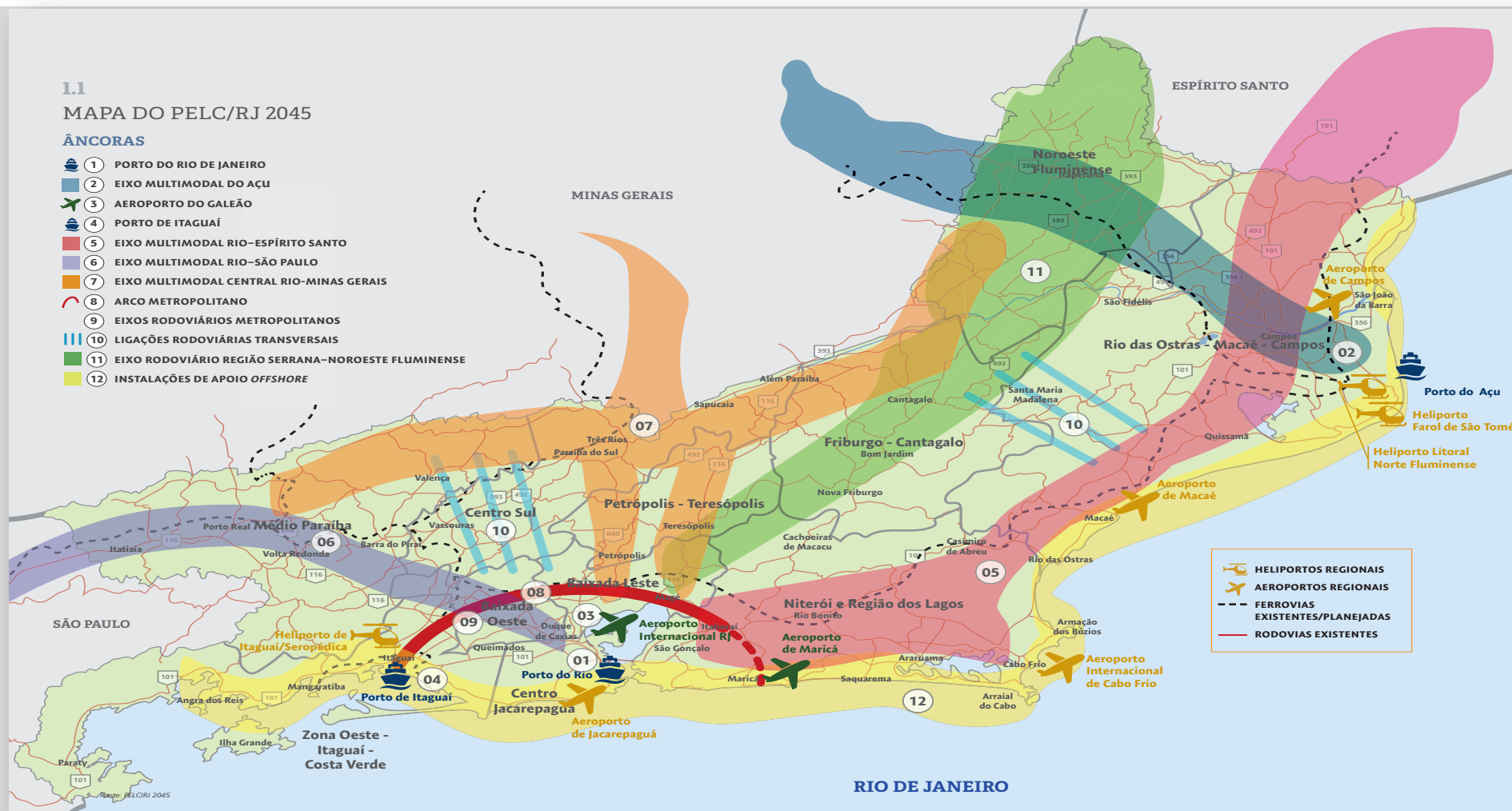


- PELC-RJ is the only integrated logistics master plan of Rio de Janeiro state
- It contains a pipeline of the major logistics infrastructure projects

#### Challenges:

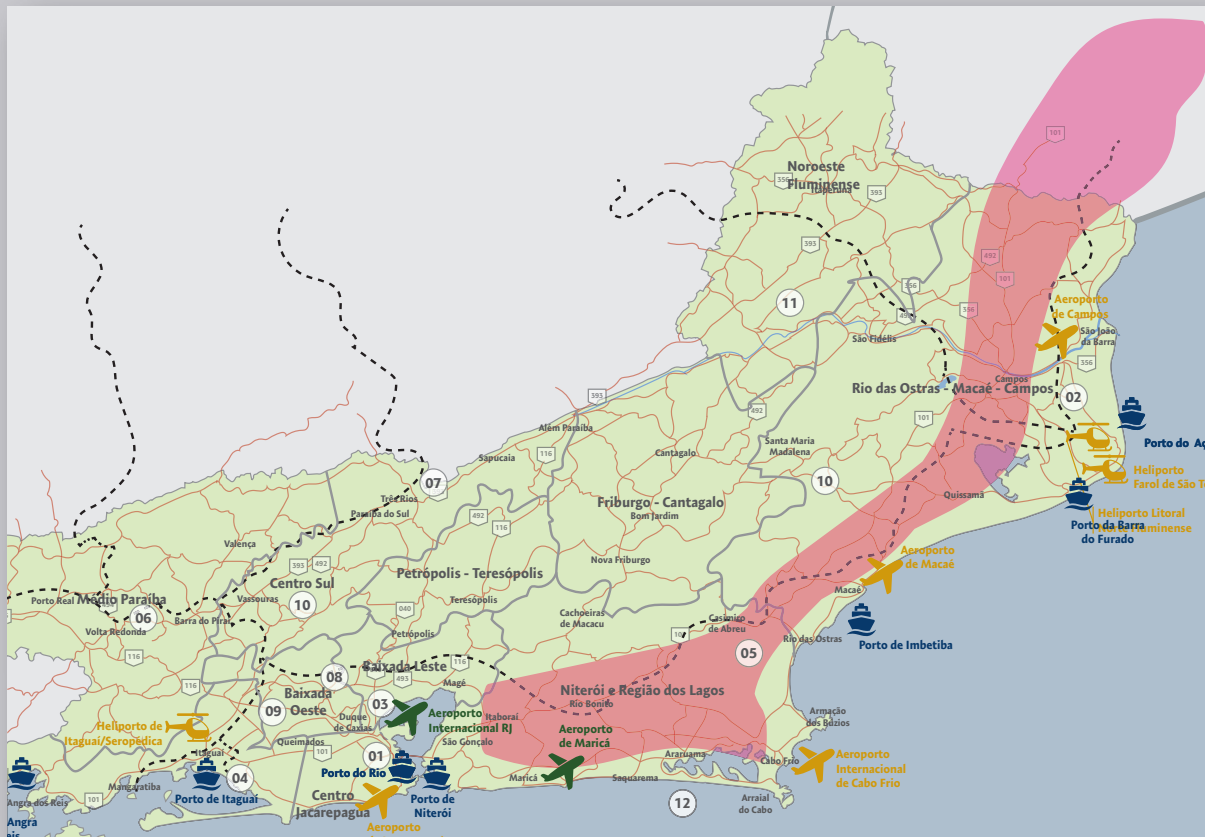
- PELC-RJ has been approved in the form of Law by the Rio de Janeiro State Government in order to bring **predictability and long term view to attract Brazilian and international investors**
- Rio de Janeiro State needs to nominate an committee to be able to execute PELC-RJ pipeline projects, on the following tasks:
  - Structuring
  - Business strategy
  - Road show to attract investors

