Mobility
Data Space
Data Sharing Community

Mobility Data Space: Data Sharing Community

01
Challenges

01 Challenges

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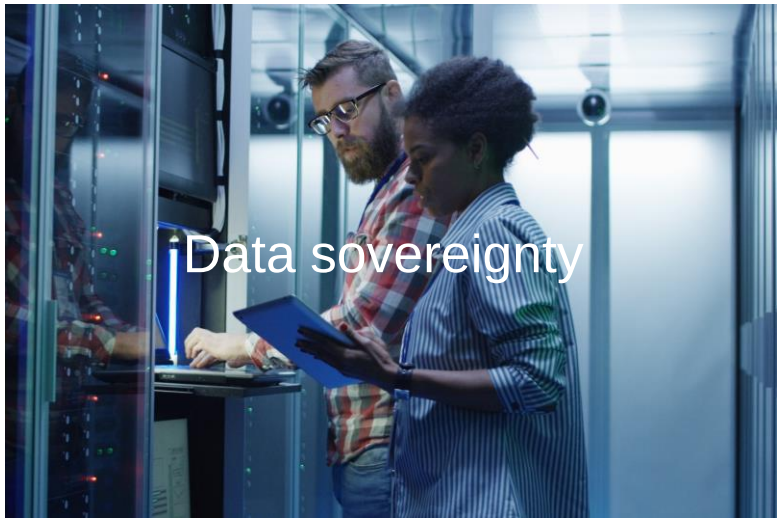
Data Sharing Community



02
Vision

Mobility Data Space
Data Sharing Community

MDS is an independent marketplace for mobility data that is open to everyone. The data platform enables the mobility of tomorrow by providing a secure environment for sovereign data exchange. This results in innovative products, services and business models that benefit us all.

03
Data Sharing Community

Data Sharing Community: trustworthy ecosystem for mobility pioneers

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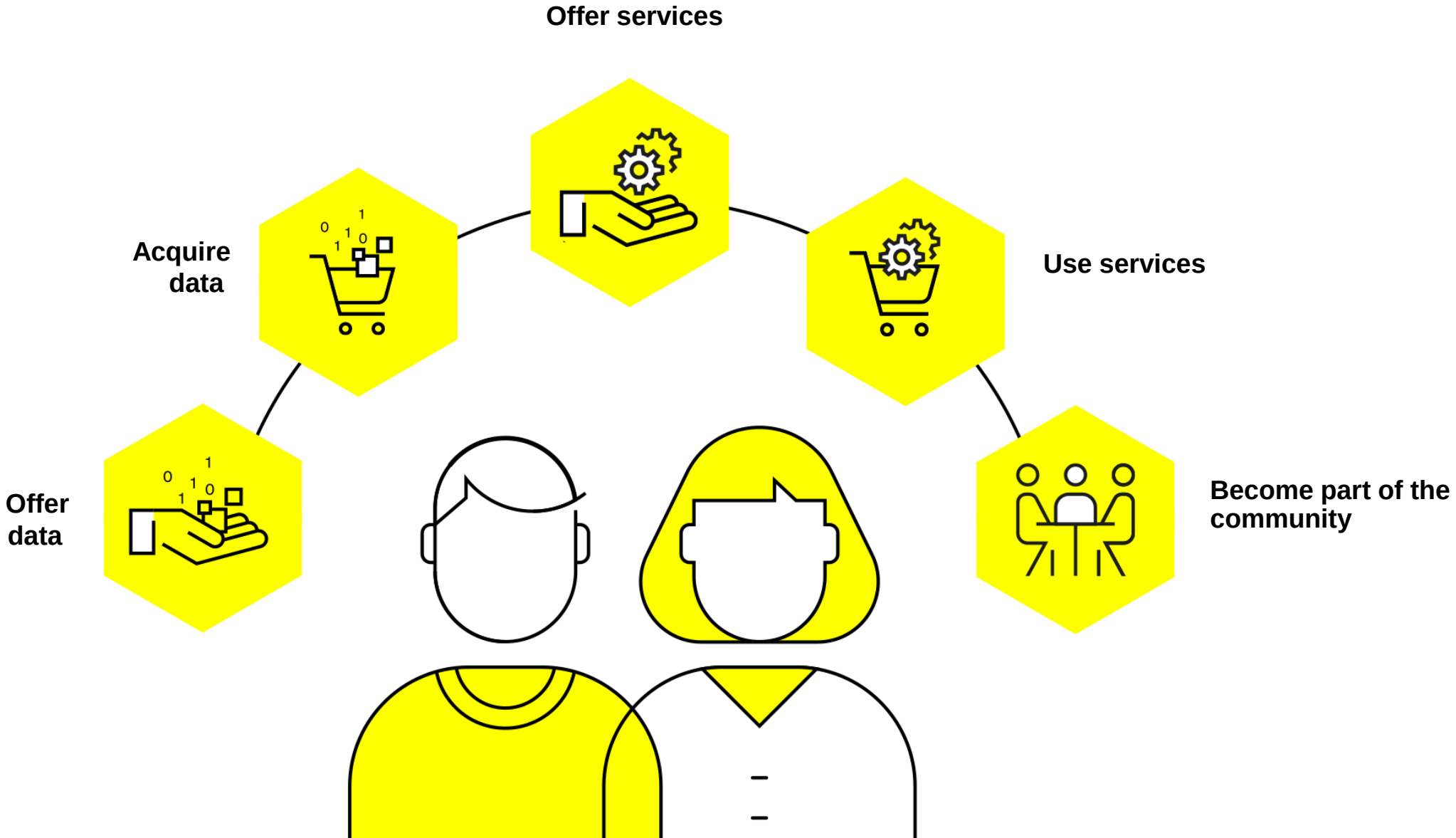
Data Sharing Community



Marketplace for services: wide range and tailor-made services

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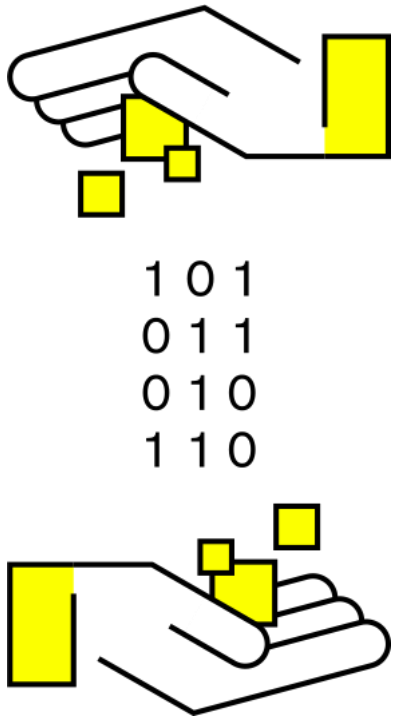
- → **Decentralisation:**
  data is not stored centrally, but shared directly among members

- → **Freedom of contract:**
  contractual partners negotiate conditions directly and autonomously among themselves

- → **Value creation:**
  From 1 January 2025, MDS will levy user fees to co-finance the Data Sharing Community and MDS services. The MDS will remain a non-profit organisation

