

Innovative New Mobility Services

The example of Hamburg

Harry Evers, CEO

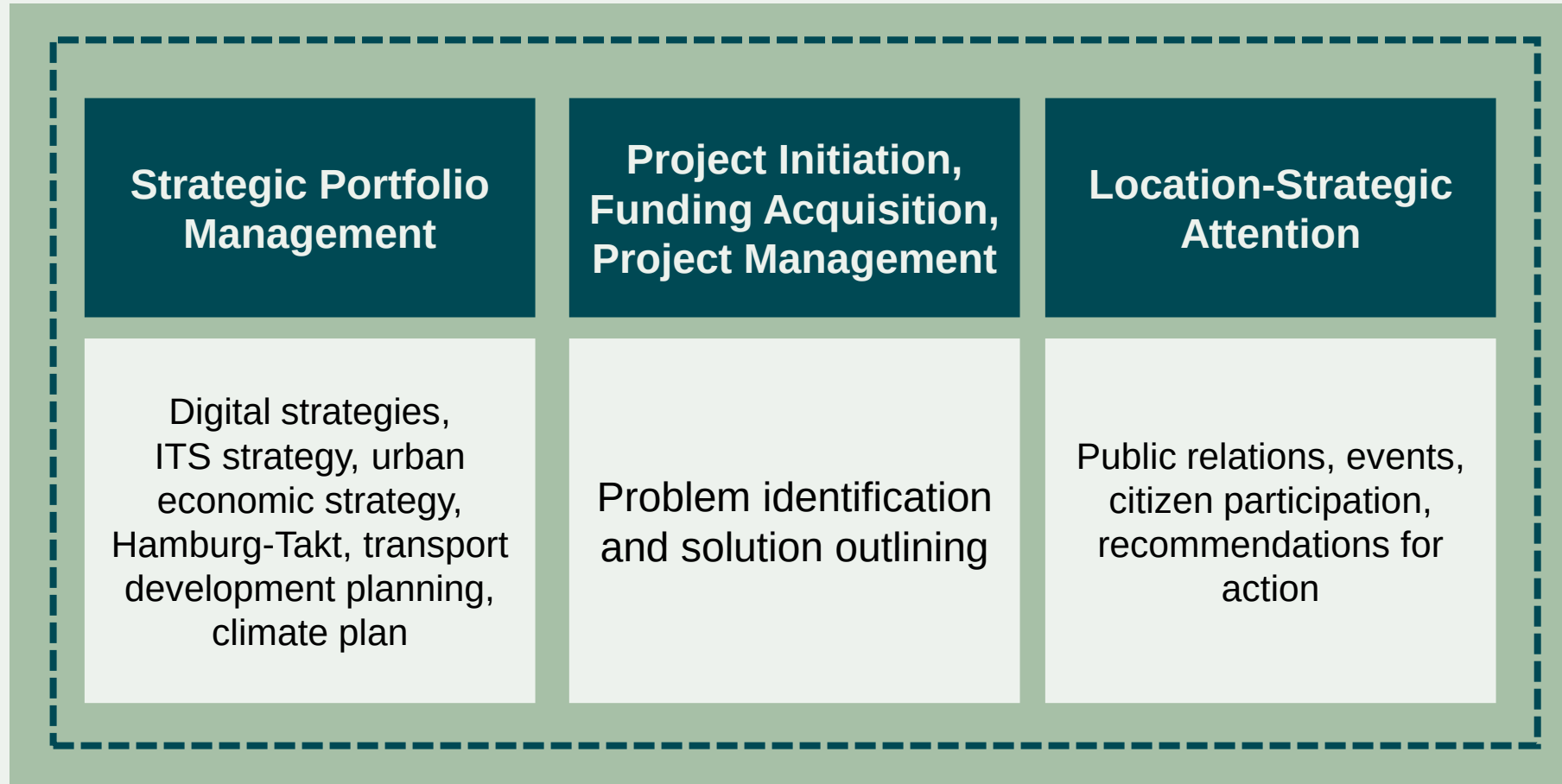
Dr. Johannes Lauer, Team Leader

Strategic Portfolio Management

Digital Mobility for the City of Hamburg



The New Mobility Solutions GmbH supports Hamburg in leveraging the potential of the digitalization of mobility.

