





# Rail Systems Technology in the Capital Region Berlin-Brandenburg

THE GERMAN CAPITAL REGION excellence in mobility



Berlin-Brandenburg booth at InnoTrans 2022



BerDiBa project - test of automatic obstacle detection

#### OEMs

Alstom Siemens Mobility Stadler Deutschland Thales

#### Vehicle engineering

arxes engineering
Fahrzeugwerk Brandenburg
Fahrzeugwerke Miraustrasse
Knorr-Bremse
PanTrac
Photon Laser Manufacturing
PROSE
RWS Railway Service
Talgo

### Track system | Transport facilities GBM Gleisbaumechanik LAT Spitzke Voestalpine BWG Wirthwein

#### Control technology | ICT

ASCI Systemhaus ime Elektrotechnik INTERAUTOMATION IVU Traffic Technologies Move & Traffic Controls PSI Transcom RMM RailwayMechanics-Metal SIUT Televic GSP Verkehrsautomatisierung Berlin

#### Service Providers

5micron Deutzer Technische Kohle Ferchau Engineering ICB Ingenieur-Consult Verkehrstechnik IGES Institut Institut für Bahntechnik KCW

### Leading international location

Berlin-Brandenburg is a leader in rail systems technology: over 100 businesses and institutes with more than 20,000 employees make the capital region one of the most important European centers for research, development and manufacturing. System providers such as Alstom, Siemens, Stadler, Knorr-Bremse, Talgo, Thales and voestalpine BWG are represented as well as a diverse supplier industry, mostly small and medium-sized enterprises. The spectrum ranges from vehicle manufacturing/maintenance to track construction, signalling technology and digital solutions for the mobility of the future. The industry's strong position opens up new avenues for suppliers for example through the development of system capabilities to tier 1 or 2 - and therefore also for the additional creation of value in the region.

Deutsche Bahn brings into focus a variety of core transport functions in the region and is present through Digitale Schiene Deutschland, DB Fahrzeuginstandhaltung in Cottbus and Wittenberge and DB Systemtechnik in Brandenburg-Kirchmöser. In addition to the



»Stadler supplies innovative solutions for railway transport of the future. We find individual ideas to meet the different needs of our customers. With great attention to detail and creative approaches, we rise to the challenge of creating sustainable mobility and interesting perspectives for our employees.

The capital region offers us a good basis as a location with a tradition in rail systems technology.«

Jure Mikolčić CEO Stadler Deutschland GmbH



»We have been a reliable player on the German rail market since 1996. The goals of our activities are passengers who enjoy using our trains, customers who are well served by our freight services and satisfied railroad companies that operate on our routes. This <u>enables</u>

us to offer our employees attractive and secure jobs in rural areas.«

Dr. Ralf Böhme Board Member Deutsche Eisenbahn Service AG (DESAG)

largest German public transport service provider, BVG (Berliner Verkehrsbetriebe), operators such as DB with S-Bahn Berlin, Netinera with ODEG (Ostdeutsche Eisenbahn), Abellio, Transdev, Captrain with IGB (Industriebahngesellschaft Berlin) and NEB (Niederbarnimer Eisenbahn), DESAG (Deutsche Eisenbahn Service AG), BEHALA (Berliner Hafen- und Lagerhausgesellschaft) and HVLE (Havelländische Eisenbahn) are present.

The world's leading trade show, InnoTrans, in Berlin is the biggest international trade show for railway technology.

## **Research and innovation**

Berlin has always been a place for railway pioneers: The world's first electric train was presented here. This is still true today: digitalisation, innovative drives and lightweight construction are exemplary for the innovation potential of the capital region. The dynamic trend of digitalisation opens up new avenues for rail technology, with the automation of operation, the interlinking with other modes of transport and new models for maintenance and repair all profiting from it. As a center for



Study command and control technology at the Railway Operation and Experimentation Field at TU Berlin

- An international leader in the research, development and manufacturing of rail transport technology with over 100 businesses and 20,000 employees
- A unique concentration of all significant players and performance segments - notable operators, mobility providers, vehicle manufacturers and suppliers
- Near to growing markets in Central and Eastern Europe
- Germany's leading location for rail transport technology in research, universities and vocational training
- Highly skilled specialists
- Center of political decision-making and the seat of the most important transport federations in Germany
- Central hub for the flow of traffic and goods in Europe
- The world's leading trade show, "InnoTrans"

ing events, where we also meet tech startups,«

The Open Digital Test Field of the DZSF (Ger-

man Centre for Rail Transport Research)

between Halle (Saale), Cottbus and Niesky

tests new technologies and innovations under

The regional economy and science play a

decisive role in European R&D projects for the

railway system of the future and thus partici-

pate directly in innovations at European level.

