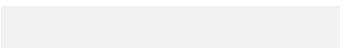




Rail Data Space x MDS

24.09.2024

Nicolás Ortiz (DLR)

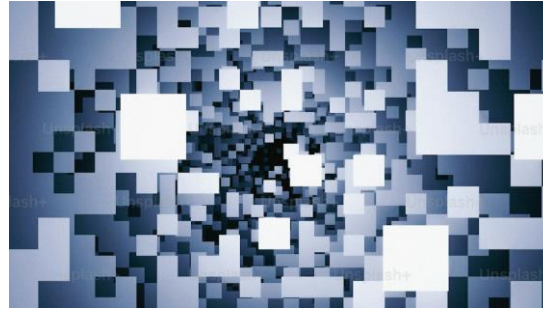


Digital challenges in the rail industry



Disruptions

- Disruptions in rail operations
- Disconnected from other transport modes
- Supply chain disruptions



Fragmentation of data

- Silos within and between companies
- Data storage and analysis based on individual use cases
- Lack of interoperability



Reluctance to share

- Security concerns
- Liability concerns
- Competitive concerns



Challenges lead to insufficient utilization of innovation potential

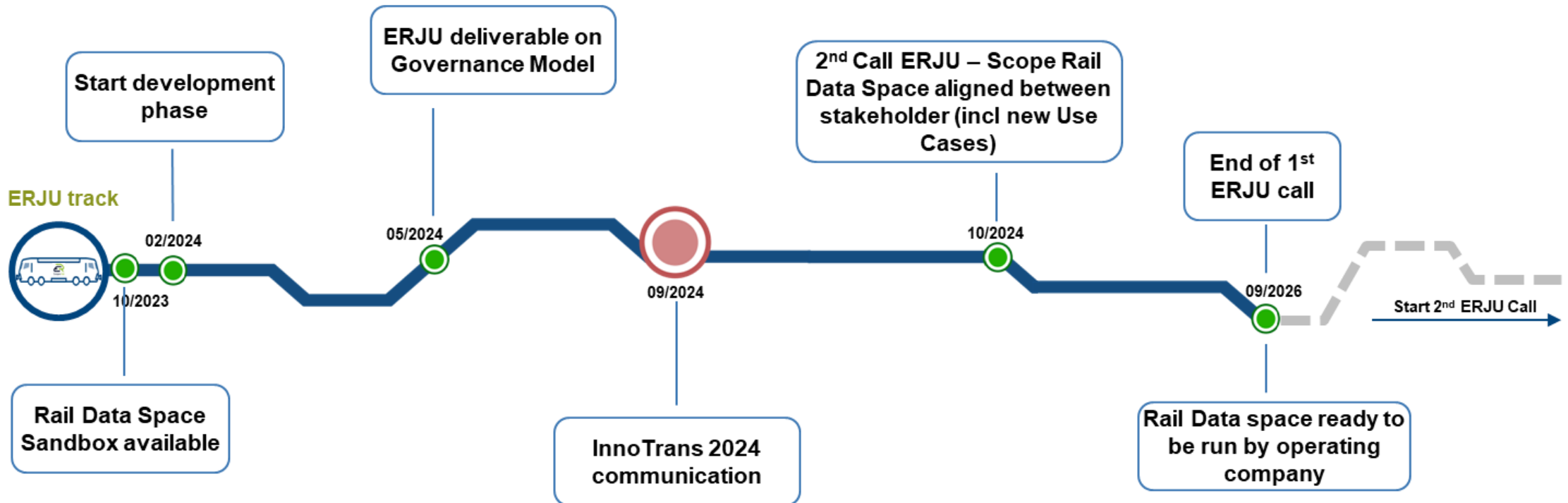
Rail Data Space: The new data ecosystem that enables companies to securely exchange crucial data along the complete rail value chain