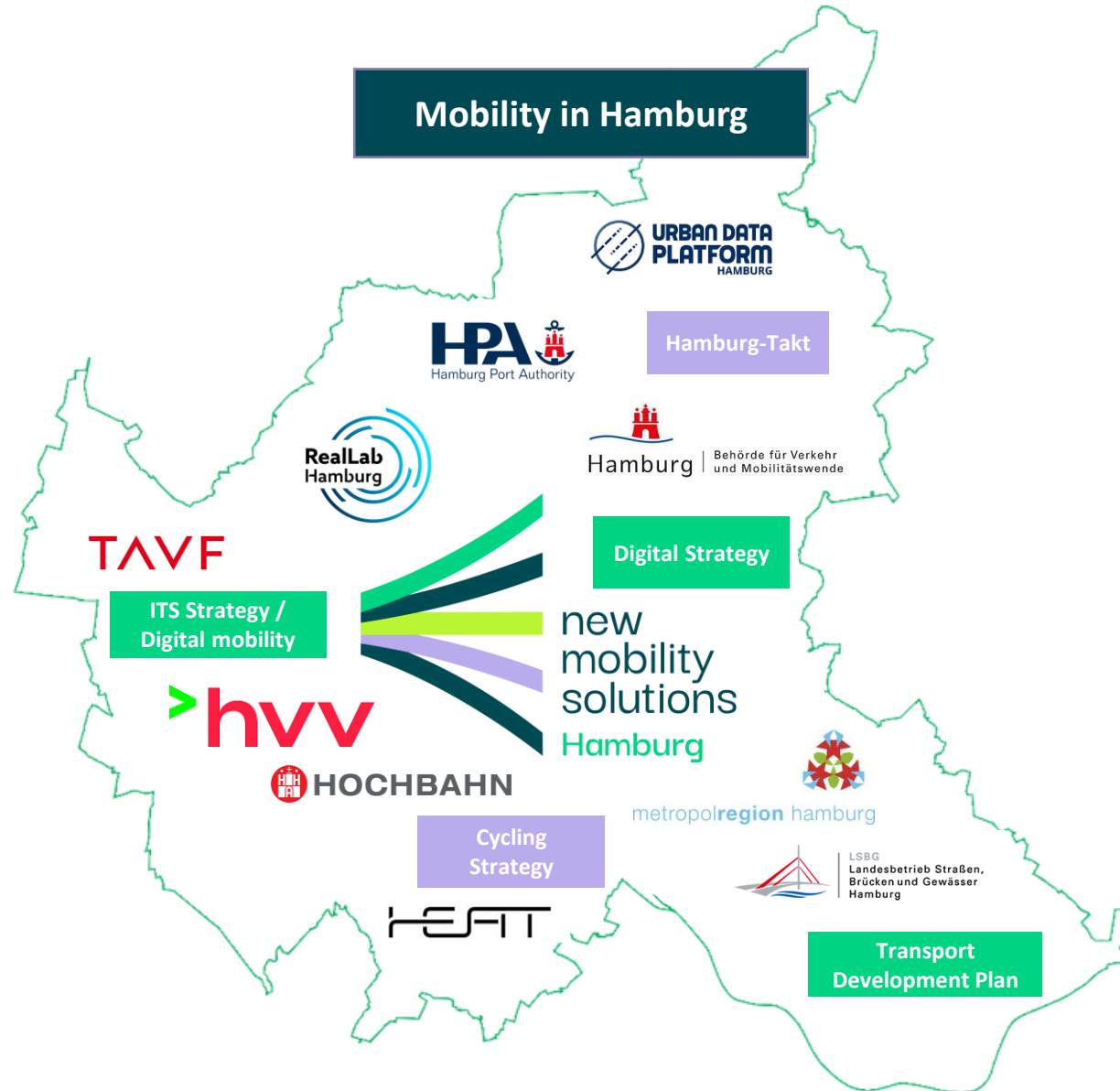


Exchange of Experience and Networking

Nationwide Initiatives



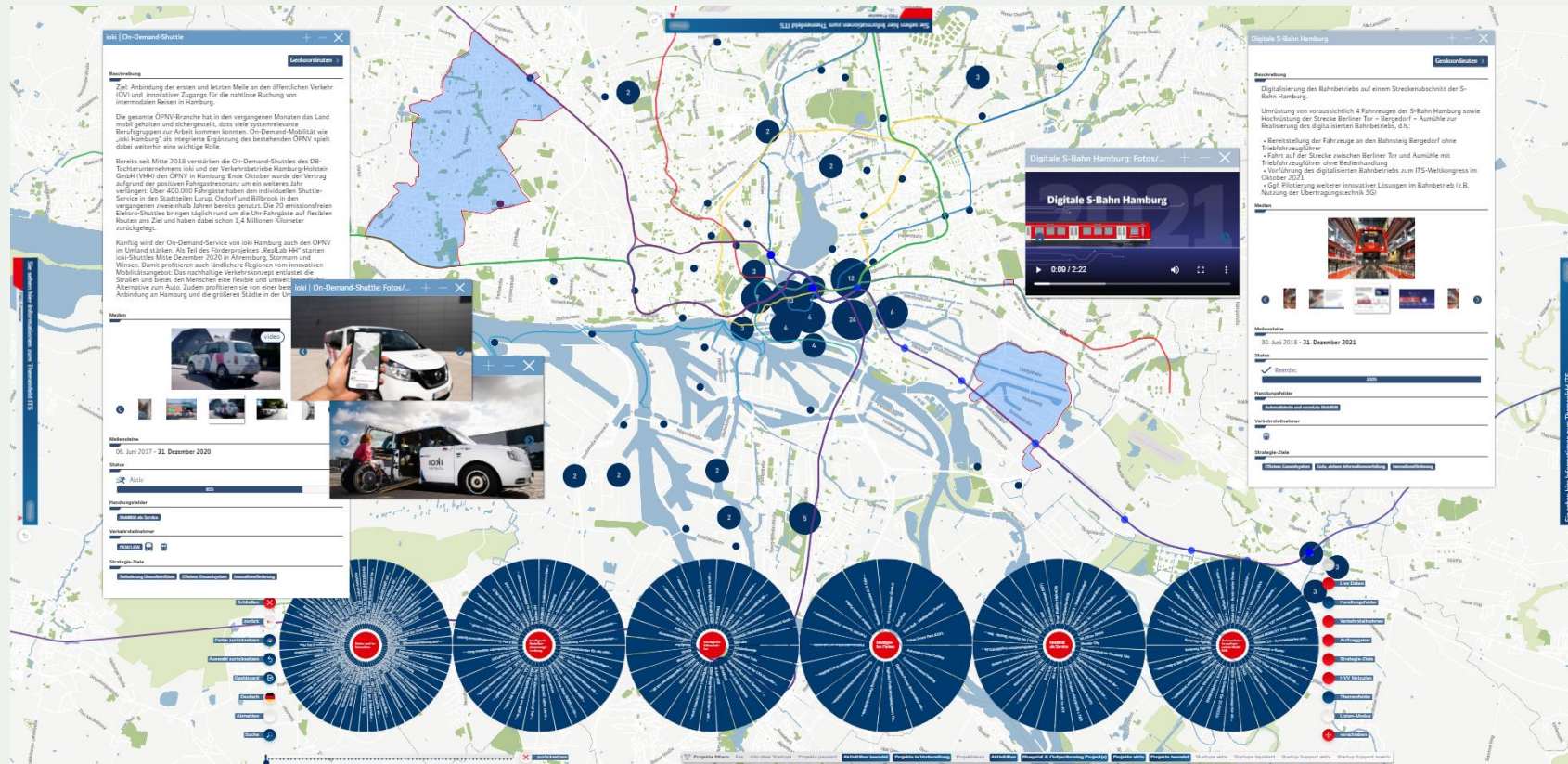
Mobility in Hamburg



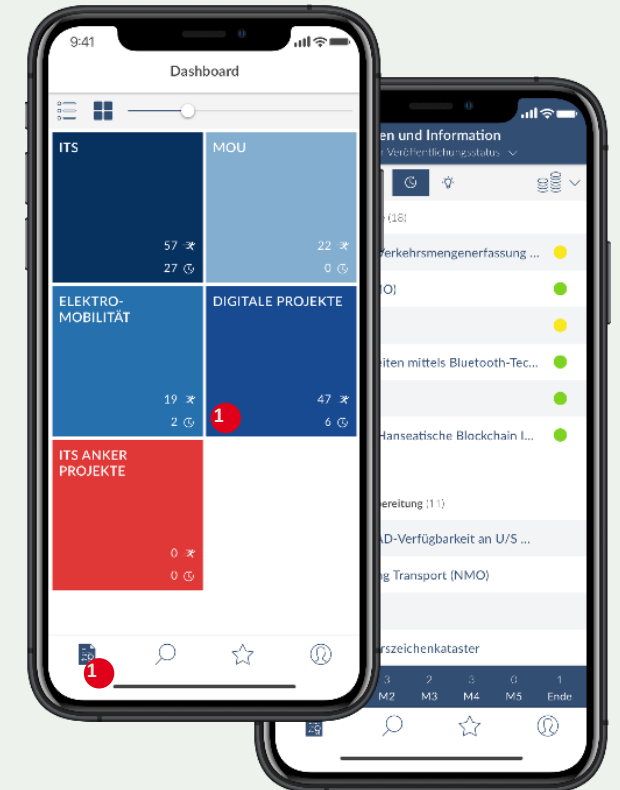
RealLabor Network



Monitoring and Networking through visibility of all projects and contexts in a digital tool



Visualize according to fields of action, goals, effect, target groups





Hamburg
is one of the
**most livable
cities** in the world

Rank 16 from 140

(Economist 2022)

Hamburg
is Germany's
smartest city

(bitkom 2019, 2020,
2021, 2022)