PELC-RJ was developed by DB-Sysfer-Logit, in cooperation with Setrans-RJ and defined the main logistics corridors and the pipeline of logistics projects of RJ State



The EF-118 Rail (Axis 5) is a major logistics corridor connecting Rio de Janeiro and Espírito Santo most important ports and industrial districts by rail

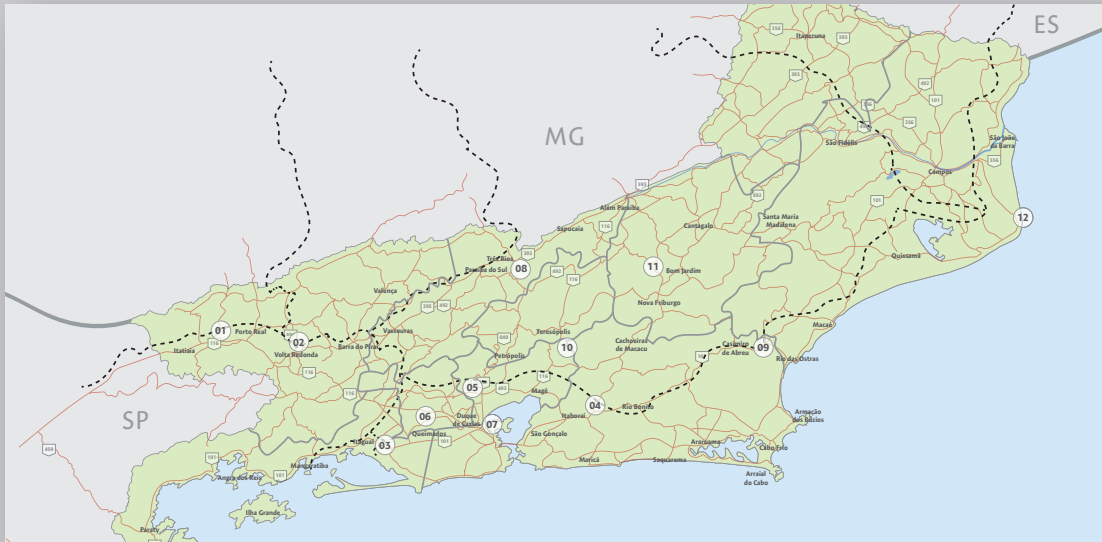
### EF-118 Rio-Vitoria rail corridor



- **Total Extension:** 577.8 km
  - **ES:** 169.2 km
  - **RJ:** 404.6 km
- **Capacity:** 11 pairs of trains /day
- **Train-type:** 168 wagons
- **Total Capex:** BRL 7.8 Bi (1.85 bi EUR)
- **Direct link:** Comperj Petrobras, Açú Port, Porto Central
- **Indirect link:** Ports of Itaguai, Macaé, Barra do Furado, Ubú, Industrial Districts

PELC-RJ recommended 12 multimodal logistics platforms to work as hubs in order to integrate several logistics corridors and achieve high logistics efficiency

### Rio de Janeiro Logistics Platforms



1. **SUL FLUMINENSE (RESENDE-ITATIAIA-PORTO REAL)**
2. **BARRA MANSA/VOLTA REDONDA**
3. **ARCO OESTE (ITAGUAÍ-SANTA CRUZ-SEROPÉDICA)**
4. **ARCO LESTE (COMPERJ-MARICÁ)**
5. **ARCO CENTRAL (CAXIAS-BR 040)**
6. **BAIXADA OESTE (JAPERI-QUEIMADOS)**
7. **AEROPORTO GALEÃO**
8. **RIO-MINAS (TRES RIOS)**
9. **MACAÉ (EIXO MACAÉ – CABO FRIO)**
10. **SERRANA I (PETRÓPOLIS-TERESÓPOLIS)**
11. **SERRANA II (NOVA FRIBURGO);**
12. **ACU (BARRA DO FURADO-ACU-CAMPOS)**

1 The Deutsche Bahn Group and DB International

2 Introduction and benefits of multimodality



4 Case Studies

5 Contact

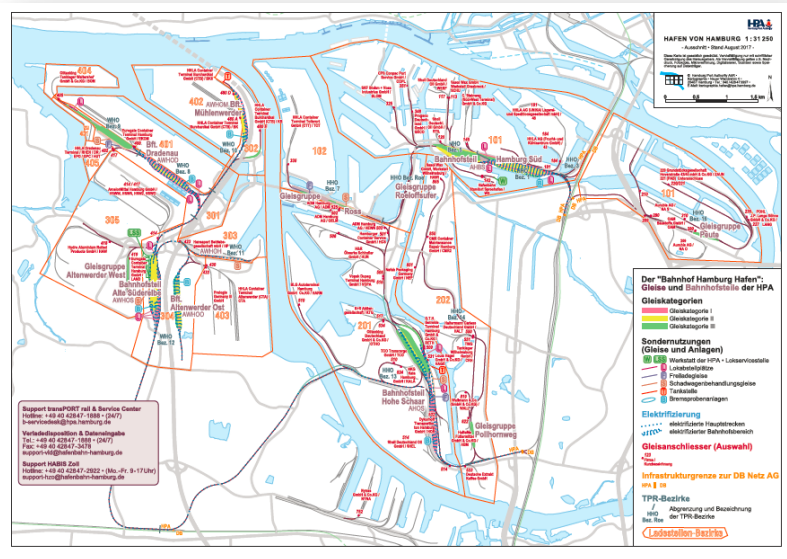
### 3 | Success factors for an efficient multimodal supply chain





# Hinterland transport: The railway transport plays a crucial role in the hinterland of the German ports

- **Port of Hamburg** handles approx. **8.8 million TEUs** per year
  - **5.6 million TEUs** are (un)loaded in need for **hinterland transportation**
  - **Modal split: 42 % rail / 55 % truck / 3 % barge**
- **Port of Bremerhaven** handles approx. **5.5 million TEUs** per year
  - **2.5 million TEUs** are (un)loaded in need for **hinterland transportation**
  - **Modal split: 46 % rail / 51 % truck / 3 % barge**



# The Port of Hamburg is European third busiest container port



## About the Port of Hamburg

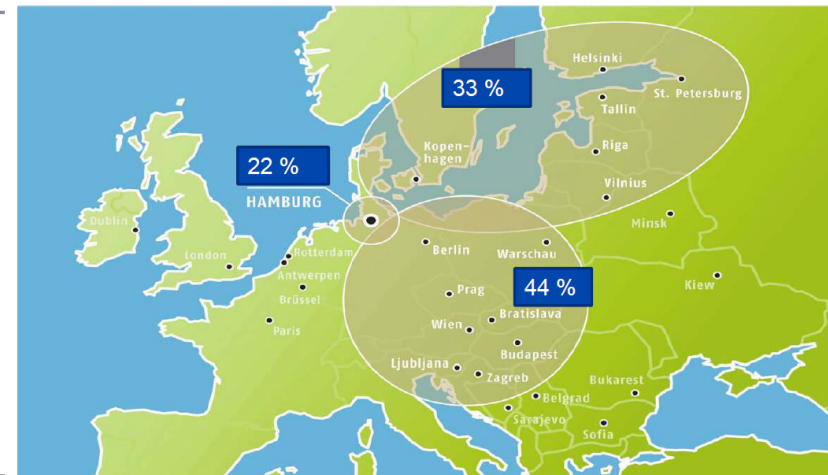
- Total port area: 7.145 acres
- Ranking (container):
  - 3<sup>rd</sup> in Europe (after Rotterdam and Antwerp)
  - 18<sup>th</sup> worldwide