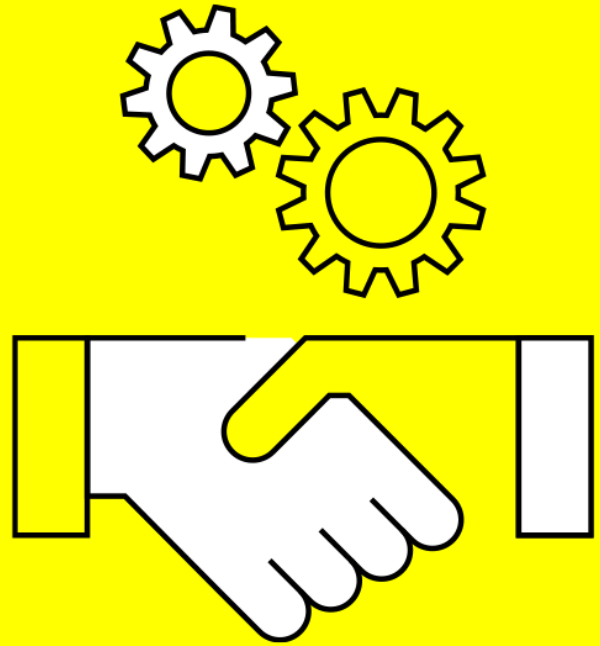


Marketplace for services: wide range and tailor-made services

- **Support in the selection of service providers:**
  uncomplicated networking with service providers

- **Uncomplicated onboarding:**
  service providers offer specialised services geared towards data rooms

- **Wide range of services:**
  onboarding, operations, data & identity management, development, business development



Advice and Know-how

Mobility Data Space connects members with specialised service providers from key data management disciplines.

Onboarding

Operation

Data & identity management

Development

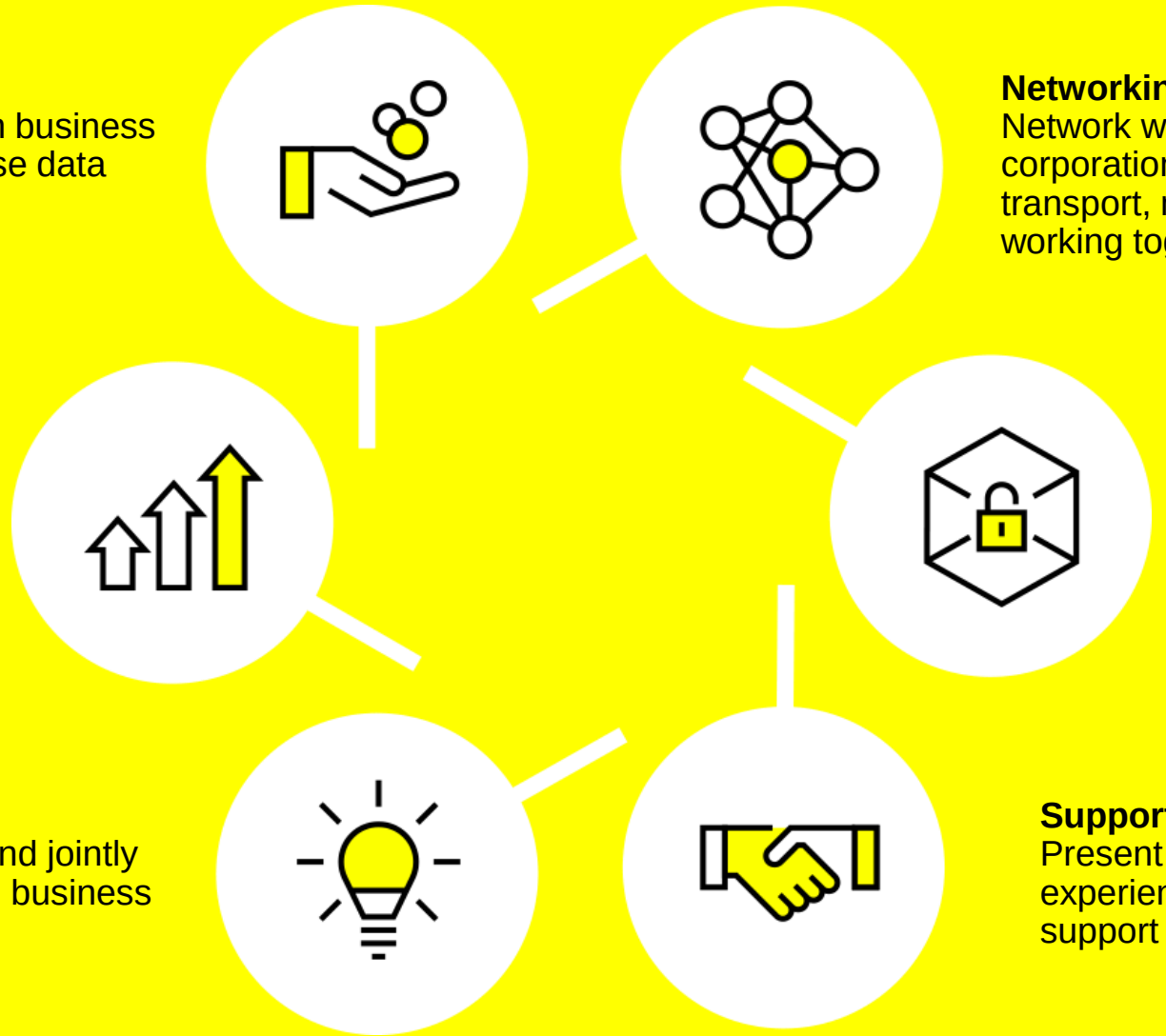
Business development

Advantages of participating in the Data Sharing Community at a glance

Value creation
Operate data-driven business models and monetise data

Networking
Network with like-minded people from corporations, start-ups, SMEs, public transport, municipalities and academia, working together in a spirit of trust

Growth
Find new partners for joint value creation and expand data portfolio



Trust
Exchange ideas with experts in a protected area

Innovation
Try out new ideas and jointly develop data-driven business models

Support
Present best practice, share experiences and receive support

04
Mode of operation

Data transmission in Mobility Data Space: the basis for innovative products, services and business models