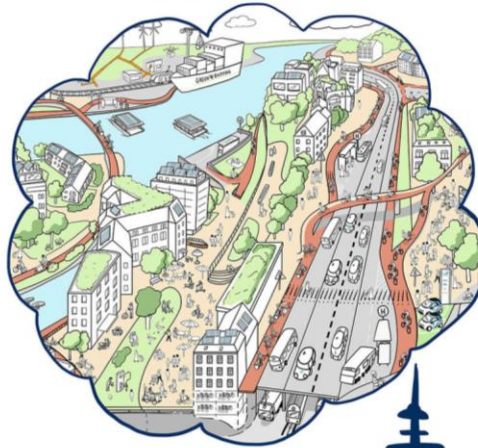
HAMBURG Climate Smart City

2030

Heating transformation



Mobility transition



Climate adaptation

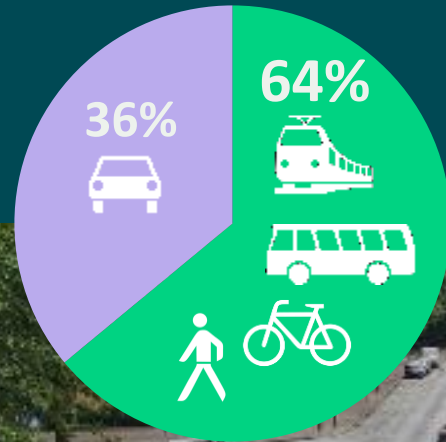


klimafreundliches Hamburg

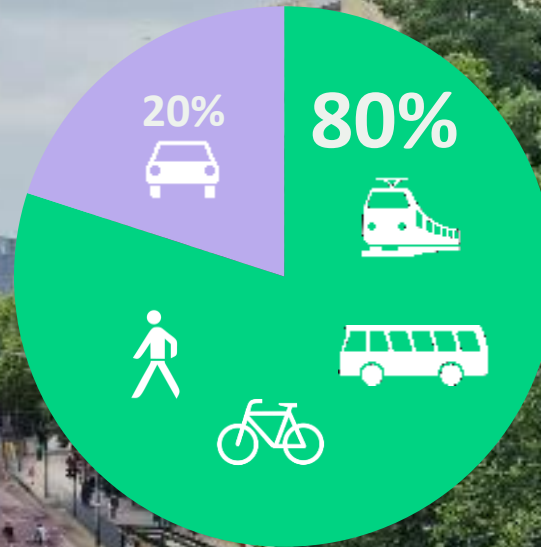
- 1.4 million t CO₂ until 2030

Transport sector: 28 % of total emissions

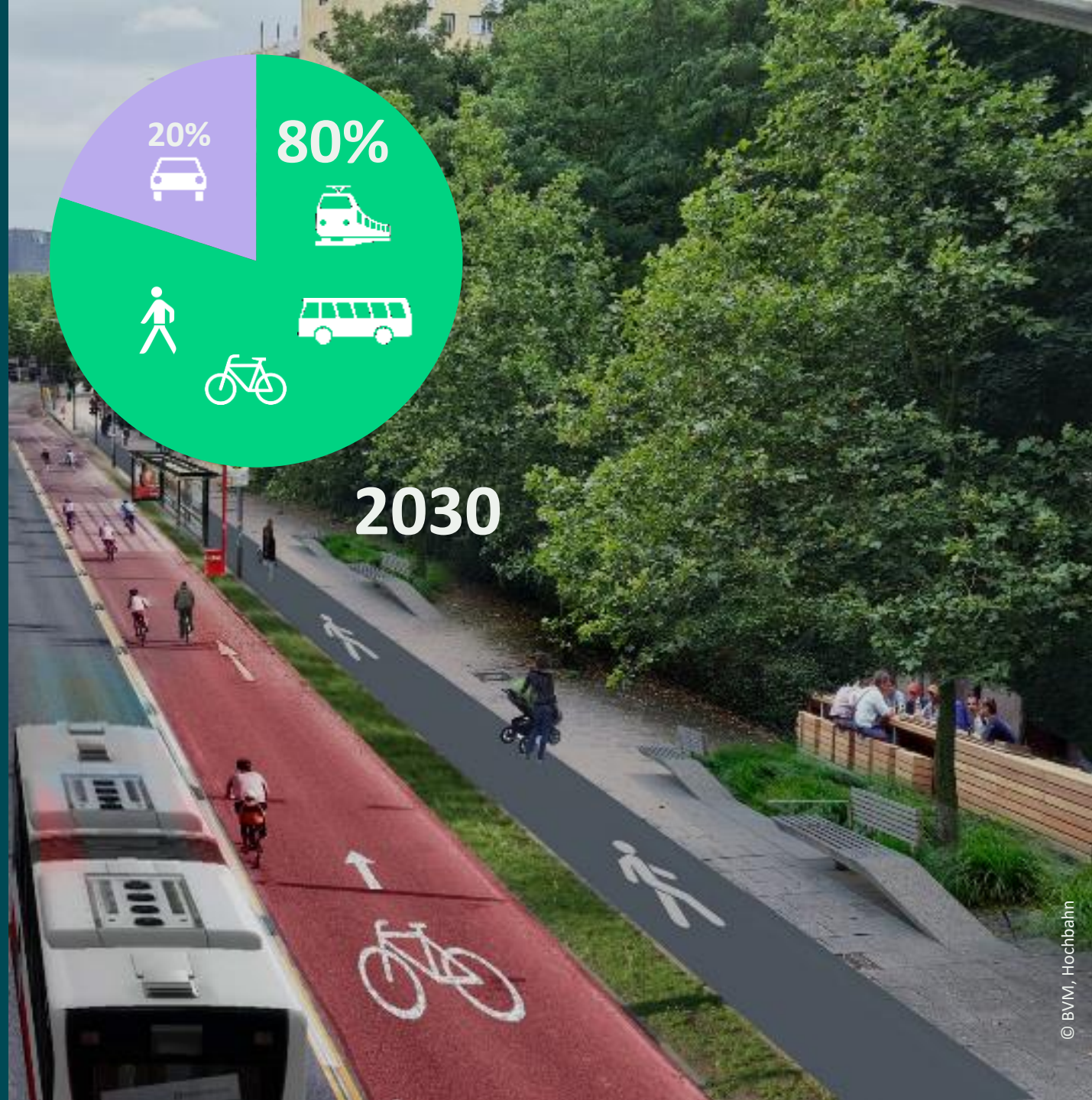
Modal Split



2017



2030



The main players in the mobility transition in Hamburg's climate plan:

Hamburg-Takt

(expansion of public transport services, including integration of on-demand services)

ITS-Strategy / Strategy Digital Mobility (SDM)

Electrification of vehicle fleets

(reduction of emissions on the road, i.e., change of drive systems for cars, trucks, buses, etc.)

10x1
> 3.500

MOIA



FREE
NOW

STADTRAD HAMBURG

approx. 3.300



SIXT share

SHARENOW



> 3.000

We
share.

MILES

TIER

emmy

voi. Bolt

> 9.000



felyx



90

ITS-Strategy | Anchor Projects



The cornerstones of Hamburgs Mobility Transition



**Memorandum of Understanding – MoU
“Metropolitan Model Region Mobility”**



**Strategy Digital Mobility
2023 - SDM**

**Expand the
Real Laboratory
Hamburg**



**UITP Global Public
Transport Summit 2025
and 2027**

**Operational Structure
and political focus**

- Projects
- Communication
- Network nat/int

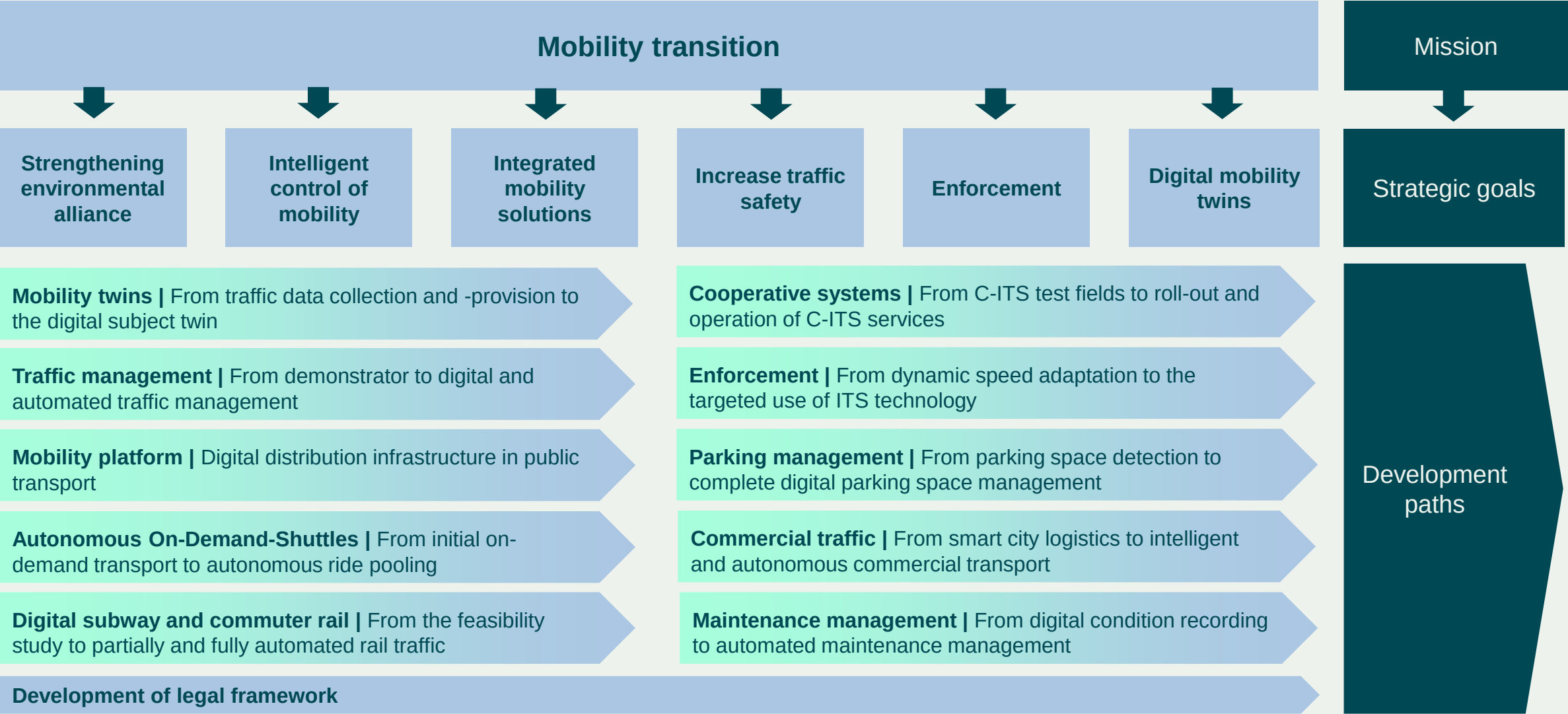
Hamburg develops new urban mobility system