Source: Hafen Hamburg Marketing e.V., 2016

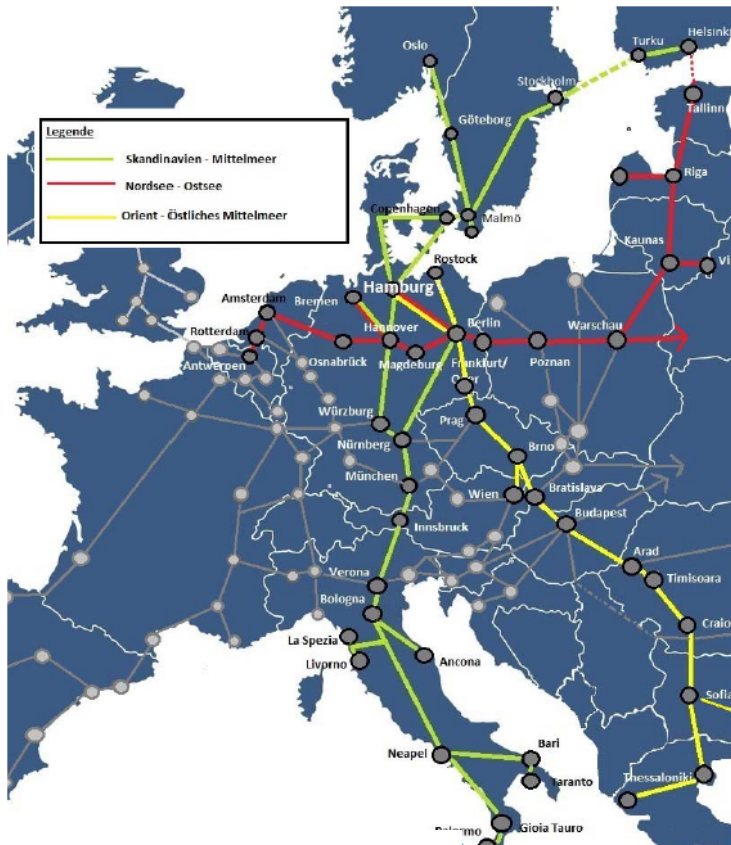
## Distribution of cargo in the Hinterland of the port of Hamburg (2014)

- 22% in the area around Hamburg
- 33% to the North-East of Europe
- 44% to Central Europe

Source: HPA Hafenbahn, 2014



# Capable hinterland railway network: The port of Hamburg has perfect connections to the European railway network



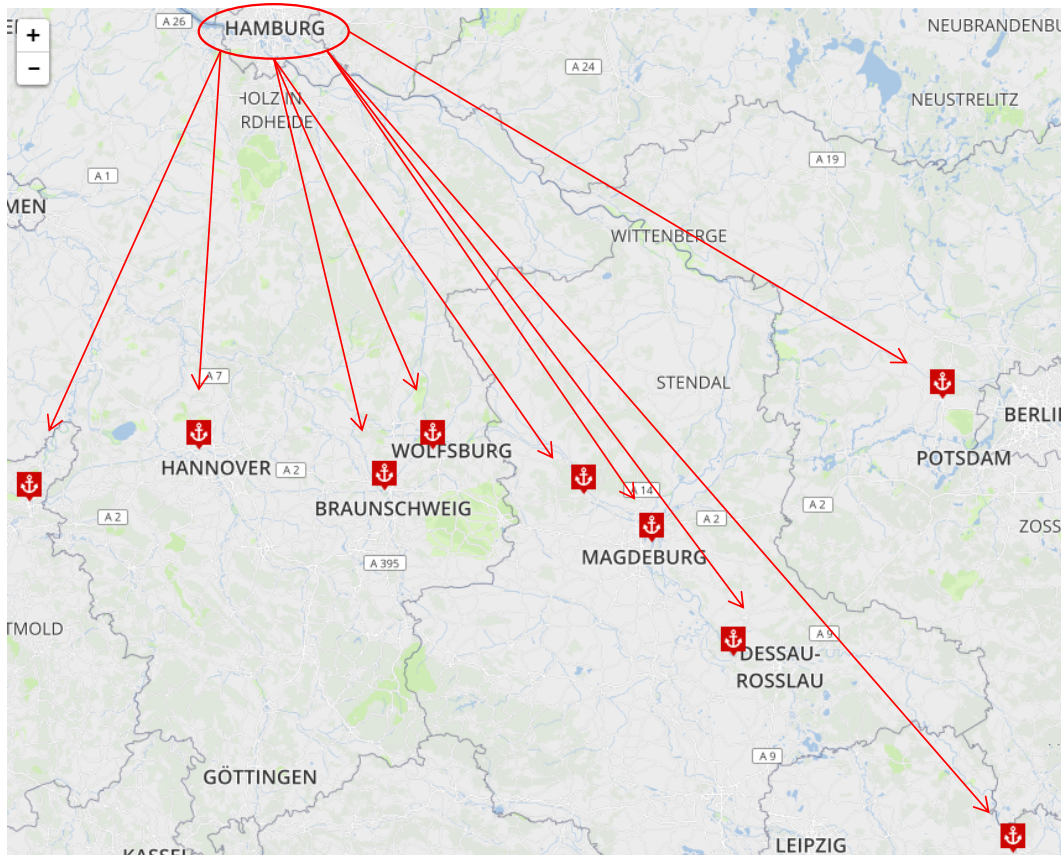
Source: HPA Hafenbahn, 2014

- **Hamburg** is in the center of three railway traffic corridors with **1,200 trains per week**

## Cargo Train services from and to Hamburg (2014)



Besides intermodal transport services to the Hinterland, the port of Hamburg also uses inland waterways for several German destinations



### Current line destinations

- Aken
- Braunschweig
- Fallersleben
- Haldensleben
- Hannover
- Magdeburg
- Minden
- Riesa
- Wustermark

## By the Elbe river, Hamburg is well connected to several inland waterways



The Port of Hamburg provides **106 public berths** for inland waterway craft.