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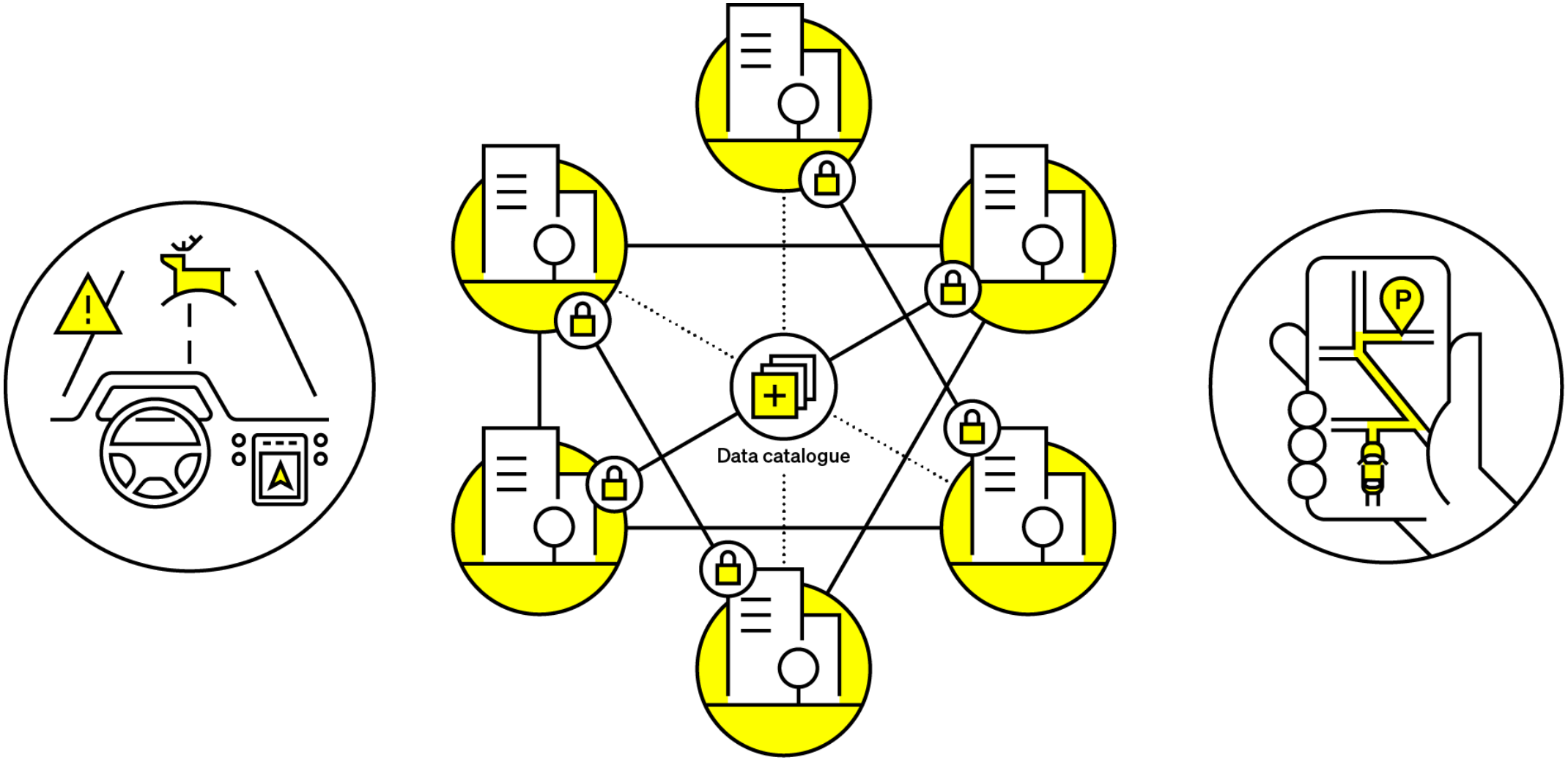
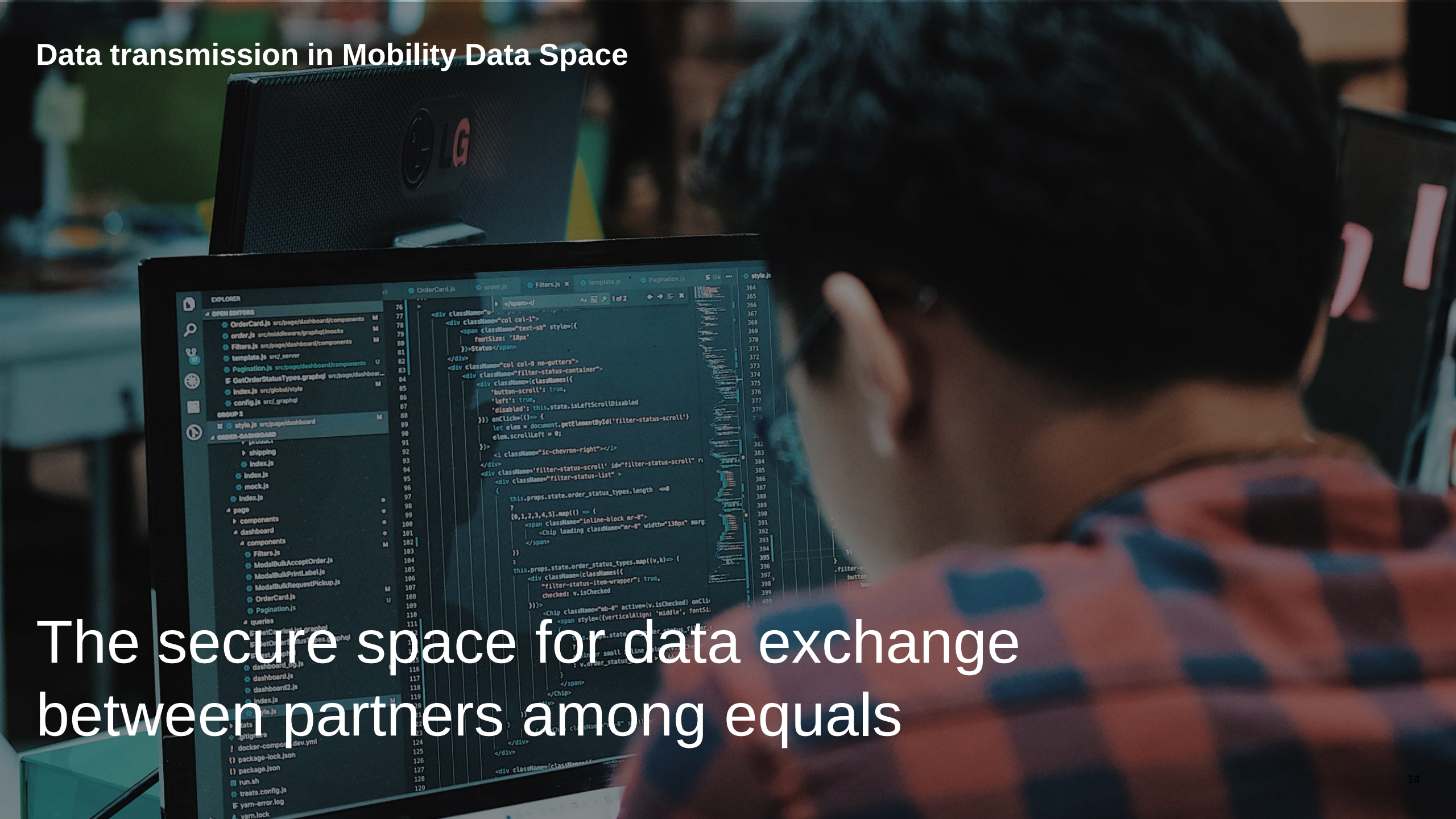
Data Sharing Community