Automated, digital and connected mobility system of the future

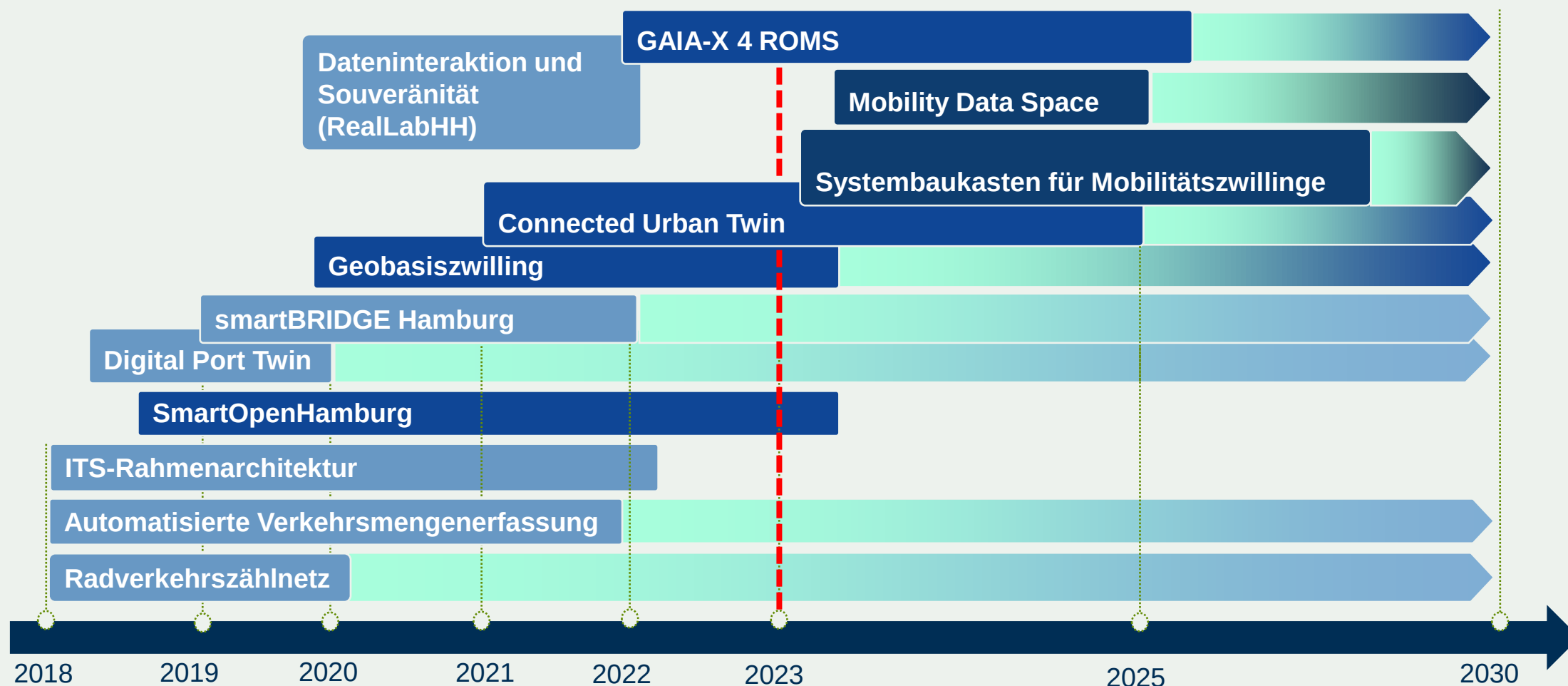
For a sustainable mobility transition with significantly less private car traffic

Strategy Digital Mobility | SDM



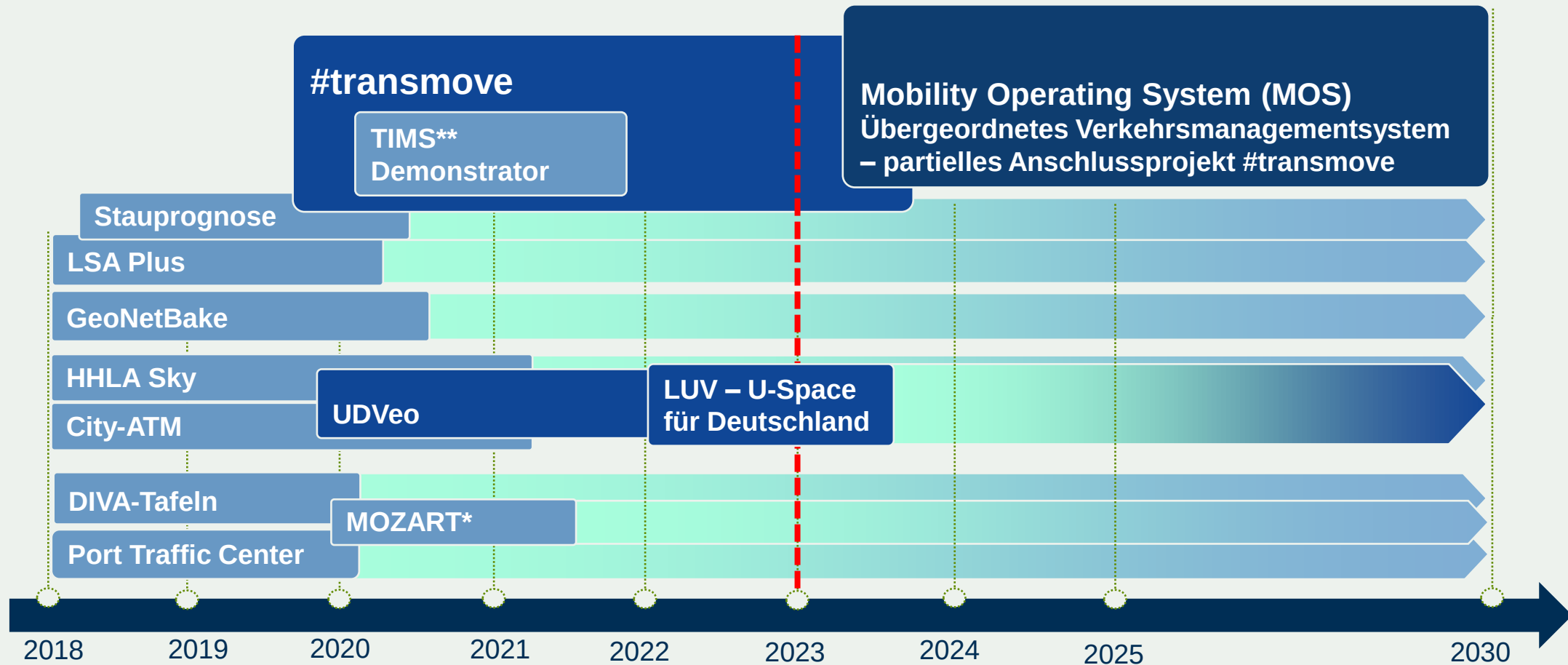
MOBILITY TWINS | FROM TRAFFIC DATA COLLECTION AND -PROVISION TO THE DIGITAL SUBJECT TWIN

Geplant	In Betrieb
In Umsetzung	In Betrieb
Abgeschlossen	In Betrieb
Aktivität	In Betrieb



TRAFFIC MANAGEMENT | FROM DEMONSTRATOR TO DIGITAL AND AUTOMATED TRAFFIC MANAGEMENT

Geplant	In Betrieb
In Umsetzung	In Betrieb
Abgeschlossen	In Betrieb
Aktivität	In Betrieb