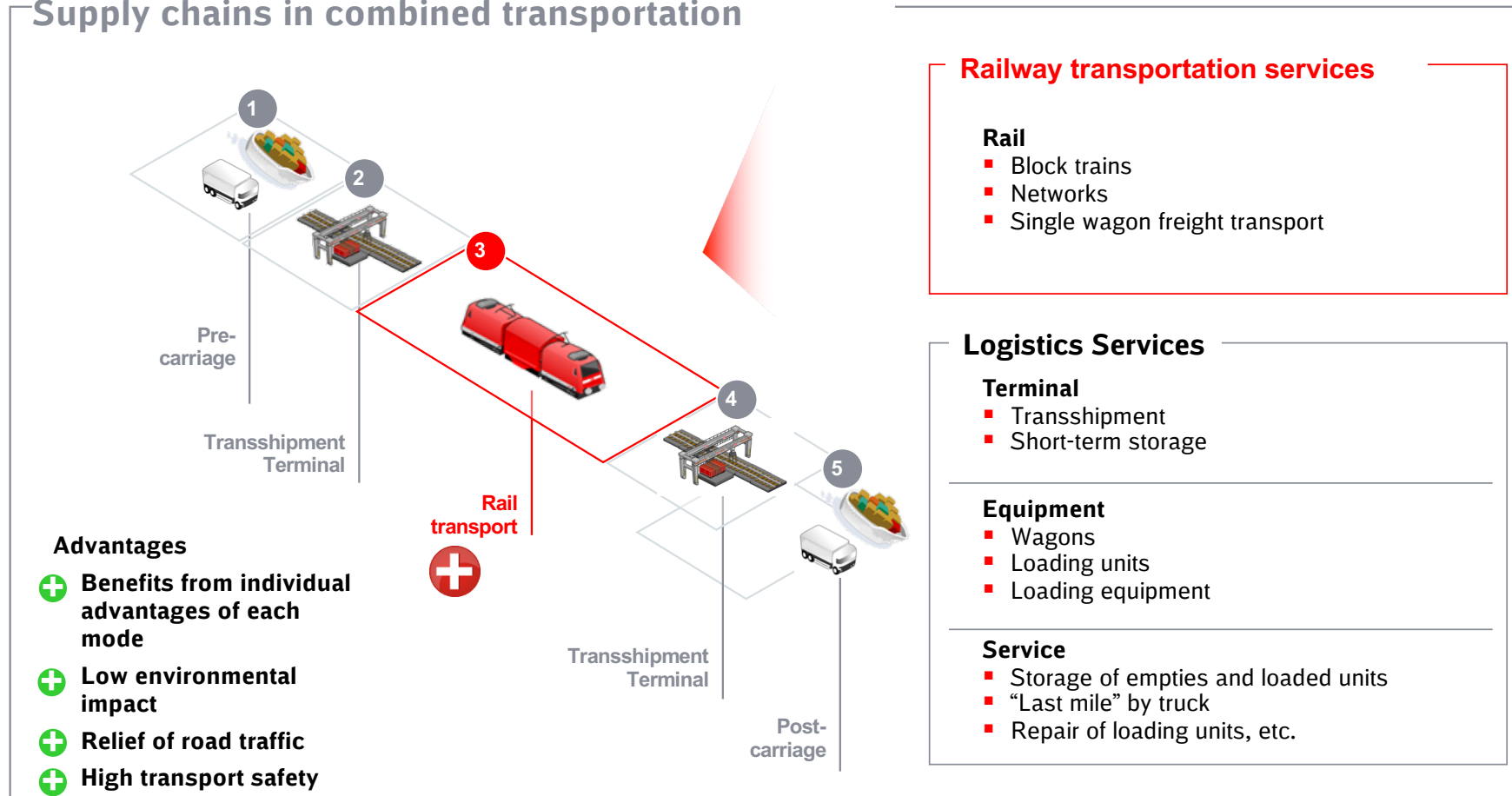
In 2014, approximately **10,000 inland waterway vessels** tied up and transported around **11.6 million tons of cargo**.

Cargo leaves Hamburg daily on the River Elbe and the canals into the **hinterland**. There are **regular services** on the middle and upper Elbe in the direction of **Magdeburg, Aken, Torgau, Riesa, Dresden** and even to the Czech Republic to **Děčín, Ústí nad Labem and Lovosice**.

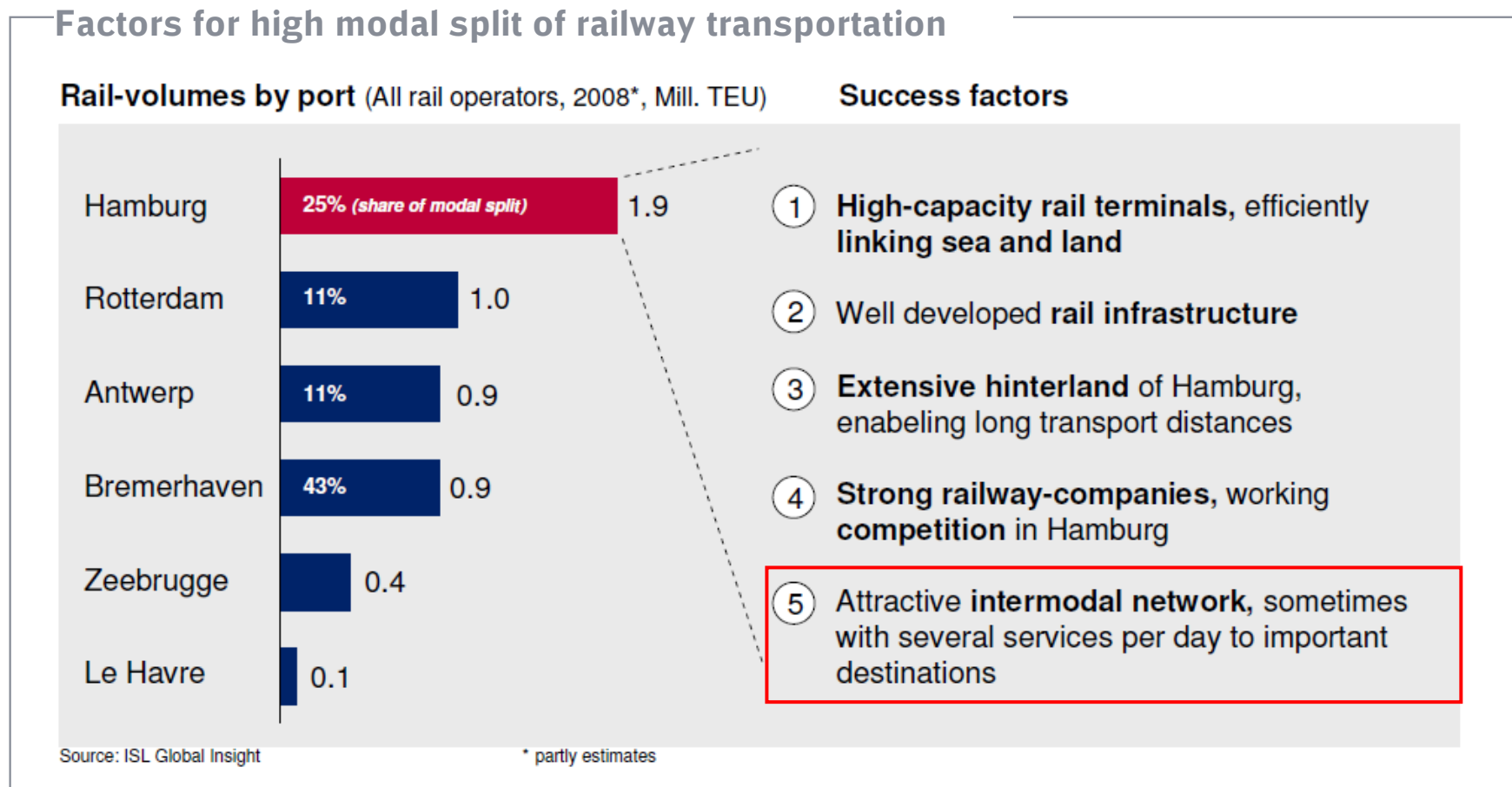
Along the Lower Elbe **Brunsbüttel, Cuxhaven and Glückstadt**, among others can be served. In the Elbe Lateral Canal the link to the Mittellandkanal is also the connection to **Braunschweig, Haldensleben, Hanover and Minden** as well as to the **Ruhr region** and the inland ports of the Rhein, Main, Mosel and Neckar. Cargo also finds its way to **Berlin** via the inland waterways.