Data transmission in Mobility Data Space



The secure space for data exchange between partners among equals

Data transmission in Mobility Data Space

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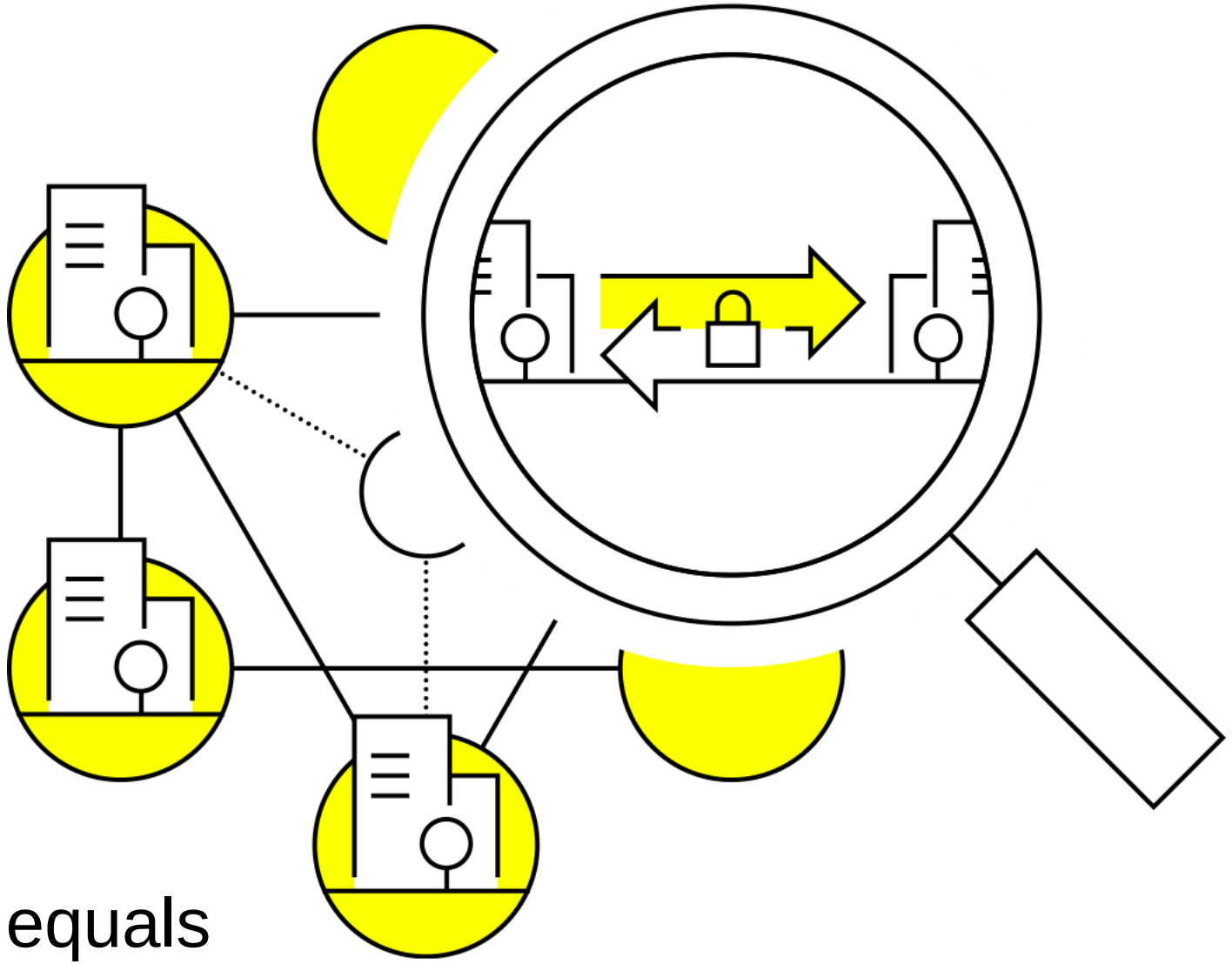
Data Sharing Community



The secure space
for data exchange
between partners among equals

Step 1:
negotiating the conditions between the contracting parties

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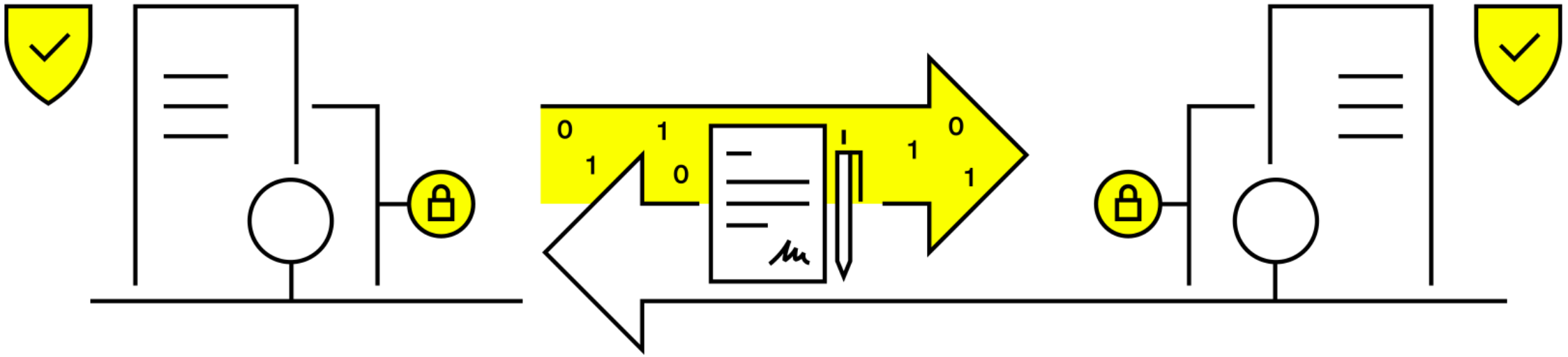

Step 2:
peer-to-peer data transfer via trusted IT architecture

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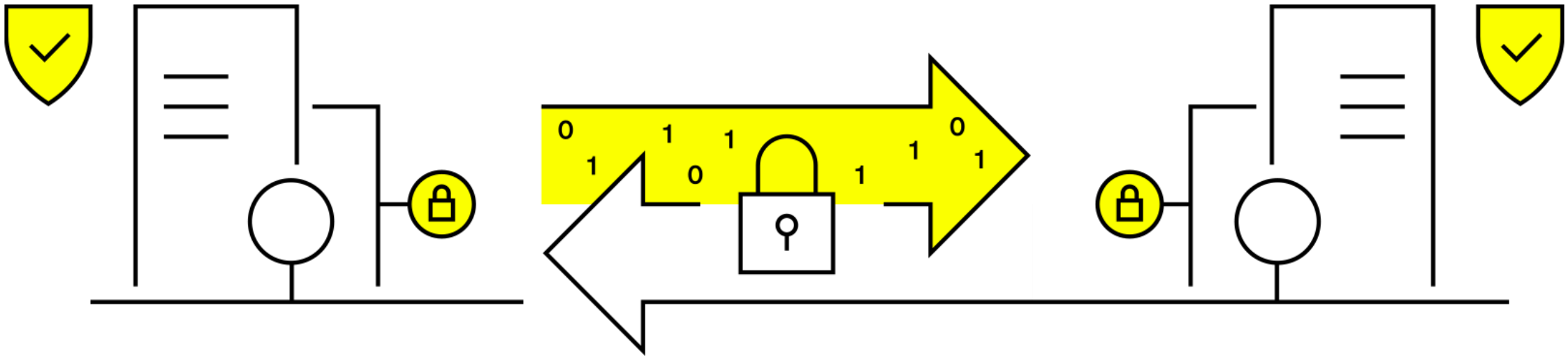
Data transmission via connectors