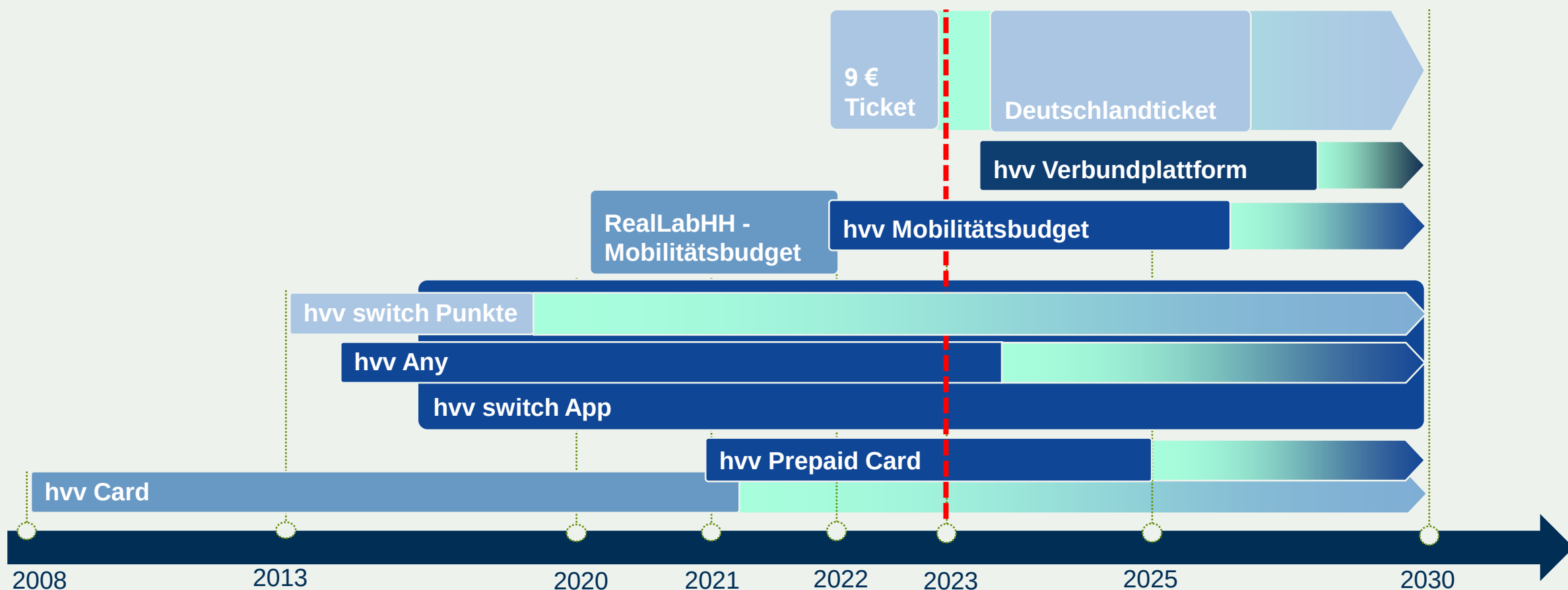


* Netzweite Echtzeit-Ampelsteuerung durch quanteninspirierte Optimierung

** Traffic Information Management System

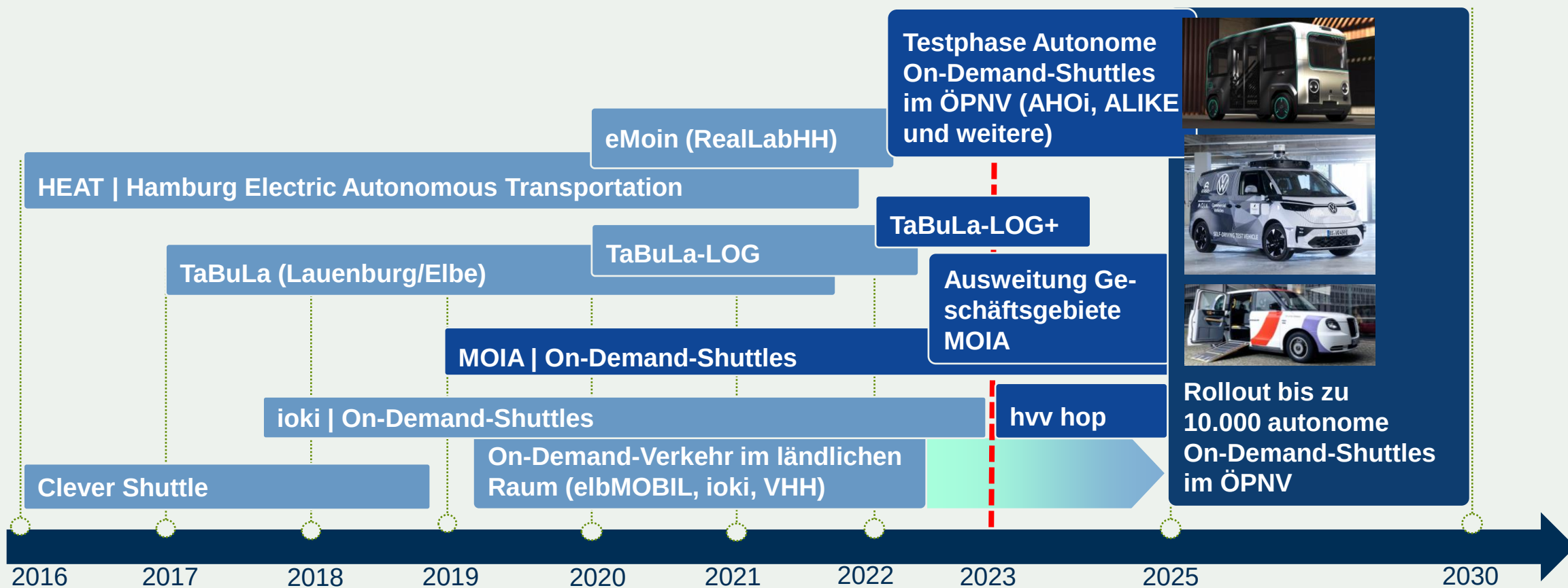
MOBILITY PLATFORM | DIGITAL DISTRIBUTION INFRASTRUCTURE IN PUBLIC TRANSPORT

Geplant	In Betrieb
In Umsetzung	In Betrieb
Abgeschlossen	In Betrieb
Aktivität	In Betrieb



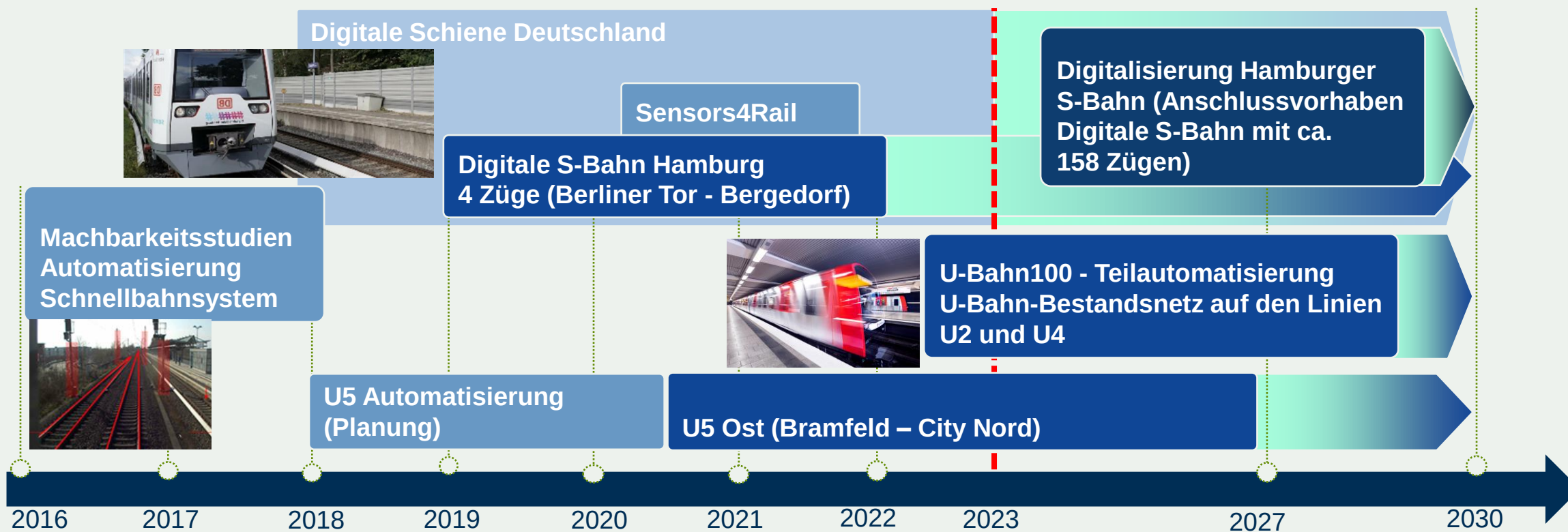
AUTONOMOUS ON-DEMAND-SHUTTLES | FROM INITIAL ON-DEMAND TRANSPORT TO AUTONOMOUS RIDE POOLING