# Railway transportation plays a crucial role for connecting seaports to the hinterland in global supply-chains

## Supply chains in combined transportation

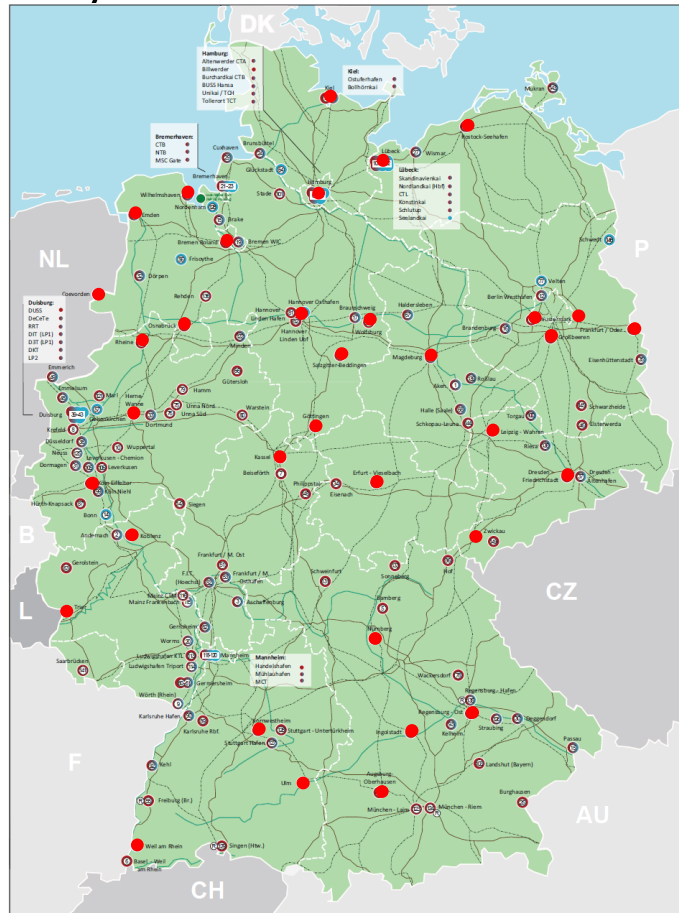


With a modal split of 25% the Port of Hamburg is Europe's best practice in hinterland railway transportation

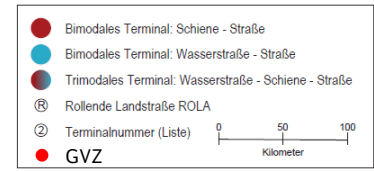


Germany provides a dense network of CT-Terminals;  
they became a success factor for regional

### Container Terminals in Germany



- Approx. **150 CT-Terminals** are in operations, all industrial and commercial cities are covered
- Infrastructure most **subsidized** by federal or local government (up to 85% of CAPEX)
- Operators:
  - **DUSS** (75 % DB Netz AG, 12,5 % DB ML AG, 12,5 % Kombiverkehr), more than 20 terminals
  - **DB Intermodal Services**
  - **Inland harbours**
  - **Industrial companies** such as BASF, Warsteiner, forwarders, e.g. Wincanton
- Some CT became **nucleus for development of 35 Freight Villages (GVZ)**





1 The Deutsche Bahn Group and DB International

2 Introduction and benefits of multimodality

3 Success factors efficient multimodal supply chain



5 Contact

# 4 | Case Studies





# TFG Transfracht is a leading multimodal company offering rail-terminal-road integrated door-to-door solutions

## TFG Transfracht

- **TFG Transfracht** connects the several container terminals of the German seaports and Koper with its comprehensive AlbatrosExpress Network to more than **15,000 destinations in Germany, Austria and Switzerland.**
- Each year we transport around **900,000 TEU.**
- TFG Transfracht is fully owned by Deutsche Bahn AG



## Business segment

Container transports in seaport hinterland traffic	
<b>3 countries</b>	Germany, Austria, Switzerland
<b>4 ports</b>	Hamburg, Bremerhaven, Wilhelmshaven, Koper
<b>1 system</b>	AlbatrosExpress

## Key facts

Foundation	<b>14.04.1969</b>
Transported volume	<b>900.000 TEU/year</b>
Connections	<b>14.000/year</b>
Trains	<b>250/week</b>



TFG Transfracht offers connections to over 15,000 destinations with a network integrated approach

**TFG**  
TRANSFRACHT

## Seaport hinterland logistics with TFG Transfracht.

**Wilhelmshaven – over 100 connections a week**

**German seaports:** Wilhelmshaven, Hamburg, Bremerhaven

**Extensive network with:**  
**high frequencies, fixed timetables,**  
**short transport times, flexible production.**

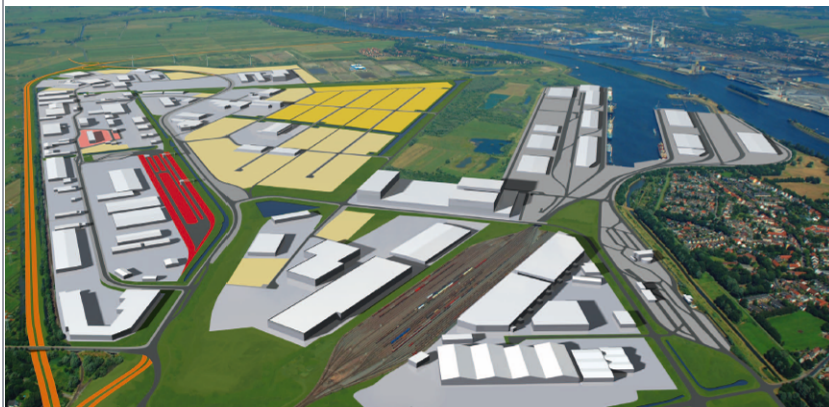
**Koper Luka – 3x per week to hinterland destinations**

**Destinations:** Berlin/Großbeeren, Dortmund, Leipzig, Erfurt, Dresden/Riesa, Frankfurt a. M., Bamberg, Nuremberg, Regensburg, Kornwestheim, Augsburg, Burghausen, Ulm, Munich, Salzburg, Vienna, Enns, Basel, Koper

**Regions:** GERMANY, SWITZERLAND, AUSTRIA

The freight village in Bremen is ranked # 2 in Europe and created 8,000 jobs mainly through related services

### Bremen-Germany largest freight village



### Key facts

- **Site area:** 496 ha (+ 4 ha terminal for combined transportation)
- **Covered storage area:** 960,000 m<sup>2</sup>
- **Employment effect :** 8,000 people in 150 companies
- **Annual cargo turnover:** n/a
- **Total investment:** €460 million since 1985

### Customers (tenants)

- Retail logistics, furniture logistics, forwarders, international logistic providers, ship-owners

### Location and benefits

- The greater Bremen area is located in the heart of global trade flows; the **proximity to port** and airport in Bremen makes the region an **attractive industrial location**
- The Bremen Logistics Centre offers attractive land plots with a **high synergy potential** for transport and logistics companies to attract companies with a high affinity to the **logistics business** (e.g. **production companies and retailers**).