05
Data

Wide range of mobility data

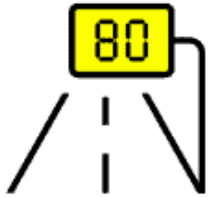
Traffic information

Roadworks and road conditions

Traffic flow information

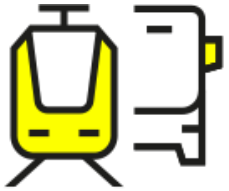
Parking information

Fuel price and electromobility



Traffic signs and speed information

Weather information

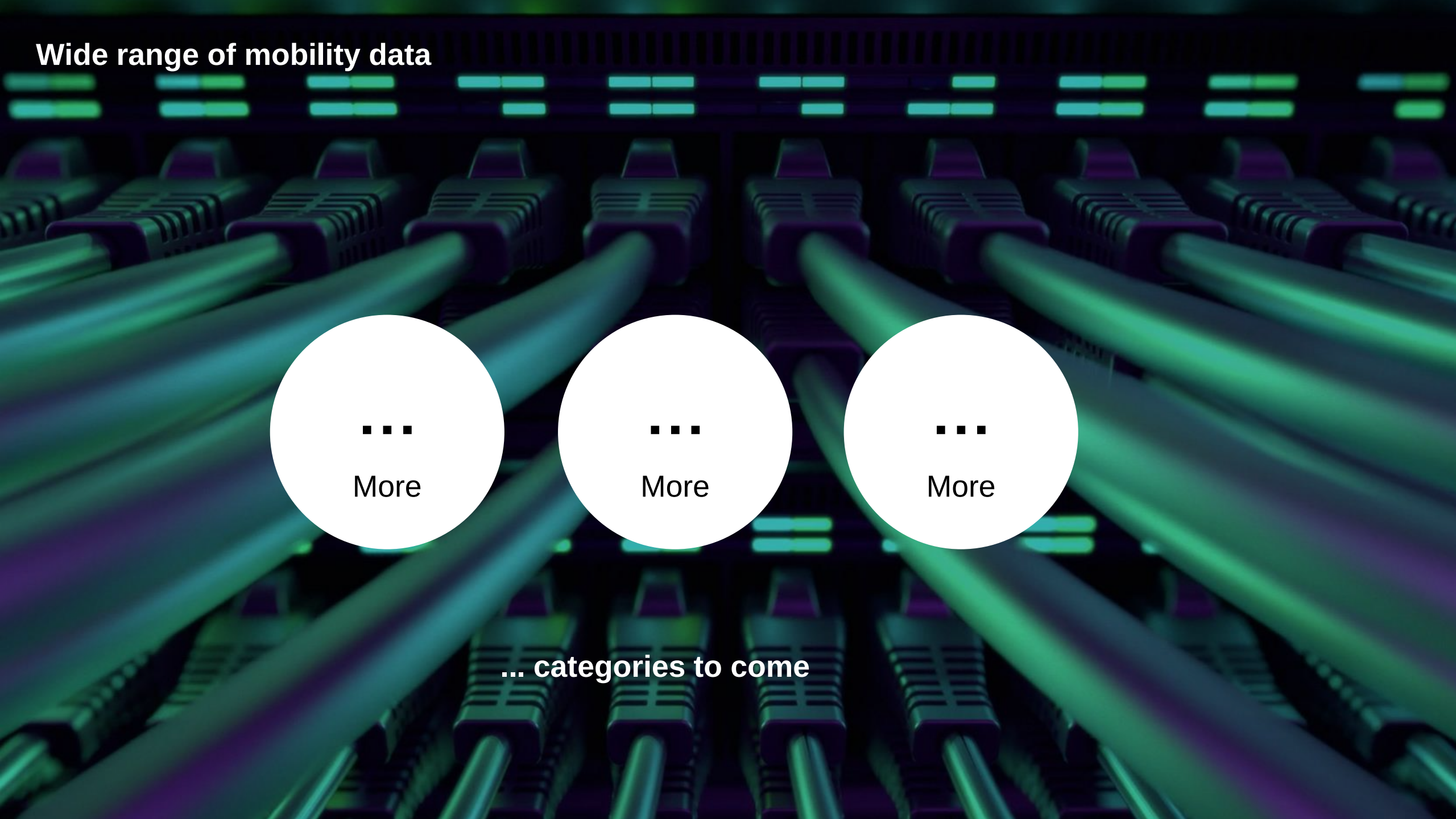


Public transport information

Car and bike sharing

Infrastructure

Wide range of mobility data



... categories to come

06
Members

02 MDS-Community (extract)

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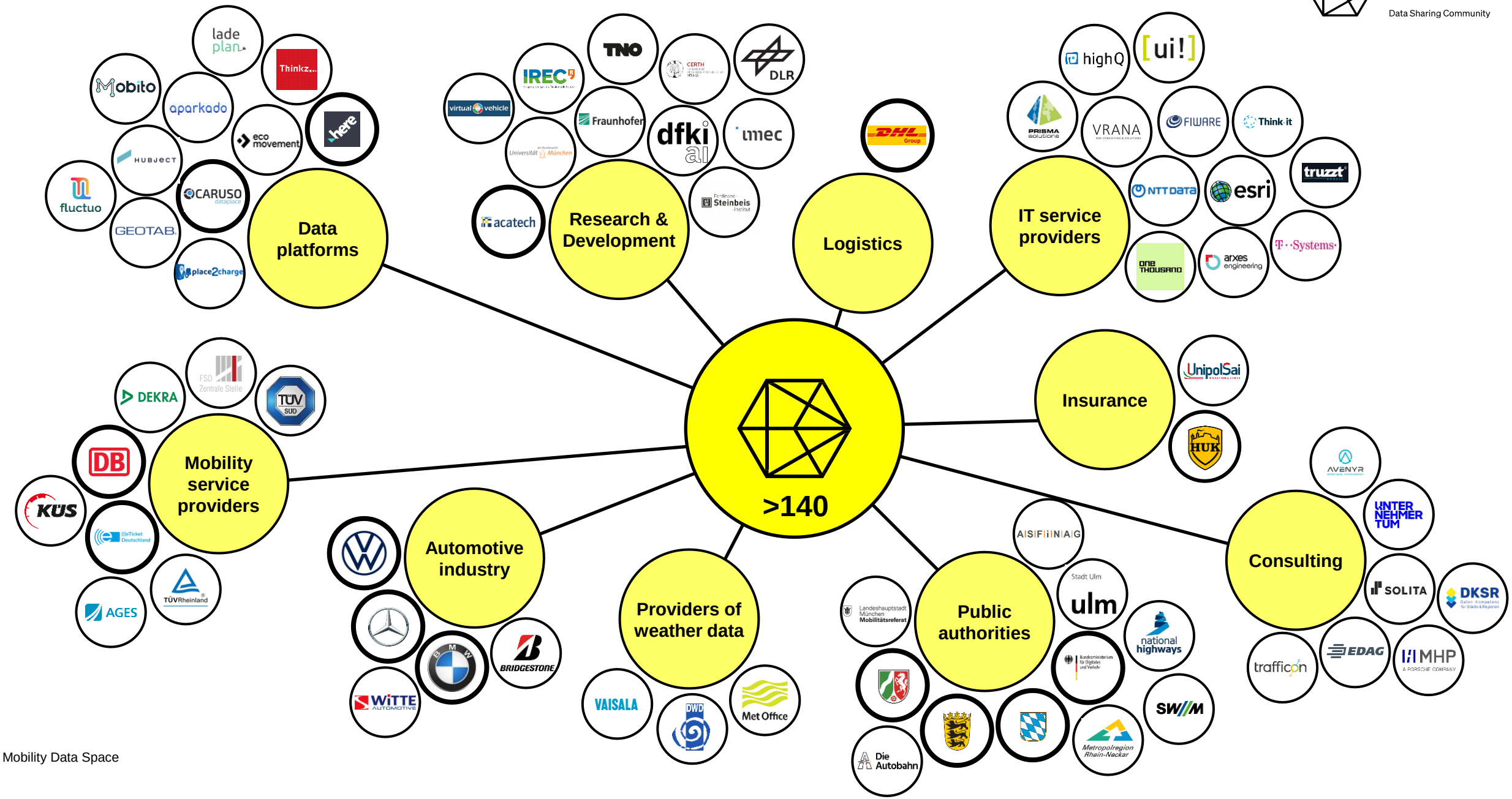

Shareholders of MDS

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More than 200 stakeholders from science, industry and public administration worked on the conception of the MDS. For long-term operation, the acatech Foundation has transferred the project to the DRM Datenraum Mobilität GmbH as a supporting company (non-profit GmbH). The MDS is funded by the Federal Ministry for Digital and Transport.