Geplant	In Betrieb
In Umsetzung	In Betrieb
Abgeschlossen	In Betrieb
Aktivität	In Betrieb



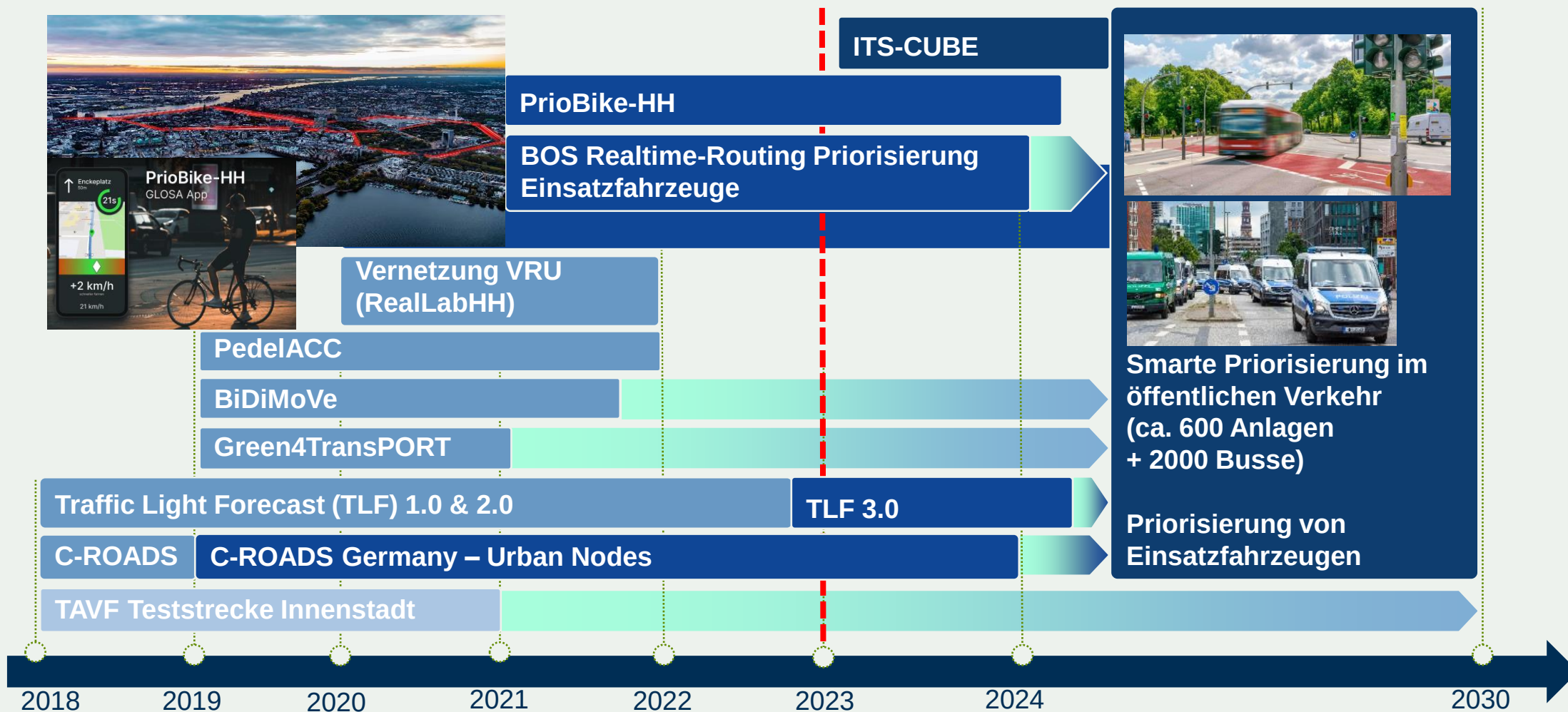
DIGITAL SUBWAY AND COMMUTER RAIL | FROM THE FEASIBILITY STUDY TO PARTIALLY AND FULLY AUTOMATED RAIL TRAFFIC

Geplant	In Betrieb
In Umsetzung	In Betrieb
Abgeschlossen	In Betrieb
Aktivität	In Betrieb



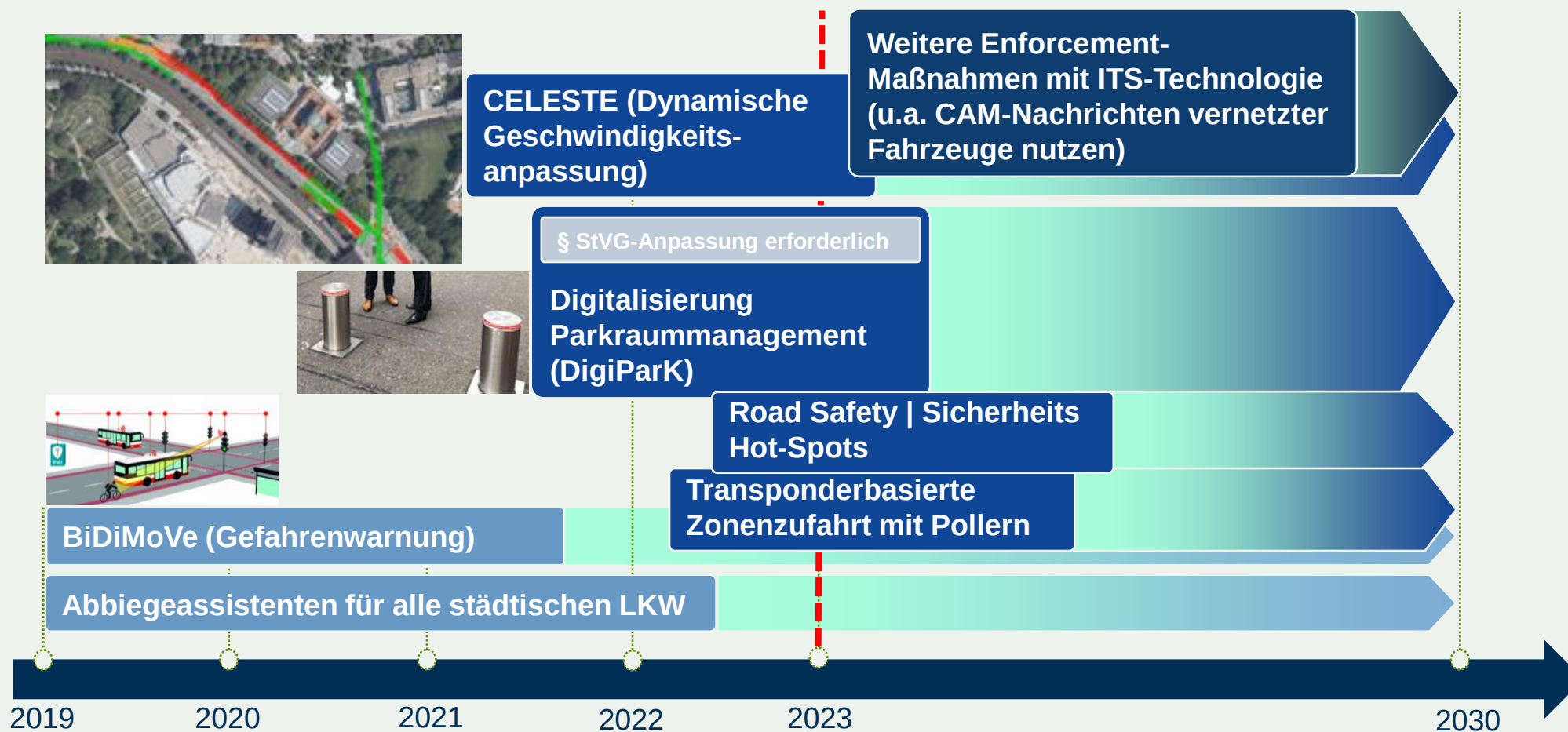
COOPERATIVE SYSTEMS | FROM C-ITS TEST FIELDS TO ROLL-OUT AND OPERATION OF C-ITS SERVICES