Benefits

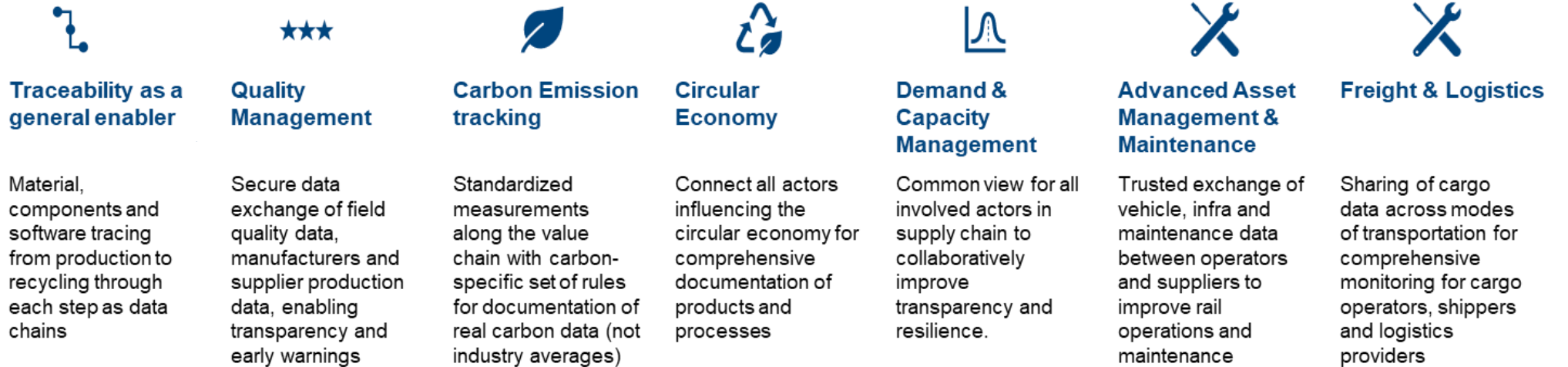
- **Compliant with EU legislation** including EU Data Act
- **Maintain data ownership** by defining who can access data and under what terms
- **Full transparency and verification** of data transactions
- **Most efficient way to share data** with multiple parties
- **Shared costs** of scalable data space infrastructure