Shareholders of DRM GmbH are:

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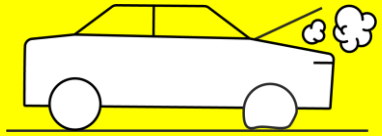
07 Data Offerings

BMW Data Offerings



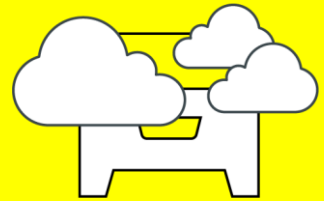
Car breakdowns

Event is generated from the relevant vehicle signals in a completely anonymised form.

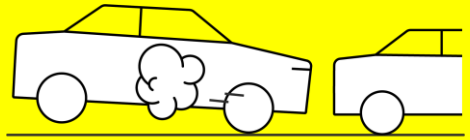
Heavy rainfall events

Event is generated completely anonymously from the relevant vehicle signals (e.g. wiper speed).

Fog



Based on the respective vehicle signals (e.g. fog lights), the event is generated completely anonymously.



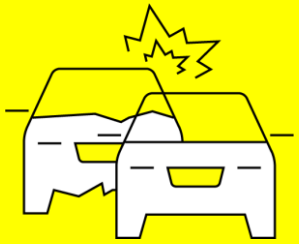
Emergency braking

Data, e.g. Dynamic Stabilization Control (DSC), is generated completely anonymously.

Slippery Road

Data, e.g. Dynamic Stabilization Control (DSC), is also generated completely anonymously.

Accident



Events such as the triggering of an emergency call are generated anonymously from the vehicle signals.

Mercedes-Benz Data Offerings

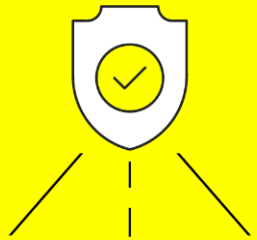
Hazard Warnings

Display of aggregated warnings about local hazards from the Mercedes-Benz fleet to increase safety and optimise navigation services.

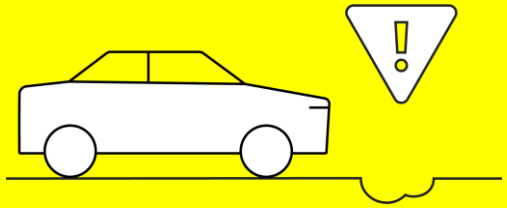
Parking Monitoring

Anonymised real-time parking behaviour data from the Mercedes-Benz fleet to improve your own applications.

Road Safety Hotspots



With the world's safest cars on the world's safest roads - using the power of data to identify safety-critical hotspots.



Surface Events

Detection of potholes and other surface events on the road network for efficient repair allocation and budget planning.

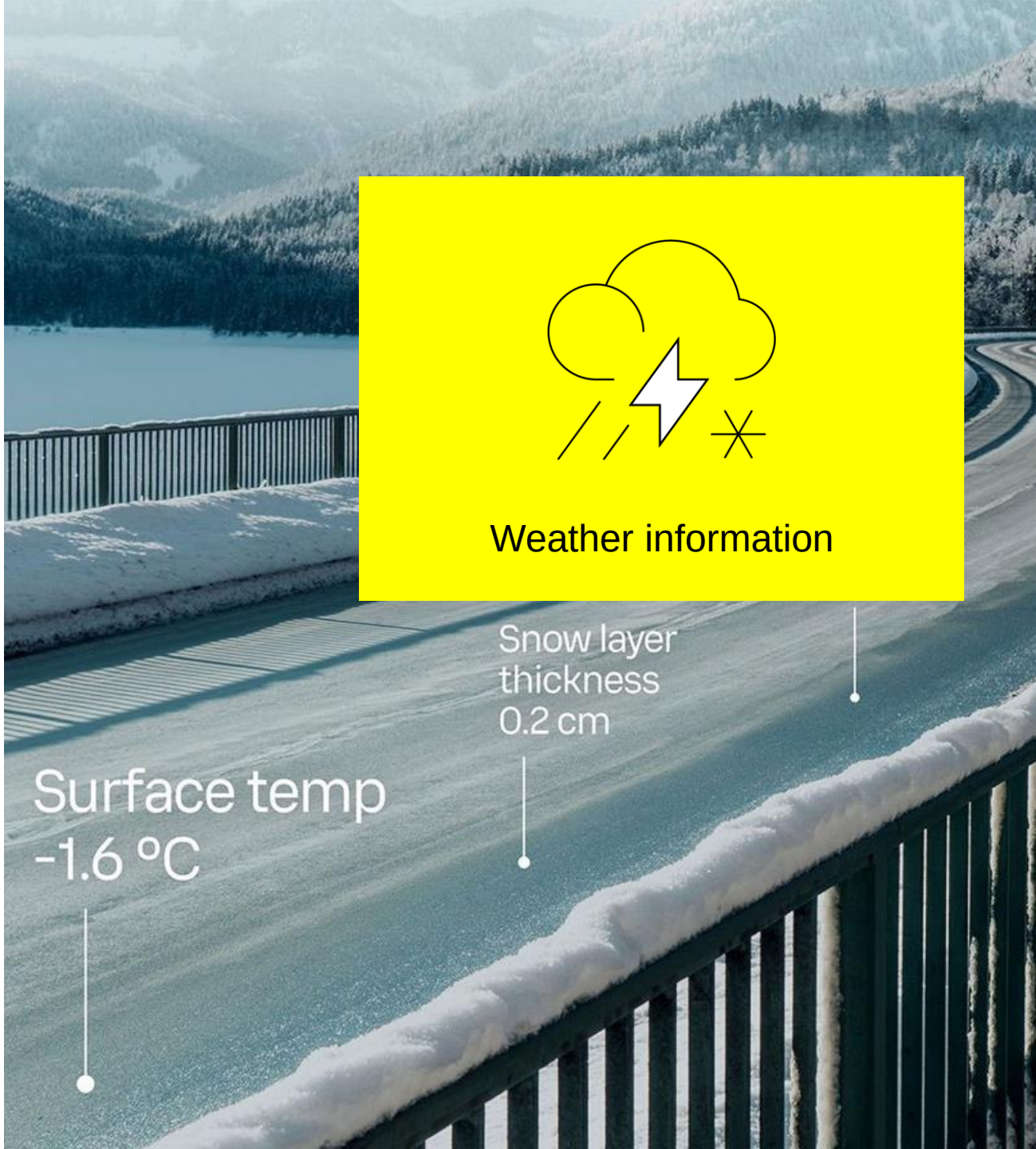
Micro Weather

The Mercedes-Benz vehicle as a "mobile weather station": current weather data at GPS level, collected anonymously in the Mercedes-Benz vehicle fleet.

Vaisala Xweather Data Offerings

"Weather Conditions" provides interpolated global current, forecast and historical weather conditions, and a minute-by-minute precipitation forecast for up to 60 minutes.

The data is generated for the requested location and time using a proprietary blend of data including weather station observations, radar and satellite information, global and regional models, and other proprietary sources.