Geplant	In Betrieb
In Umsetzung	In Betrieb
Abgeschlossen	In Betrieb
Aktivität	In Betrieb



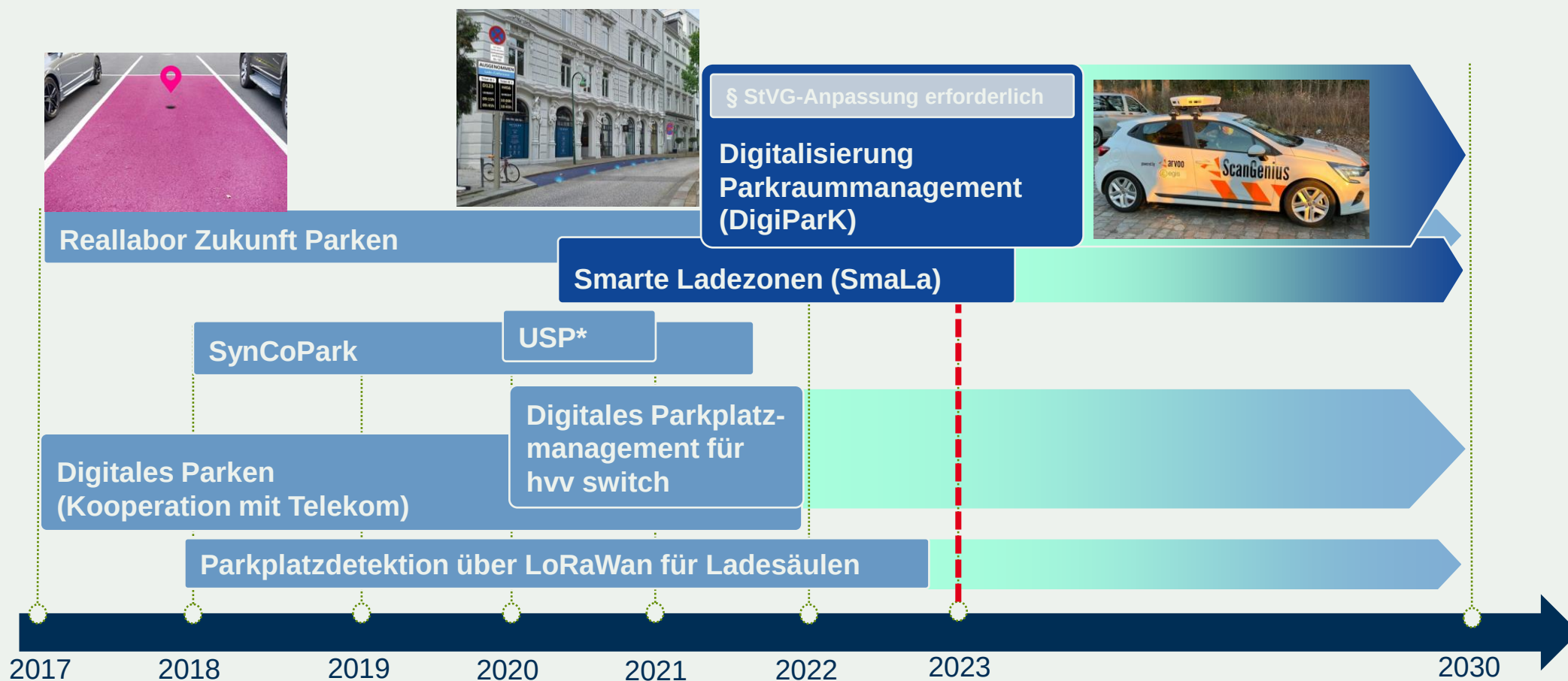
ENFORCEMENT | FROM DYNAMIC SPEED ADAPTATION TO THE TARGETED USE OF ITS TECHNOLOGY

Geplant	In Betrieb
In Umsetzung	In Betrieb
Abgeschlossen	In Betrieb
Aktivität	In Betrieb



PARKING MANAGEMENT | FROM PARKING SPACE DETECTION TO COMPLETE DIGITAL PARKING SPACE MANAGEMENT

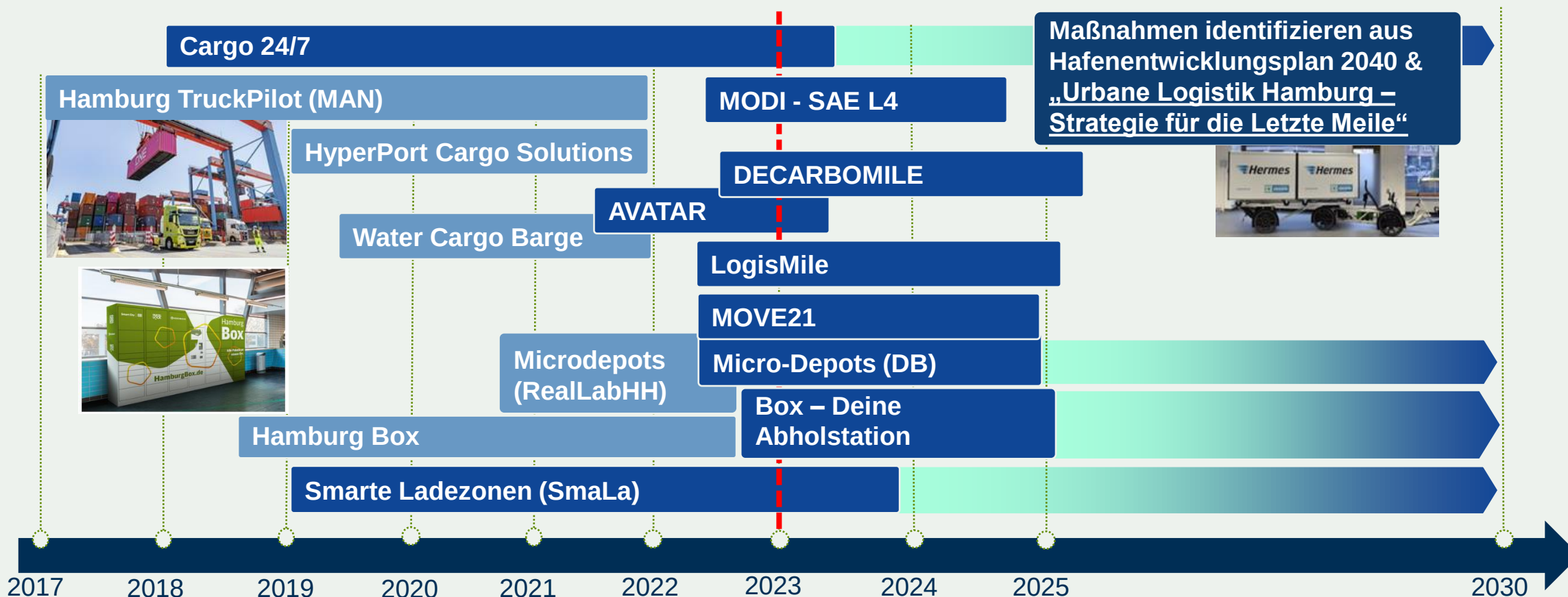
Geplant	In Betrieb
In Umsetzung	In Betrieb
Abgeschlossen	In Betrieb
Aktivität	In Betrieb



