

## Dataspace Solution

### Who will use it:

The solution targets public transport authorities, city planners, mobility service providers, and digital twin platforms across SPINE's Lead and Twinning Cities.

### What could be the impact?

By enabling seamless integration and sharing of mobility-related data, the SPINE Dataspace enhances data-driven decision-making for urban mobility systems. It supports simulations, KPIs monitoring, and cross-city knowledge transfer. This results in better public transport planning, increased modal shift towards PT, and improved integration with shared and active mobility, thus reducing congestion and emissions while enhancing user satisfaction and inclusivity.

### Development & testing in SPINE:

The SPINE Dataspace is currently implemented using an IDS architecture based on open-source IDS Connectors and custom build data applications, enabling integration with Living Labs' infrastructures. It is already used in pilot cities like Zilina and Bologna for data cataloging and data exchange.

### Can it be transferred?

Yes. Minimum requirements include IDS-compliant connectors, local data sources, and a modular backend capable of running containerised services (e.g., Docker/Kubernetes). A clear governance and onboarding process is also needed.

### What's next:


The focus is on completing full integration across all SPINE Living Labs. Post-project, the dataspace aims to serve as a scalable foundation for other EU cities to adopt smart, interoperable urban mobility solutions.


## About

The SPINE Dataspace is a decentralised data-sharing ecosystem aligned with International Data Spaces (IDS) standards, designed to integrate urban mobility data across cities, enabling real-time data exchange, simulation, and analysis to support public transport optimisation and sustainable mobility planning.

## Key Features

 Secure and sovereign data exchange through IDS-compliant connectors.

 Integration of real-time and historical data for simulation and impact assessment.

 Modular and scalable architecture facilitating data-driven urban mobility innovations.

