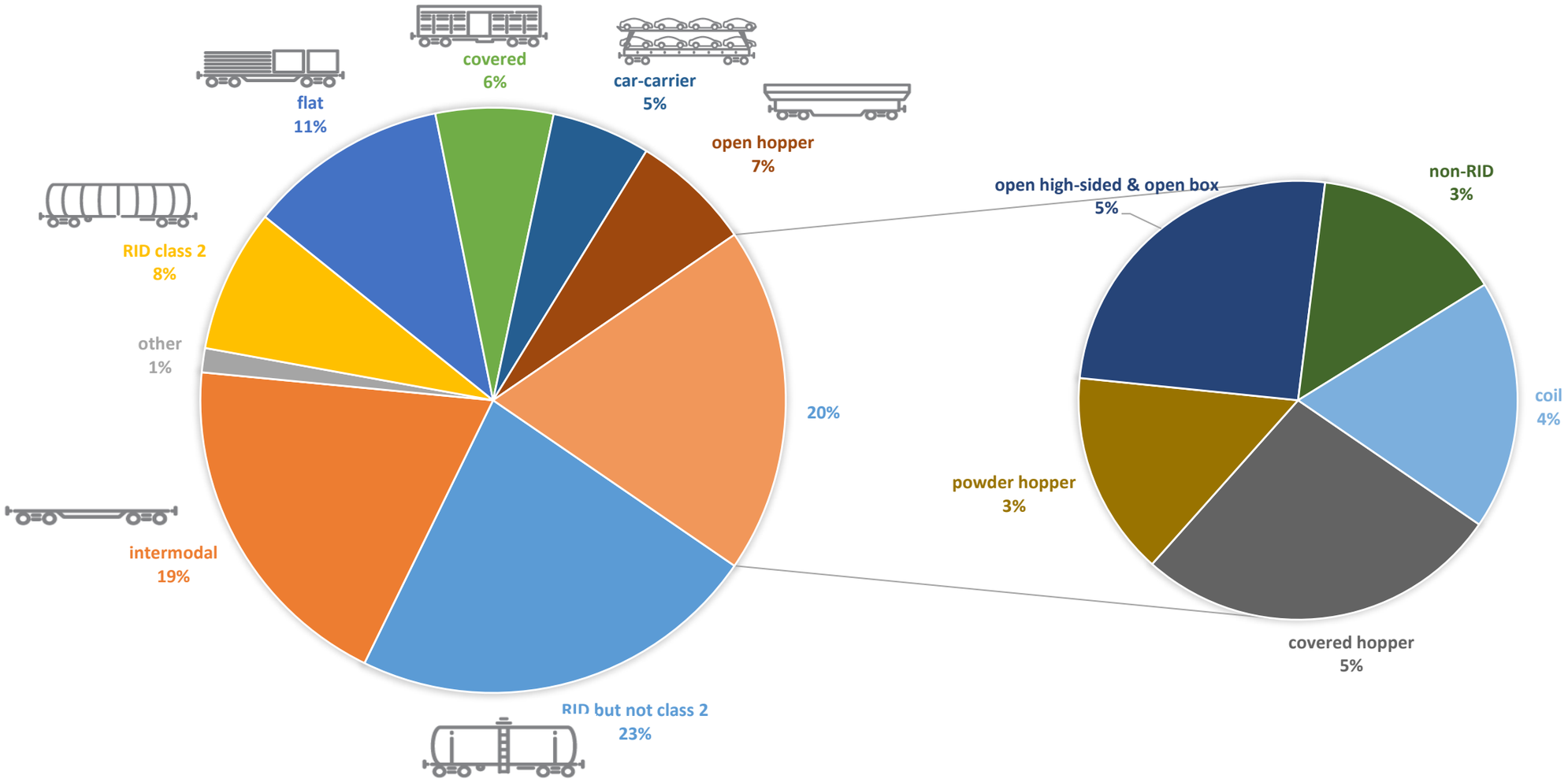
UIP – INTERNATIONAL UNION OF WAGON KEEPERS

WHAT DO WE REPRESENT ?