* Urban Smart Park

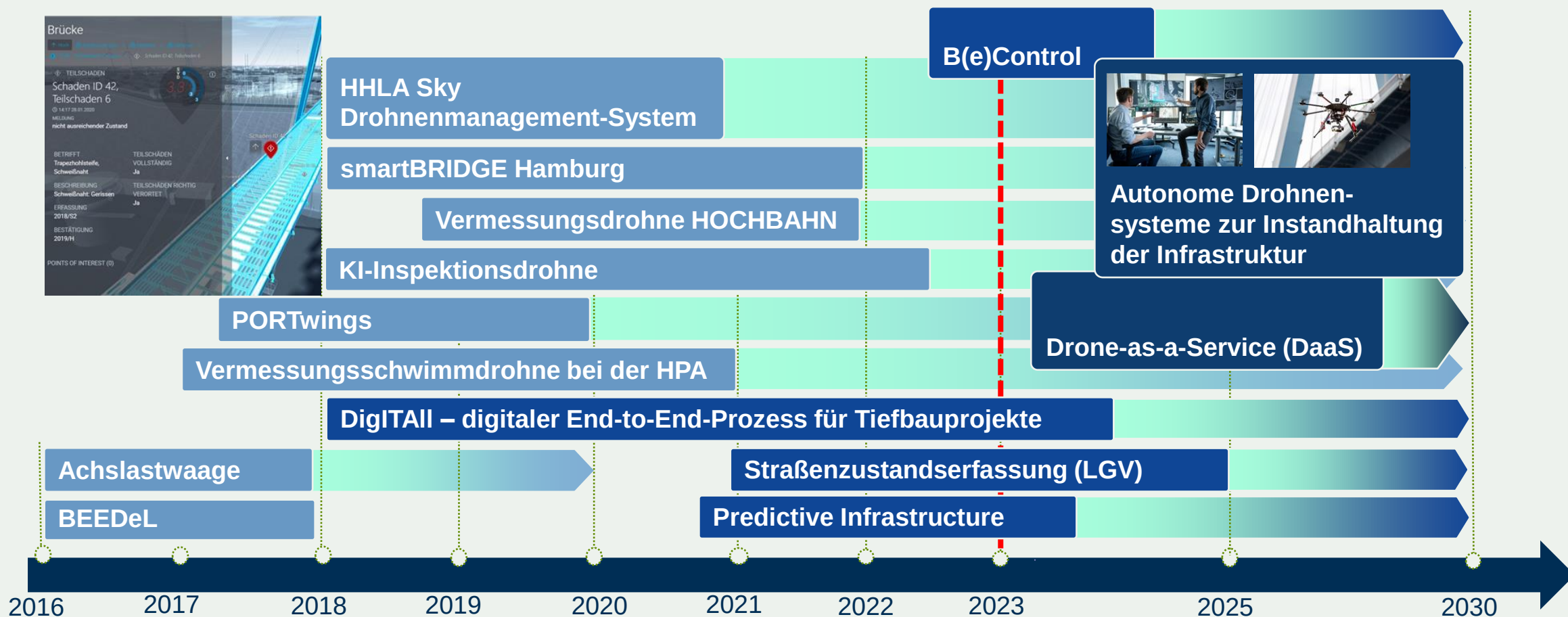
COMMERCIAL TRAFFIC | FROM SMART CITY LOGISTICS TO INTELLIGENT AND AUTONOMOUS COMMERCIAL TRANSPORT

Geplant	In Betrieb
In Umsetzung	In Betrieb
Abgeschlossen	In Betrieb
Aktivität	In Betrieb



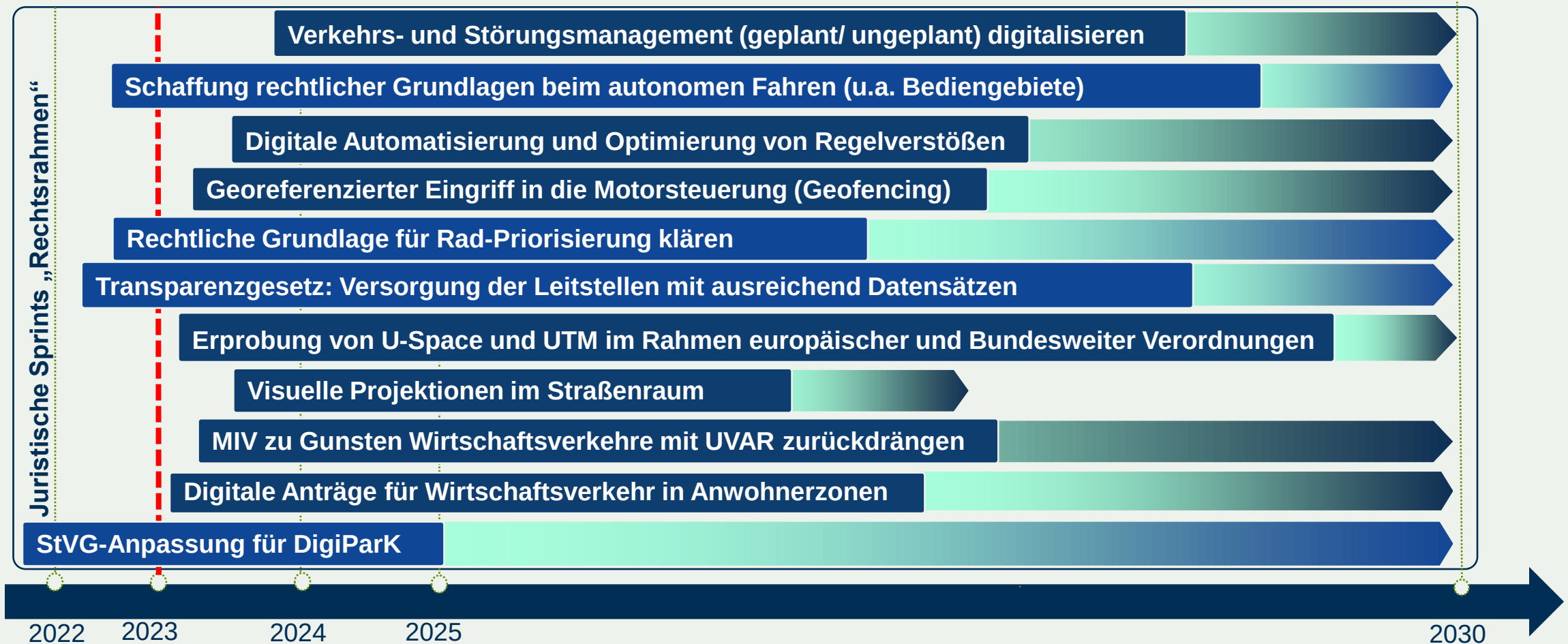
MAINTENANCE MANAGEMENT | FROM DIGITAL CONDITION RECORDING TO AUTOMATED MAINTENANCE MANAGEMENT

Geplant	In Betrieb
In Umsetzung	In Betrieb
Abgeschlossen	In Betrieb
Aktivität	In Betrieb



DEVELOPMENT OF LEGAL FRAMEWORK

Geplant	In Betrieb
In Umsetzung	In Betrieb
Abgeschlossen	In Betrieb
Aktivität	In Betrieb



Roll-out of selected ITS projects in Hamburg



Medifly Hamburg

Medical drone transport between hospitals



PrioBike-HH

Green wave at 18 Km/h and priority reversal on several bicycle routes



Smart Loading Zones

Scaling from 5 to 25 planned



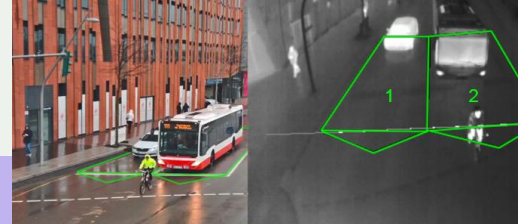
Traffic Light Forecast

> 700 nodes available via UDP-HH



Teleoperierated driving

Vay launches teleoperated service in Bergedorf



Automated Traffic Volume Detection

420 LSA nodes with counting points
175 nodes with travel time detection



Bicycle Counting Network

More than 70 counting stations for recording bicycle traffic on 13 bicycle routes



HHLA Sky

Hamburg drone control station to be sold worldwide

Urban Air Mobility, Hyperloop and Quantum Technology



i-LUM

Explores acceptance of air cabs in FHH airspace.



MOZART

Use of quantum technology for real-time control of traffic lights in the port.



HyperPort Cargo Solutions

HHLA and HyperloopTT develop blueprint for the future.



Volodrone

Load drone from Volocopter at ITS Congress 2021.



Google AirView

Scientific measurement of Hamburg air quality.



TSB Cargo Demonstrator

Container Maglev for the Port of Hamburg?

Milestones for the successful implementation of the ITS Strategy



new mobility solutions Hamburg



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