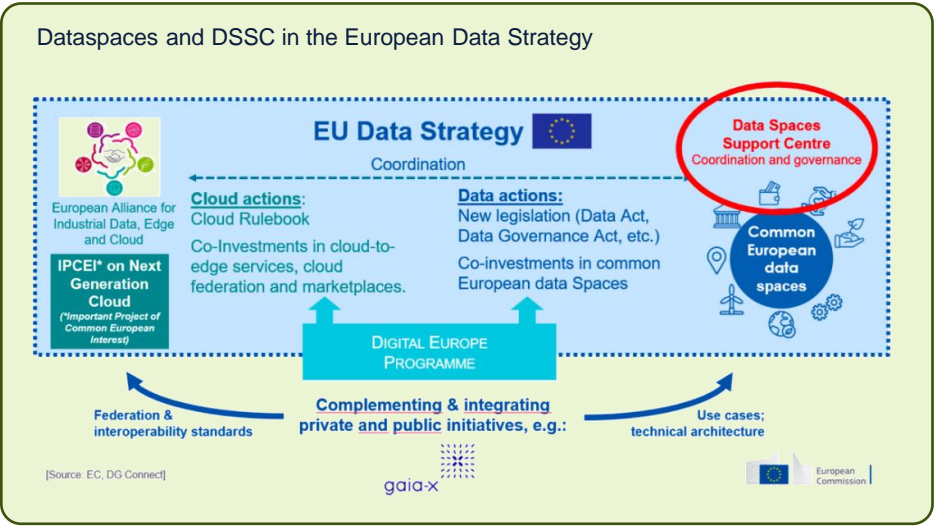
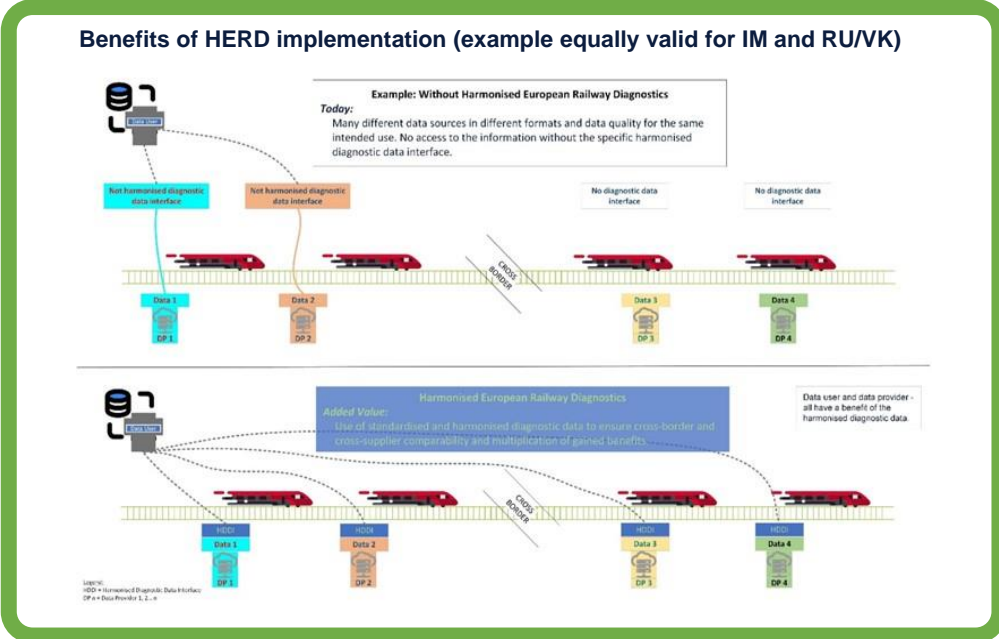


# Task 5: HERD



The Task 5 HERD domain is responsible to develop an architecture that implements the flexible combination of a mix of trackside sensor and onboard localization systems. Furthermore, it aims to generate operational, use case dependent concepts for harmonized diagnostic data of the railway assets – both rolling stock and track – and their interfaces beyond the current specifications, with much greater standardization than at present. **HERD will develop the UC specific operational models and requirements for the Harmonized Diagnostic Data Interfaces.**

The HERD team consists of representatives of the data user as well as of the data provider from supplier industry, infrastructure managers (IM), railway undertakings (RU), and vehicle keepers (VK). Strong alignment with the Innovation Pillar Flagship projects FP1, FP3 and FP5 as well as with the System Pillar Tasks 1, 2 and 4 is ensured by the team members.



The Task 5 HERD Team will focus on developing the following new functions and technical enablers for the “**Harmonised European Rail Operation**” migration plateau:

- **Specification of the architecture of the Harmonised Diagnostic Data Interface (HDDI).**
- All other interfaces of the System Pillar Target Architecture, which are perhaps agreed and published at this time, can be used for optional implementations**



## Lead STIP Deliverables

- *No STIP Deliverables defined in STIP v1 for HERD*

## Deliverables Request for Service (SC2.4)

**D01 Aligned UC 1 demonstrator specification for a Pilot implementation - Q2 2025**

**D02 Processing of new Use Cases – Q3 2025**

## Latest Achievements, Challenges and Design Decisions *(to be filled periodically by the domain)*

- **Latest Achievements:** The following achievements have been accomplished by the HERD-domain:
  - **Achievement #1:** Evaluated the requirements and parameters of the Harmonised Diagnostic Data Interface.
  - **Achievement #2:** Reviewed the team-expertise needed to complete the deliverables until August 2025.
  - **Achievement #3:** Designed the project plan until September 2025.
  - **Achievement #4:** Identified and decided the dissemination activities in the next 10 months.
- **Domain Current challenges:** The domain is facing the following challenges:
  - **Challenge #1:** Currently lack of expertise in data processing of the wheel-set diagnostic data.
    - *Mitigation action: SBB and OEGB are looking for experts who can support.*
  - **Challenge #2:** We are still looking for partner in IP to implement the HDDI-architecture for UC1 by end of 2025.
    - *Mitigation action: Promotion of HERD on the Mid-Term conferences of FA1 and FA3 as well as expanding the network in the industry..*

## Expected outcomes for sector review in the next 3 months

- **Completion of the synergies analysis with other SP-domains and IP**
- **Plan and action implementation based on the synergies**
- **Risk assessment and risk mitigation plan**
- **Evaluation of the next possible Use Cases**