A fleet of 248’000 rail freight wagons: > **~50% of European fleet**



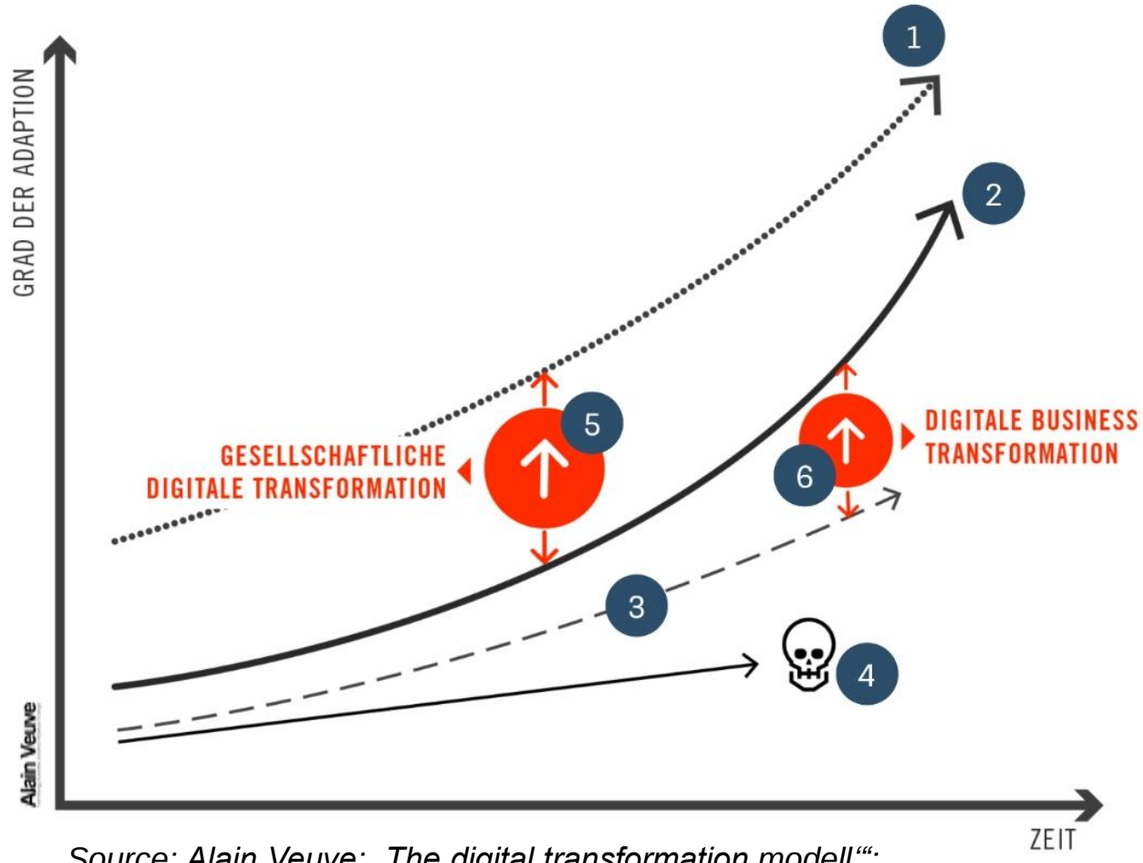
DIGITAL, AUTOMATED, CONNECTED AND CUSTOMER FOCUSED

OUR VISION FOR RAIL FREIGHT

- Green Deal needs more rail freight
- Rail freight need new realities to cope with shippers' expectations
- Digitalised, Automated, Connected Costumer focused Rail Freight System:
  - ✓ Connected to the ports and urban nodes
  - ✓ Flexible with help of modular systems
  - ✓ Digital processes to improve customers' experience
  - ✓ Digital infrastructure
  - ✓ Integrated in land planning to ensure capacity
- Fully Digital Freight Train Operations
- Seamless and multimodal operations

A REAL REVITALISATION OF THE RAIL FREIGHT MARKET…

A BETTER MODAL SPLIT FOR RAILWAYS NEED **NEW REALITIES: OUR FUTURE IS DIGITAL**



Source: Alain Veuve: „The digital transformation modell“;
URL: http://www.alainveuve.ch/digital-transformation-model/ [December 2016]

1. Technological evolution: always ahead
2. Acceptance of technology by the customers
3. Adaption curve of the average company
4. Adaption curve of a death-bound company
5. Digital transformation of the society
6. Digital business transformation

UIP

INTERNATIONAL UNION OF WAGON KEEPERS

ACHIEVING SEAMLESS, SAFE AND EFFICIENT CONNECTIVITY

CHALLENGES IN ACHIEVING A DIGITAL TRANSFORMATION

THE NEED FOR DIGITAL TRANSFORMATION IS NOT RECOGNIZED OR LACKS THE NECESSARY COMMITMENT.