### Services provided

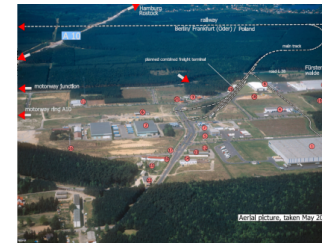
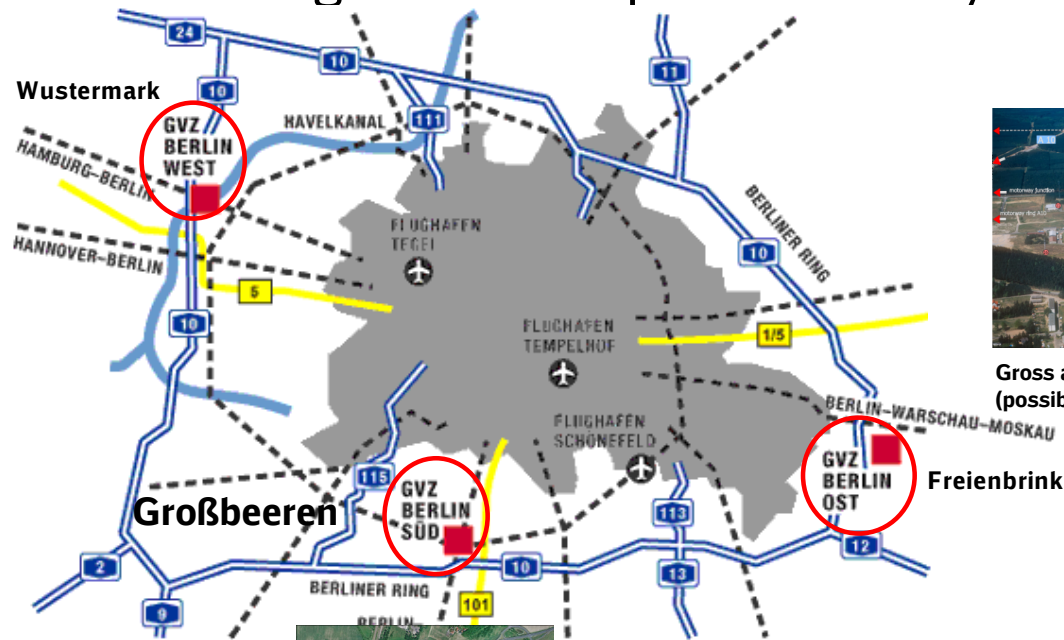
- Cooled warehouse
- Gas station
- Container terminal and service centre
- Biggest high rack storage in Europe

Source: DGG 2010: Ranking of Europe's Logistics Centers, DB International

Three freight villages (GVZ), perfectly connected to rail and road, form the backbone of the logistics concept for Germany's capital Berlin





Gross area: 226 ha



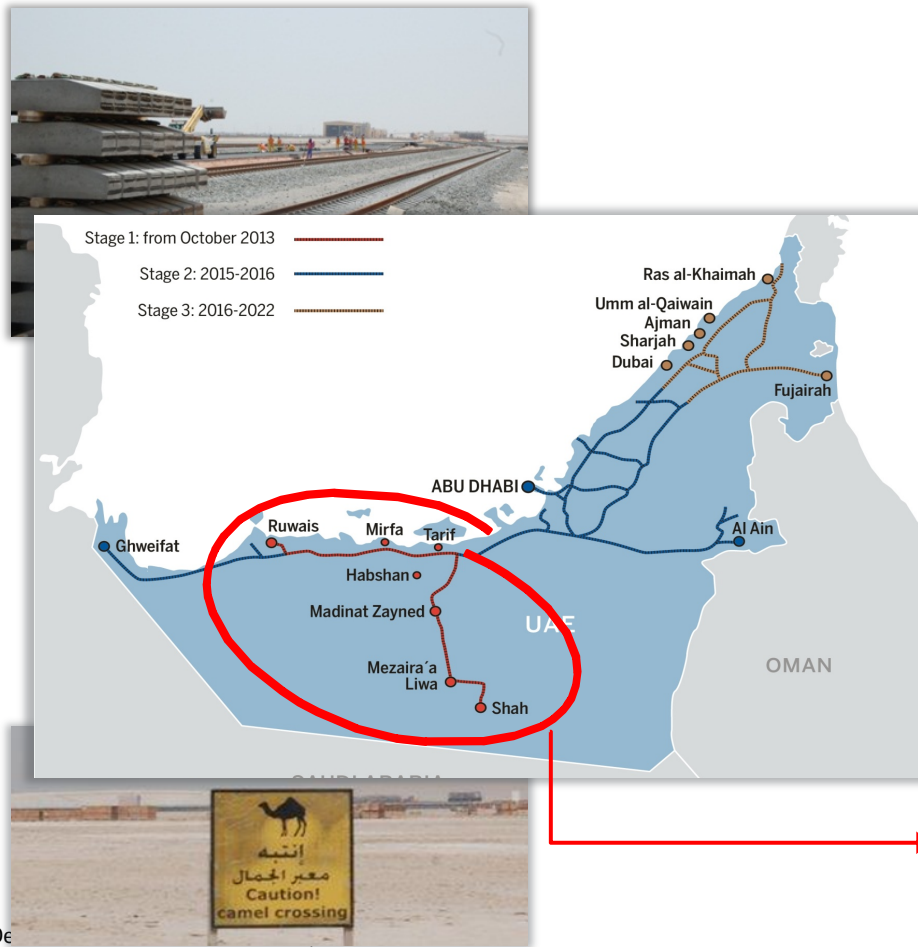
Gross area: 130 ha  
(possibility of further enlargement)



Gross area: 260 ha  
(possibility of further enlargement)