DB Parking Information

Information on "DB BahnPark" car parks in Germany. This dataset allows you to search for parking facilities, e.g. car parks and multi-storey car parks, especially near railway stations, and to obtain more detailed information about them.

Bridgestone Data Offerings

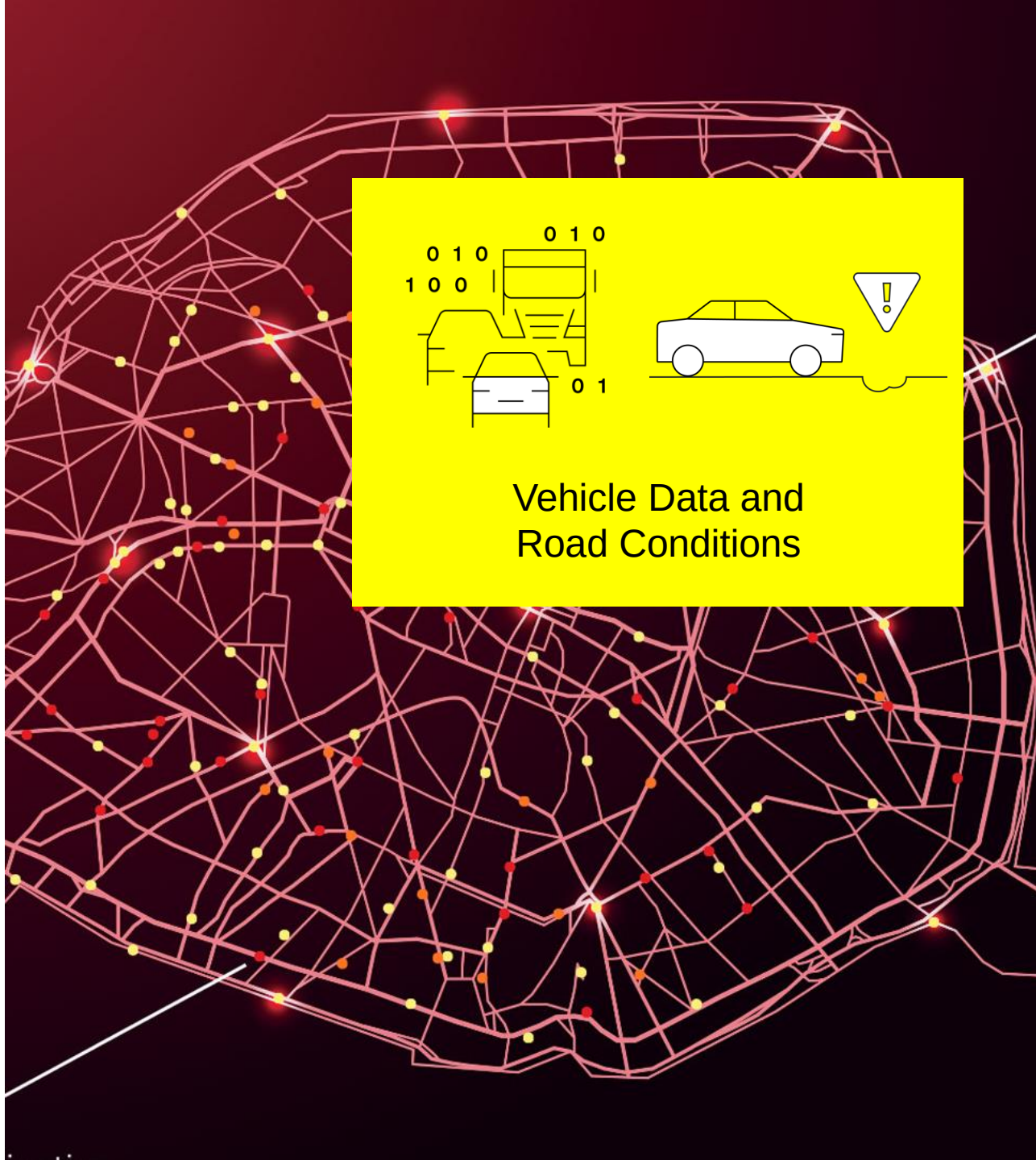
Vehicle Data Portfolio

This data source provides deep insights into vehicle performance, driving behaviour, traffic dynamics, CO2 emissions, electric vehicle insights, and road and weather conditions. The portfolio consists of the following products:

- Floating Car Data
- Origin Destination Data
- Hazardous Driving Events
- Standstill Data
- Vehicle Profiles
- EV Charging Events

Road Conditions Portfolio

- **Road Damage Detection**: Identification of road damage such as potholes, cracks, manhole covers and patches
- **Road Asset Visualization**: Analysis of road data from connected vehicles and camera streams, including information on traffic signs, traffic lights, road markings, and road conditions
- **Road Roughness Monitoring**: Calculation of the International Roughness Index (IRI) for real-time and long-term monitoring of road conditions



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08 Use Cases

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Initiative for safe roads and the City of Hamburg

PrioBike-HH: Enhancing Cyclist Safety

Description

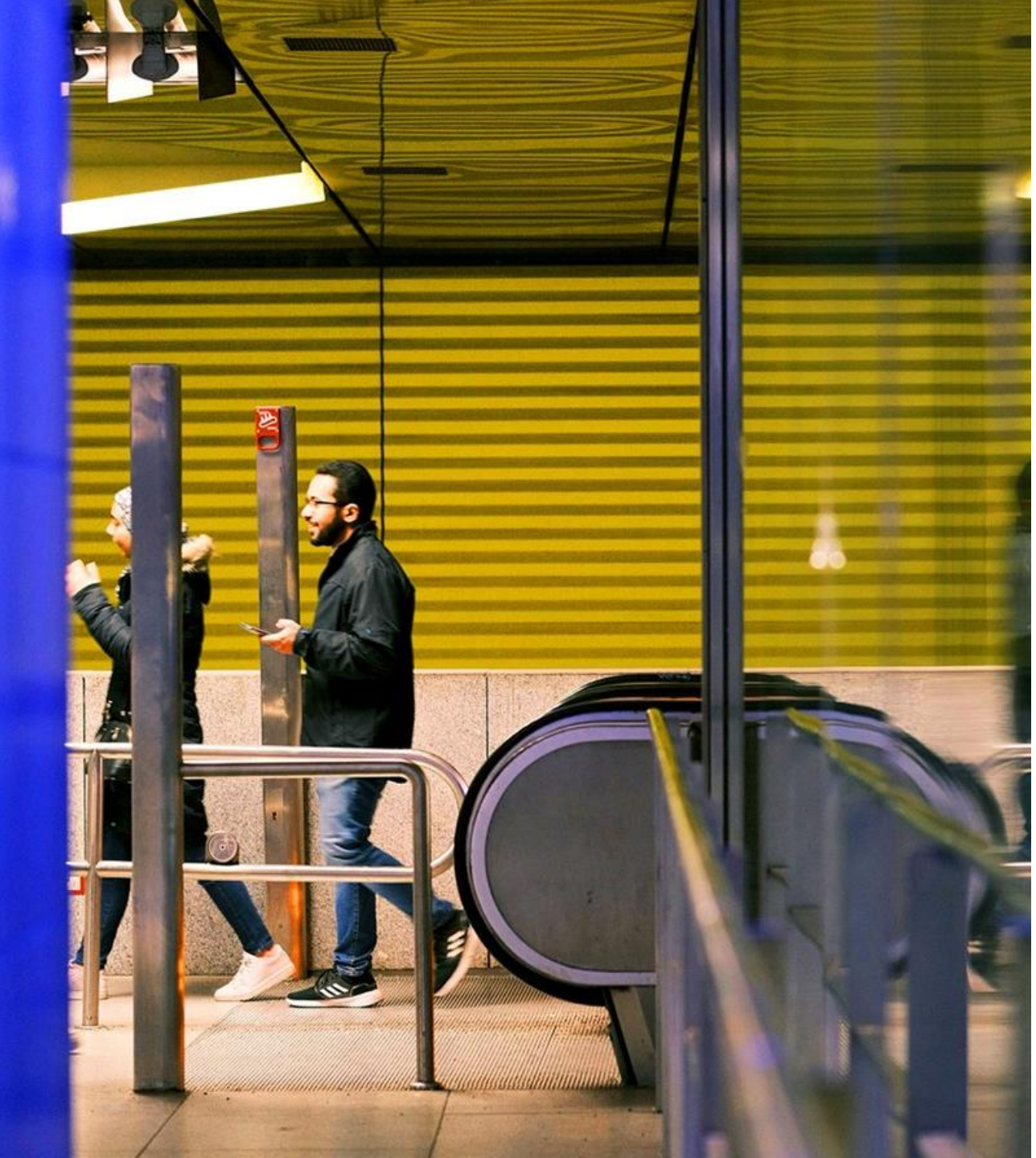
In collaboration with the Initiative for Safe Roads GmbH and the City of Hamburg, an innovative system for improving traffic safety was tested at a critical intersection in Hamburg's HafenCity (Am Sandtorkai / Großer Grasbrook).