DIGITAL SOLUTIONS ARE ONLY SOUGHT FOR INDIVIDUAL PROBLEMS INSTEAD OF WORKING ON AN OVERALL STRATEGY.

DIGITAL ACTIVITIES ARE NOT TARGETED OR EMBEDDED IN EXISTING CORPORATE STRATEGIES.

THERE IS LITTLE OR NO TRAINING.

AUTOMATION IS NEGLECTED. INSTEAD, TRADITIONAL WORKPLACE CONCEPTS ARE APPLIED.

THERE IS A LACK OF INNOVATION IN IT SOLUTIONS.

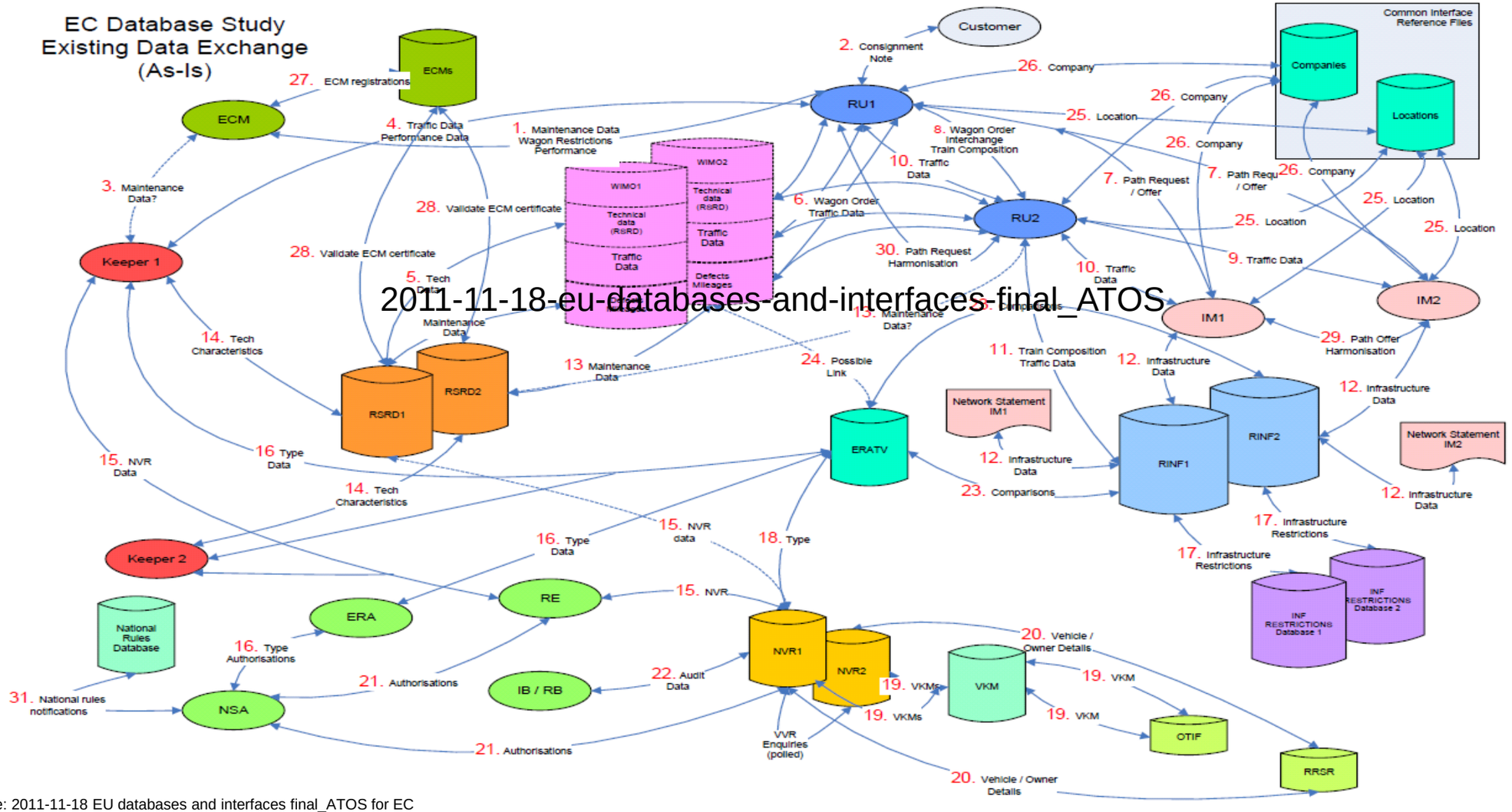
THE BUDGET FOR DIGITIZATION IS TOO SHORT-SIGHTED.