 Highway  
 Railway

# DB International is strongly involved in the development of the United Arab Emirates logistics and rail network

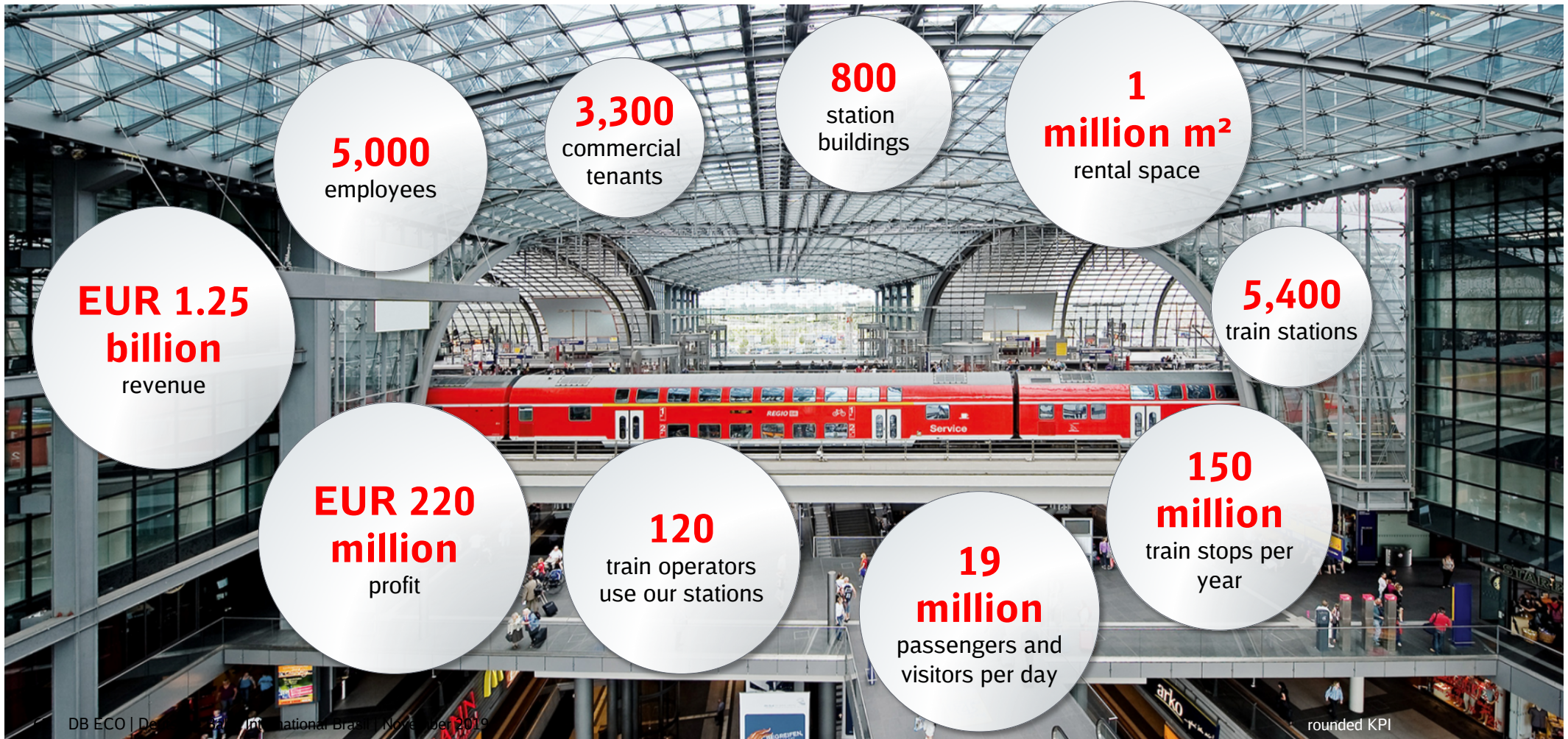


## Project Details

- A total of **1,200 km of track length**, mainly **double-track for mixed traffic**
  - More than **10 tunnels** and about 300 structures
  - Speed design:
    - **Freight transport up to 120 km/h**
    - **Passenger transport up to 200 km/h**
  - Possibility of mix standards (AREMA / AAR, UIC)
  - **Diesel operation** with option for electrification
- 
- **Current operation of Stage 1 (266 km)** for transport of sulfur from Shah to Ruwais



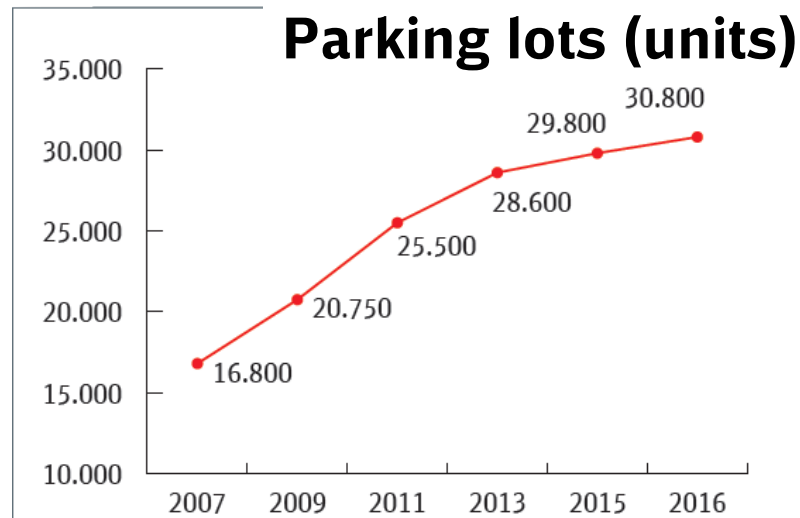
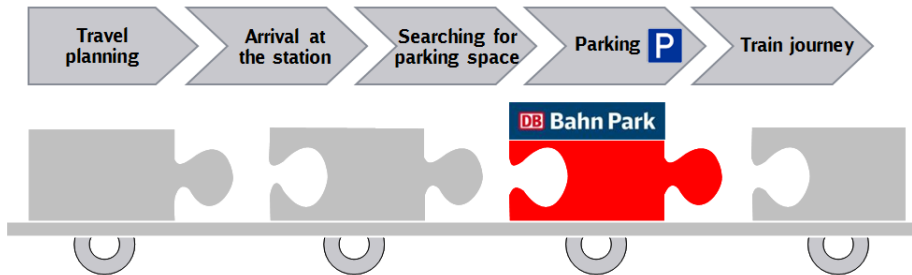
# DB Station&Service AG - We build and operate train stations!



# DB BahnPark operates over 300 parking areas in Germany

Relevant to add value on the transportation chain

## Transportation Chain



## Parking Areas in Germany





**Project References**  
– Station and urban development projects

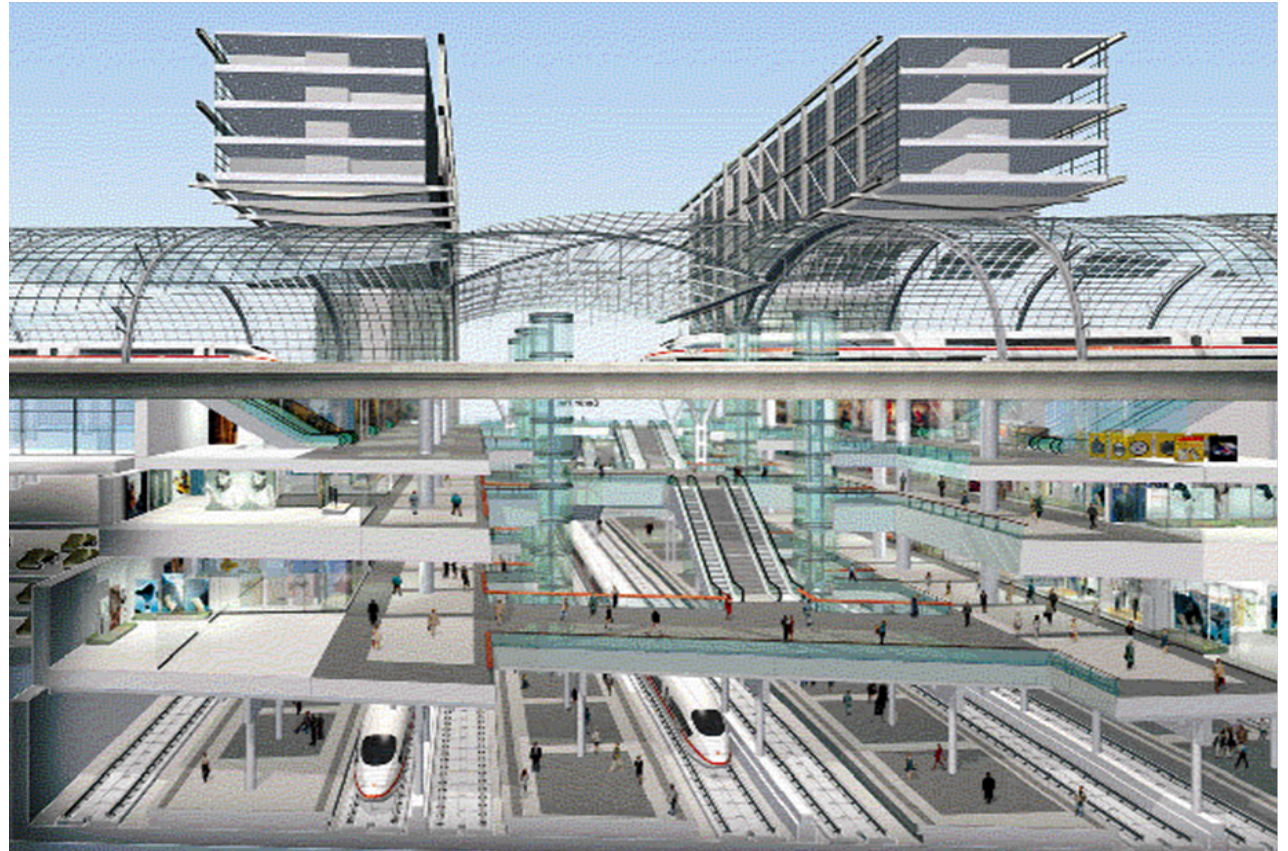


**The new Berlin Central Station**





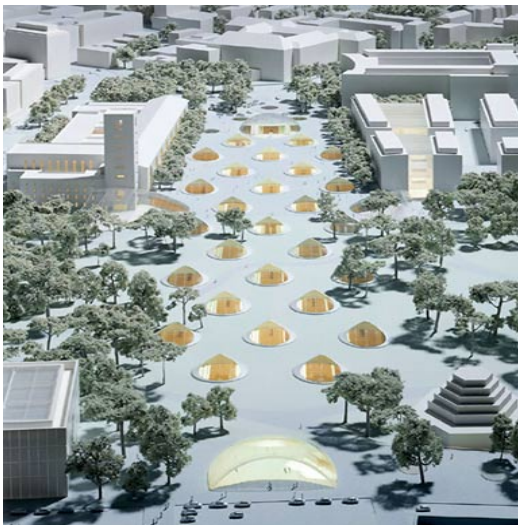
**Berlin Hauptbahnhof central station: Europe biggest multimodal station**  
60,000 m<sup>2</sup> / 3 shopping levels with 80 stores / 10 floors of offices



