# Smart City DB

Mobile. Connected. Livable.

## **Cities in transition**

## Germany needs climate-neutral solutions and a strong rail system

The urban environment is growing and changing. In the cities of the future, private cars will be a rare sight on the roads. No traffic jams and no need to search for a parking space. No more suffering from smog and high levels of nitrogen oxides. And thanks to flexible working models, all of us can work from anywhere. Deutsche Bahn is developing a comprehensive strategy to make this vision a reality. Its approach is to shift more traffic to rail and develop smart mobility and logistics solutions for urban areas to reduce the impact on cities and the environment. For the climate, for the people, for the economy and for Europe.

**Reduction in specific** 

compared to 2006

-55%

-35%

2030

targets

As of

2019

greenhouse gas emissions



Renewable energy in the traction current mix

80 % (and 100% by 2050)

60%

Collectively, we have set out to reduce global  $CO_2$  emissions by at least 55% by 2030.\* Deutsche Bahn is already making an important contribution toward reaching this goal with its train and bus transport and its sharing and logistics services.

The traction current mix is just one example: 60% is currently generated by renewable energy sources. Long-distance trains have been powered exclusively by green energy since 2018. Deutsche Bahn has taken action in response to climate change and its effects by offering a strong rail system and sustainable solutions for the first and last mile.

\* The 2030 Agenda set by the international community in conjunction with the Paris Climate Agreement



# Smart services centered around stations

Improved mobility and more efficient logistics

Urbanites want simple, convenient and eco-friendly solutions that offer flexibility for seamless integration into their daily lives to meet their specific needs. Smart City | DB offers cities climate-friendly alternatives for creating smart connections between transport infrastructure, mobility and logistics.

Smart City | DB products provide city residents tailored mobility and logistics solutions along their daily route. The different products and services enhance the existing infrastructure and transform the station and its surroundings into the center of urban life.



## Stations as a place

**Centers of attraction for urban life** 

Over 21 million people pass through stations throughout Germany each day – on their way to work, to shop or to travel. Being on the go has become an essential part of daily life.

Smart City | DB transforms stations into centers of attraction in the heart of the city – Smart City | DB transforms stations into places. Stations and their environments that are safe, secure, clean, well-lit and have fitting color schemes, furnishings, plants and green spaces make travelers and visitors feel welcome. New usage concepts such as coworking, smart luggage lockers, sharing services and flexible pop-up spaces are putting stations at the pulse of urban life.

### Place Charlottenburg

Berlin's Charlottenburg station was transformed into a neighborhood platform from August to October 2019. Smart City | DB revitalized the station forecourt based on city dialogues and data-driven analyses with a food stand, bicycle rental, an open-air movie theater and pop-up cubes.

The custom designed urban furniture was a special highlight and served as the setting for a variety of activities in the neighborhood. New usage concepts are being developed for stations in Hamburg and Cologne, which are both Smart City partner cities.

# every*works*

## everyworks – coworking at stations

Arriving, working and networking



everyworks is redefining the office: more flexible, more modern and with the best connections.

Whether they're entire offices or just a few desks, coworking spaces are a network of comfortable and creative work spaces at highly frequented stations. Flexible rental options are available for companies, project teams, startups or freelancers. Work spaces can be booked conveniently at Berlin Central Station using the everyworks app from anywhere in Germany. By transforming transit into a destination, waiting time turns into productive time. Therefore everyworks makes commuters and travelers feel good about spending time at stations.



## ioki – On-Demand shuttle service

Flexible mobility for everyone – even without your own car

ioki offers smart On-Demand mobility, integrated sensibly into public transport and with an eye on the future of autonomous driving.

The dynamic shuttle service uses a convenient app, which lets users book their vehicle for a specific amount of time – without a set timetable or route. In consequence, road and rail, optimal capacity utilization of routes and vehicles, and more sustainable and efficient road transport. The concept is available as a white-label solution to bring ioki to roads all across Germany. Custom packages include a mobility analysis, an operating system for On-Demand mobility, and advising on planning and introducing the service. Vehicle concepts are coordinated with each other, and can be put together quite flexibly.

ioki creates a driving experience that is both shared and customized, creating a smart bridge between the first and last mile. ICXI



## **Box – die Abholstation**

Online sales are booming. Over 3.5 billion packages are already mailed every year. As a result, the challenges for last-mile deliveries are also increasing.