THE IT ORGANIZATIONAL STRUCTURE IS NOT FLEXIBLE ENOUGH.

THE DATA CENTER INFRASTRUCTURE IS OBSOLETE.

ACHIEVING SEAMLESS, SAFE AND EFFICIENT CONNECTIVITY

TAF/TAP TSI/REGISTERS/OPERATIONAL DATABASES: UNLEASH FULL POTENTIAL OF DATA?



Source: 2011-11-18 EU databases and interfaces final_ATOS for EC

ACHIEVING SEAMLESS, SAFE AND EFFICIENT CONNECTIVITY

MARKET DEMAND, TECHNOLOGY DEVELOPMENTS, LEGAL OBLIGATIONS

Mission Statement 2011

RSRD² will be the new online platform for wagon keepers to exchange data in multiple directions with sector partners in a most effective and safe way.

Via RSRD² the keeper can provide (a) technical design, (b) maintenance and (c) administrative vehicle data to various sources as well as collect mileage data from RUs to permit calculation of vehicle performance.

RSRD² is expected to be the single source of authentic, keeper certified up-to-date vehicle information.

RSRD² is one of the sector's most widely used data platform.

251.600
registered wagons from **99** keepers

140
wagon data elements

450
companies using the system

1.300
registered users

6.000.000
queries/month from **166** RUs

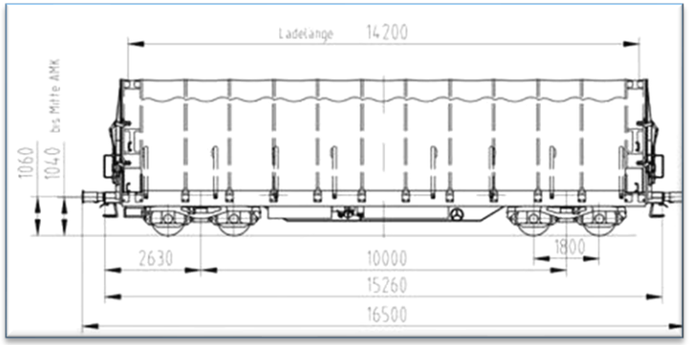
Content of RSRD²

1. Administration

Wagon identification, registration, authorisation and certification information, e.g.

- Wagon number(s)
- Owner, keeper, ECM, fleet manager information
- Safety certification information (ECM)
- Authorisation (TEN, RIV, GCU, EC verification)

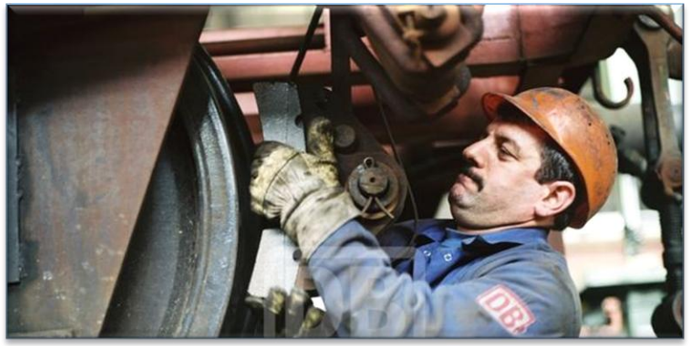
2. Technical Design



Wagon design and applicability information required for operation, e.g.

- Wagon type
- Manufacturer, year of build
- Type of components: brake, coupling, buffer
- Wagon gauge, weight, speed etc.

3. Maintenance



Inspection and overhaul cycle and due date information, e.g.