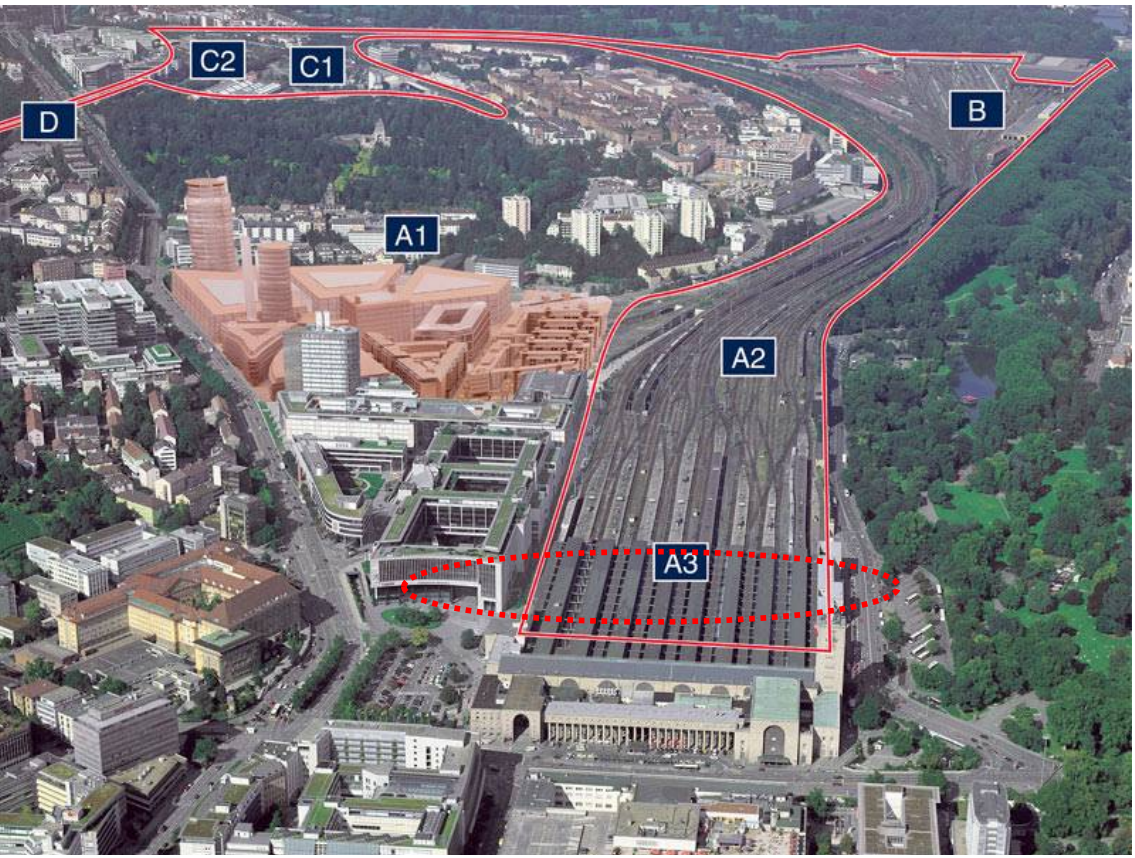
# Project References

– Station and urban development projects

## Stuttgart 21



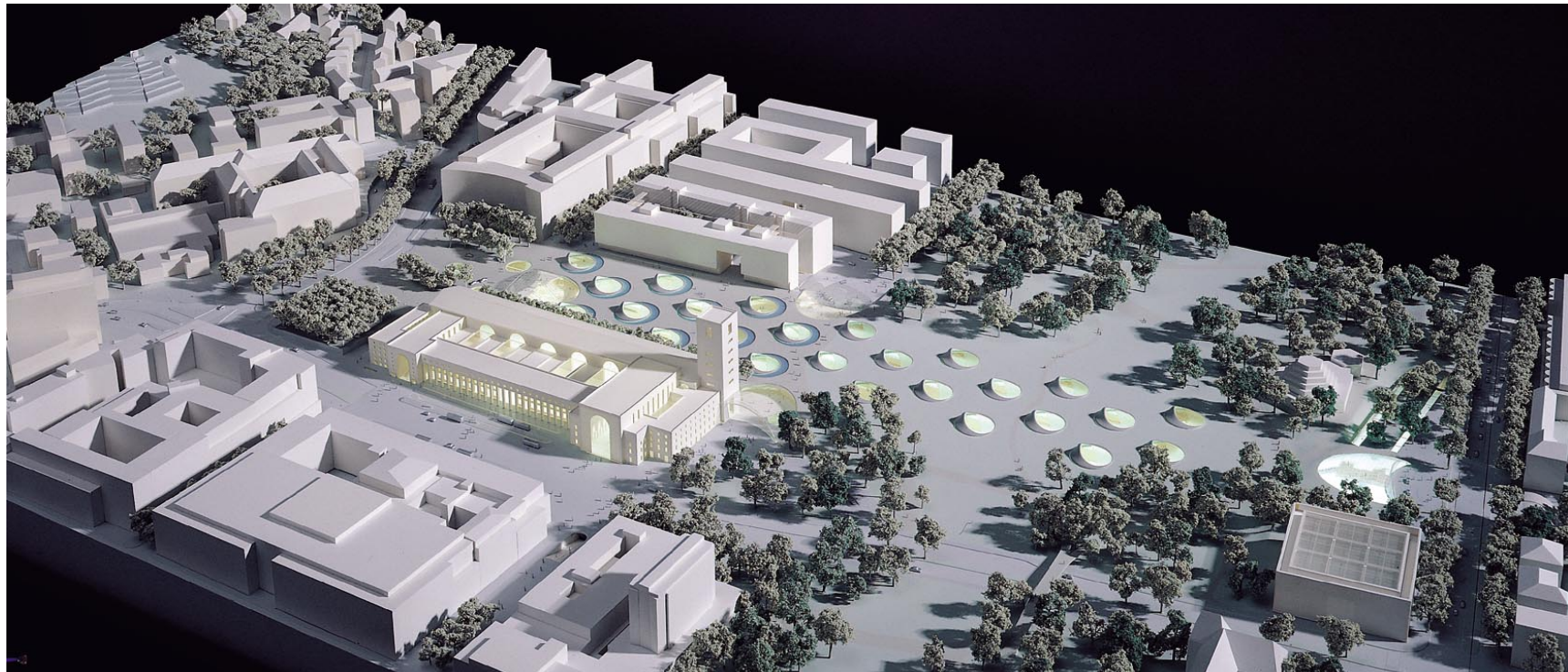
Straßburger Platz  
The new Central Station



# Project References

– Station and urban development projects

## Stuttgart 21





## Contacts

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**Thank you for your attention**