We've developed Box - die Abholstation a parcel lock and IT solution to solve these growing problems.

Retailers and e-commerce partners can deliver packages to a public, cross-provider network of pick-up stations. Participating station retailers can access the service using an online booking portal and use the lockers without being tied to a specific operating system or platform. Technical interfaces (APIs) make it possible for online retailers to connect parcel lockers to their existing e-commerce system and make them available as a delivery option at check out. End customers are sent a code, which allows them to pick up their packages at their convenience, any time day or night. The service keeps customers from having to go to a storefront, consolidates deliveries, and extends "store hours" for retailers and customers.

db.de/box

## **Hamburg Box**

In early March 2020, a pilot project testing smart, provider-neutral locker systems was launched in Hamburg: *Hamburg Box*. The parcel lockers are a convenient way for users to have goods and products delivered, which they can pick up during their daily errands or commute.

With a delivery to a pick-up station, shipments can be received flexibly at various stations without being tied to the rigid opening hours of parcel stores. Hamburg Box is available at around 20 S-Bahn, regional and subway stations, and stops in Hamburg through a partnership with Hamburger Hochbahn AG.

Hamburg Box is a pilot project of ParcelLock GmbH, Hamburger Hochbahn AG and Smart City | DB.

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# Mobility stations for eScooters



## **Micro-depots**

We take City Logistics a step further – efficient and green.

### eScooters are a practical and flexible way to get from A to B in the city.

Deutsche Bahn has established mobility stations with room for up to 40 scooters at the central stations in Düsseldorf, Frankfurt, Hannover and Münster, where customers can pick up scooters, take them out for a spin and return them. Stations in other cities are planned. Micro-depots are a new sustainable concept for developing urban sites to create provider-neutral mobile and logistics networks.

Micro-depots are places within a city where goods arrive via established parcel and part load logistics networks and head out for carbon-neutral delivery on small vehicles. They solve the problem of emissions and double parking while optimizing transshipment and warehouse processes to ensure even time-delayed last-mile deliveries. Routes are increasingly being optimized through the use of new and smaller carbon-neutral electric delivery vehicles operated by local couriers. Micro-depots are a much-needed infrastructure component, which we offer through a network of municipalities and local partners.

It benefits cities and the people who live in them.

Our goal is to bundle onward mobility,Treduce road traffic and promote theashift to rail.a

Smart City | DB uses Urban Analytics to answer questions such as:

- What parts of the city experience heavy traffic that could be addressed using new mobility solutions?
- What stations have potential for onward mobility products?

The Smart City | DB Team uses extensive analyses to provide cities with in-depth consulting. It helps them integrate smart services into existing structures to meet needs and make an impact for better mobility and logistics.



## **Urban Analytics:**

Development of new potentials and continuous improvement of the product portfolio

All of the solutions that Smart City | DB develops are based on Urban Analytics. Suitable sites are analyzed, assessed and laid out graphically using data relating to mobility, logistics and social structures in the city. The aim is to explore new possibilities at an early stage, identify synergies and tap into potential. Our Mobility Analytics and Consulting Team works closely with ioki to ensure optimal analysis, from the big picture down to the tiniest detail.



# Smart City partnership

## **Connecting mobility, logistics** and infrastructure

Smart City | DB is working with its partner cities to develop stations into even better mobility and logistics hubs that improve the quality of stay. New products and services are making public transport even more appealing and flexible. Cooperation ranges from coworking at stations and smart lockers for goods logistics to carsharing and On-Demand shuttles integrated into public transport.

Hamburg and Cologne are already Smart City partners and have signed a Smart City memorandum of understanding with Deutsche Bahn. Together, through in-depth dialogue, we are creating meaningful transport and logistics solutions for urban spaces. A digital platform also accepts suggestions from the public, which are taken into account during planning.

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