Timeline

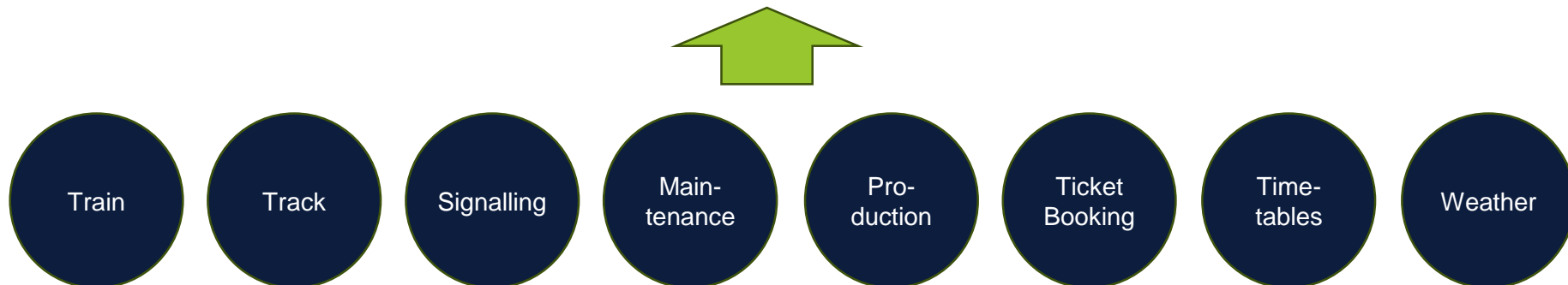


Use Cases in the Rail Data Space

Use Cases

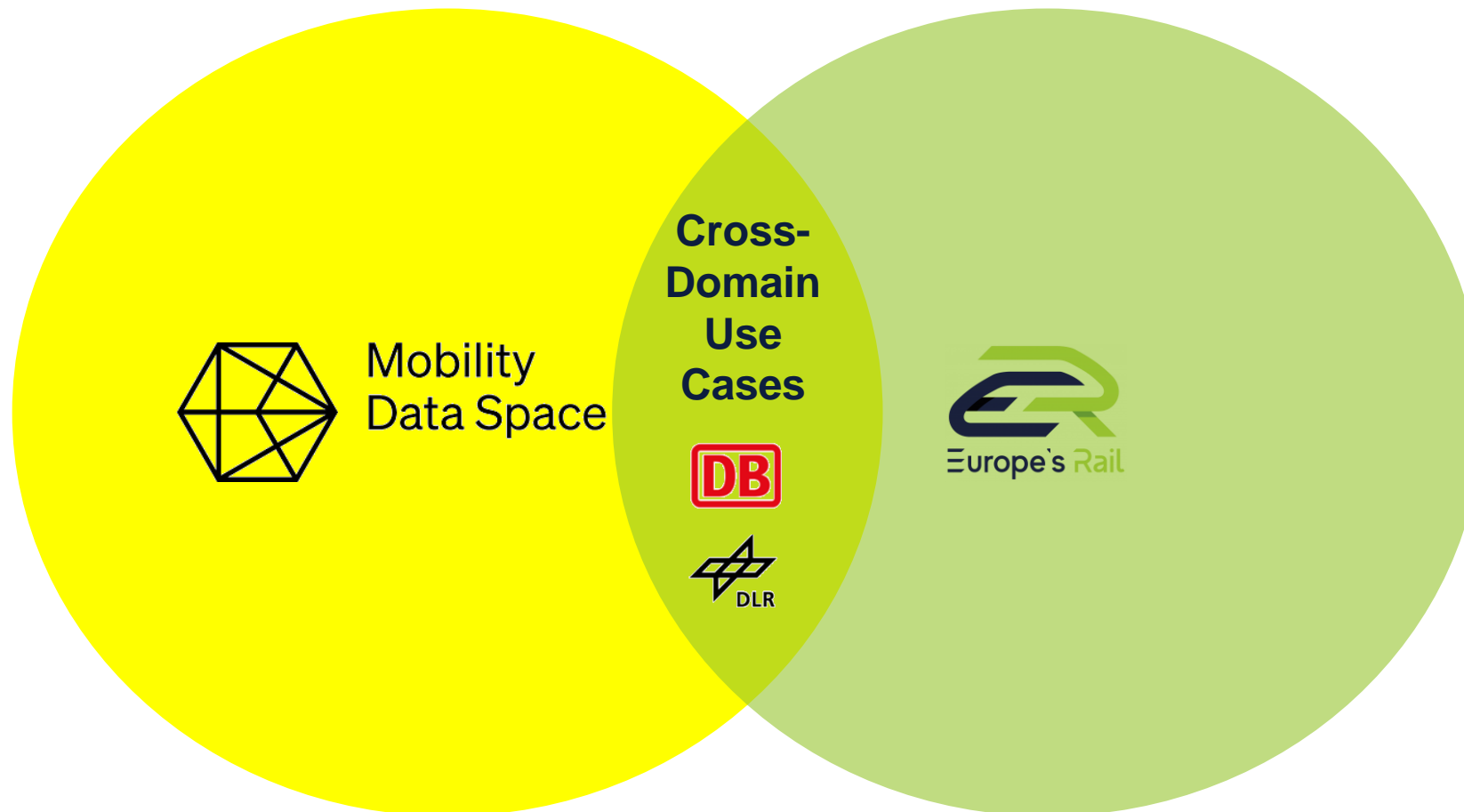


Data



Rail Data Space x MDS

Cross-Domain Use Cases



MDS as Cross-Domain Enabler Between Data Spaces

MDS for DLR Use Cases:



WHAT:

- **Exploit synergies** between both data spaces
 - Bring in and together new data providers and consumers from rail sector
 - Close gap between rail sector and travel chain-relevant data that is already available in MDS

WHY:

- **Use cases** with travel chain reference can only be strongly implemented with MDS (Smart City) & Mobilithek

HOW:

- **Knowledge exchange:** MDS is a productive environment vs. Rail Data Space as a sandbox environment
- **Members involved in both Data Spaces:**  
- **Productive use of MDS data offer:** (Smart) city data, traffic management, traffic situation data for road, public transport and rail for intermodal travel chains

Rail Data Space

The decentralized, open and secure European data ecosystem that drives Rail innovations



ALSTOM



DB



DLR



FERROVIE
DELLO STATO
ITALIANE



voestalpine
ONE STEP AHEAD.



Wabtec
CORPORATION



THALES
Together • Safer • Everywhere



KNORR-BREMSE



mermec
AN ANGEL COMPANY



Jernbane-
direktoratet



renfe



SNCF

The foundation of the Rail Data Space including the technological infrastructure and operating model is currently being developed with the aim of full operational status by 2026.

Join Us! This is the perfect time to engage with us if you're interested in learning more or join.

Contact meike.vanhoen@knorr-bremse.com & nicolas.ortizkammrath@dlr.de