The growth industry of rail systems technology

is part of the Cluster Transport, Mobility and

Logistics Berlin-Brandenburg: the cluster net-

works business and science, it supports cont-

acts with state governments and authorities.

Close cooperation exists with other clusters

in the region, especially with ICT | Media |

Creative Industries, Energy Technology and

Photonics. The Railway Areas Innovation Lab

(RAIL-BB) based at the BTC supports the

cluster in promoting science and research.

Through cooperation with the European Rail-

way Clusters Initiative (ERCI), the European

Rail Research Network of Excellence

(EURNEX), which bundles European railway

research expertise from Berlin, and the Enter-

prise Europe Network (EEN), the cluster is op-

timally networked internationally.

startups, Berlin offers the basis for productive cooperation between established regional businesses and dynamic tech companies.



real conditions.

Good integration

»LAT is a German, second generation family owned and operated firm for mobility related services. including (cable) construction for railway tracks and passenger safety systems for public transport. The capital region gives us access to partners from science, business and politics. We particularly benefit from the network-

Larissa Zeichhardt **CEO, LAT Group** 

Menlo79 OSTAKON PANTOhealth RST Rail System Testing SCI Verkehr Witt Solutions ZEDAS

LiveEO

Transport operators

Abellio BEHALA BLG Rail Logistics BVG Captrain, IGB, NEB DESAG Deutsche Bahn, S-Bahn Berlin, DB Regio Nordost Havelländische Fisenbahn I OCON Netinera ODEG PCC Intermodal **RI CW** Transdev VBB Verkehrsbetrieb Potsdam

#### Research

**BTC Havelland** BTU Cottbus-Senftenberg CHESCO DI R Fraunhofer HTW Berlin **ICAS** TH Brandenburg TH Wildau TU Berlin

Associations | Networks Allianz pro Schiene Bahnverband EURNEX KNRBB MOFAIR NEE RAIL-BB VDB

Innovations from Berlin-Brandenburg make a significant contribution to interoperability in European rail transport, for example through harmonisation and standardisation of the control and safety technology, the European Train Control System (ETCS). The BerDiBa digital railway operation project is laying the basis for highly automated driving. Other examples of innovative railway technology include alternative drives for rail vehicles, radially adjusting bogies for low-noise goods trains, illuminated platform edges made of fibre-optic concrete, non-specific sensor technology for detecting damage to vehicles and tracks, and driver assistance systems.

Berlin-Brandenburg is an internationally renowned research location: TU Berlin, TH Brandenburg and TH Wildau have extensive expertise in vehicle technology, infrastructure, railway operation and transport logistics. In addition, a modern education and innovation centre as well as a business park for the railway industry is being built on the BahnTechnologie Campus Havelland (BTC) near the Wustermark marshalling yard west of Berlin.



by transforming mobility, with rail transport at its heart. The TU Berlin is not only excellently equipped to train future transport engineers, but is also an outstanding partner for research in areas such as automation and certification.«

»Climate change can only be tackled

Prof. Dr.-Ing. Birgit Milius **Chair Railway Operations and Infrastructure** Technische Universität Berlin

## Our aim: your success!

Berlin and Brandenburg support the rail systems technology with an economic policy developed across state borders in the Cluster Transport, Mobility and Logistics. The cluster is managed under the aegis of Berlin Partner for Business and Technology and the Economic Development Agency Brandenburg.

Our aim is to provide comprehensive support to companies and scientific institutions interested in inward investment or further development in the German Capital Region.

We are ready to assist you with:

- Finding a site
- Funding and financing
- Technology transfer and R&D cooperation
- Cooperating in networks
- Recruiting personnel
- Developing international markets

## Reach out and contact us! www.mobility-bb.com



PHOTOS: Cover: Carlos Leret, Unsplash Inside: Berlin Partner/photothek.de, Siemens Mobility GmbH | Holger Last, Berlin Partner - Wuestenhagen, Kühnapfel Fotografie (Böhme), Matthias Oertel (Zeichhardt)

© September 2024



Berlin Partner für Wirtschaft und Technologie GmbH Fasanenstraße 85 10623 Berlin www.berlin-partner.de

Contact: Lutz Hübner T +49 30 46302 573 lutz.huebner@berlin-partner.de Economic Development Agency | Brandenburg

Wirtschaftsförderung Land Brandenburg GmbH Babelsberger Straße 21 14473 Potsdam www.wfbb.de

Contact: Gerald Franz T +49 331 73061 243 gerald.franz@wfbb.de



The Cluster Transport, Mobility and Logistics is a member of the ERCI – European Railway Clusters Initiative ASBL. www.eurailclusters.com