Objective

The use of digital technology and optical signals prevents car and lorry turning accidents and significantly improves cyclist safety.

Partners involved

- Initiative for safe roads
- The City of Hamburg



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Solita

Intelligent Urban Ecosystem for Human centric city living

Description

Solita integrates live data on car parks in Heidelberg into its "Intelligent Urban Ecosystem" solution. The data comes from MobiDataBW, which is operated by the Ministry of Transport of Baden-Württemberg and brings together municipal data offerings.

Objective

The dashboard provides local authorities with a graphical solution to obtain a real-time overview of information on population density, traffic, air quality and parking facilities and to take the necessary measures.

Partners involved

- MobiDataBW
- Solita

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Esri

Connecting data for more road safety

Description

Esri is evolving the classic digital twin into a living digital twin by integrating dynamic sensor data. Dynamic data from car manufacturers enable continuous adaptation to the current traffic situation. The Living Digital Twin can be used in a wide range of applications, including traffic planning, police and rescue operations, and logistics and transport companies.

Objective

Optimised traffic control and resource planning

Partners involved

- OEM
- Esri

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Insurance company

Pay as you drive

Description

In this working group, OEMs and insurance companies are working on cases, where driving behaviour data from the vehicle will be provided to insurers for risk assessment in order to create personalised insurance policies.

Objective

Tailor-made and customer-friendly insurance products that will be based on actual driving behaviour.

Partners involved

- OEMs
- Insurance companies

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Telematics Service Providers (TSP)

Standardisation of fleet data

Description

Digital fleet management tools face the challenge that fleet data is provided in different forms depending on the vehicle brand. The working group of OEMs and TSPs is working to standardise the data points provided (e.g. charge level, location, vehicle condition), data formats and data quality.

Objective

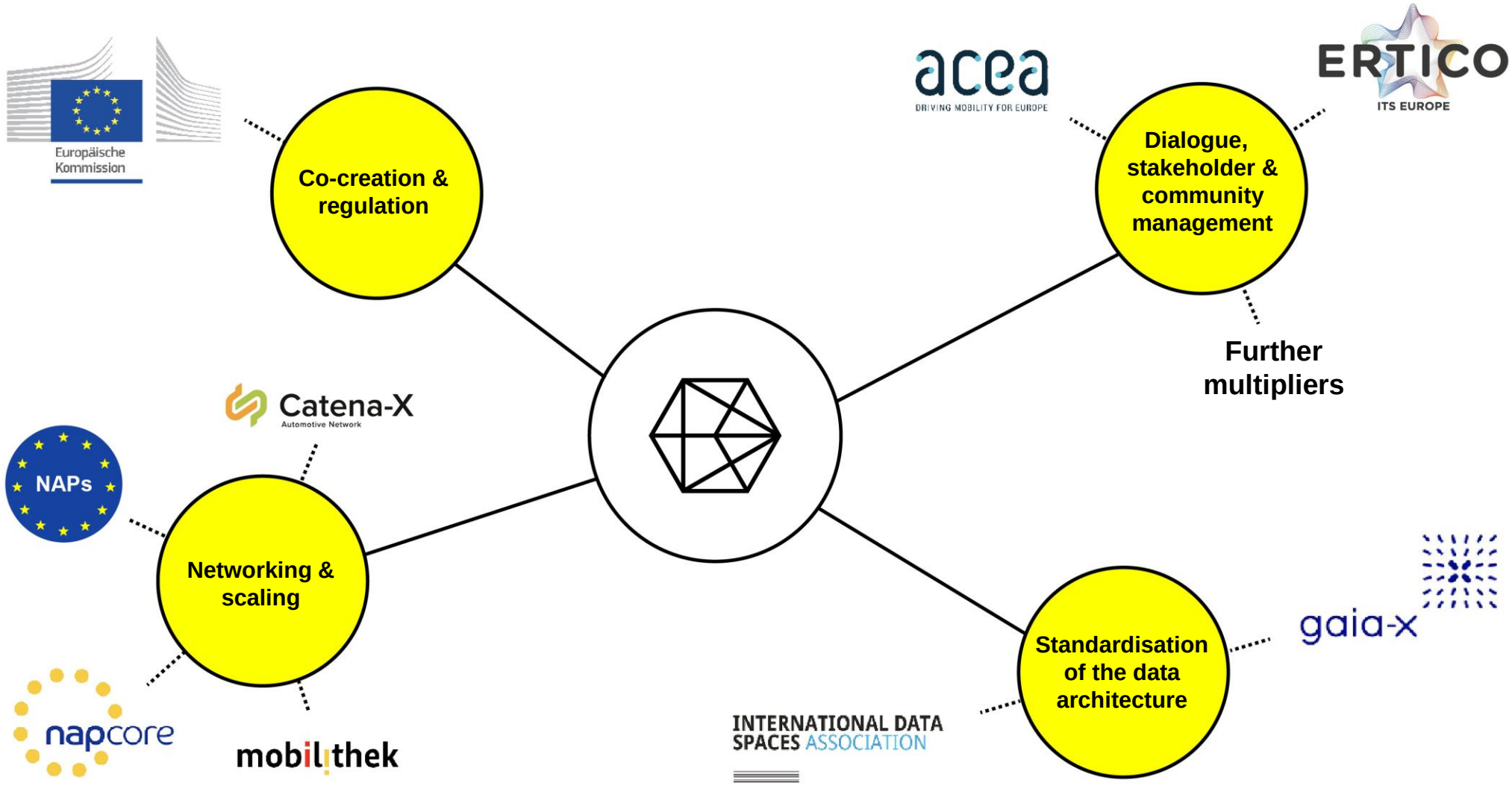
Standardisation will help reduce integration efforts and enable the development of new fleet solutions.

Partners involved

- OEMs
- Telematics Service Providers

09
Objectives

Europeanisation and networking



Ecosystems of data spaces

EU

GAIA X

IDSA

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