- Maintenance cycles (time period, km, tkm)
- Special examination (date and description)
- Overhaul information (date, tolerance, executer)

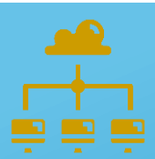
A lot of useful functions and benefits are provided by RSRD²

Data access
free of charge

Standardised data formats
and data quality

Available via interface,
web portal and data export

Individual and role based
data authorisations



Feeds other systems
(SWDB, GCU Broker)

Continuously adapted to sector
requirements (silent, telematics)

One upload,
all stakeholders served

Fulfils all TAF TSI
keeper requirements

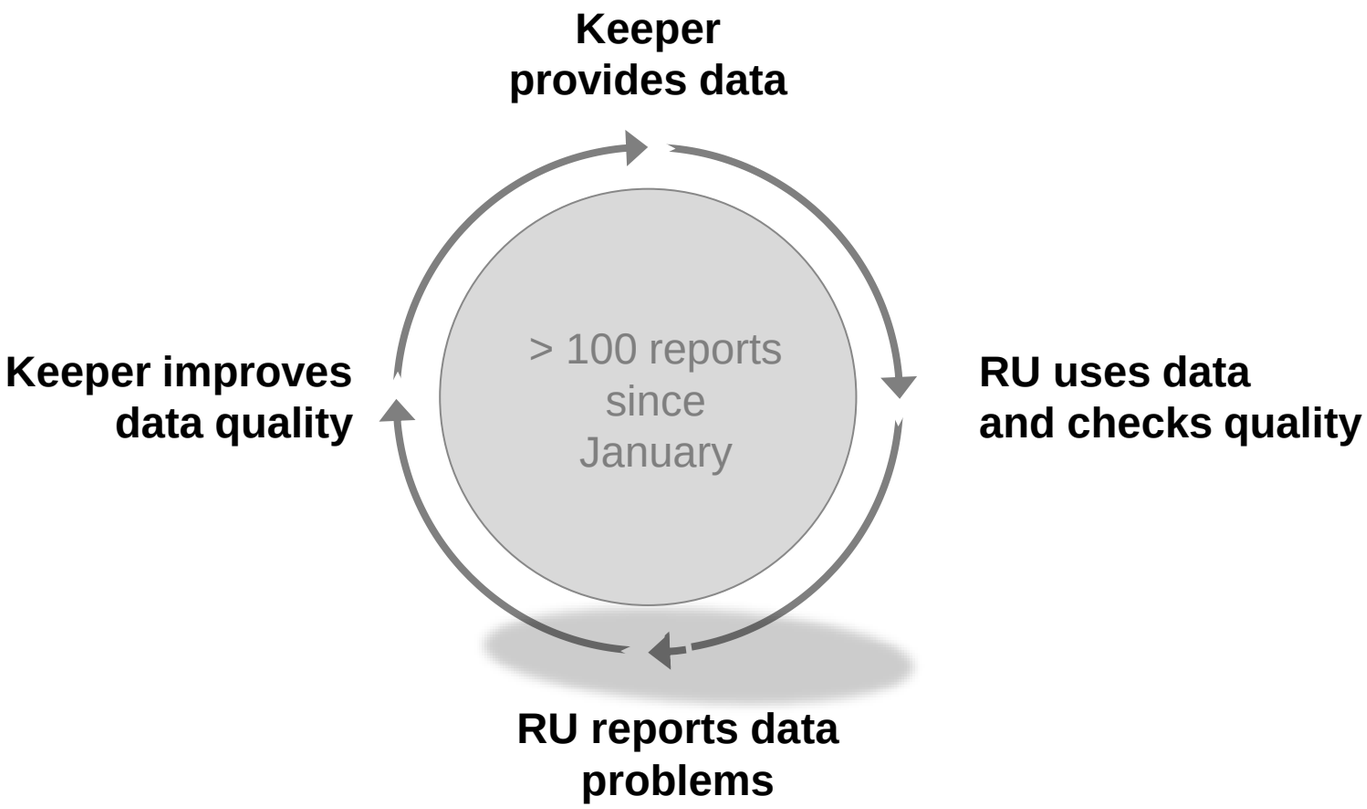
Documents, manuals,
datasheets available

The new ticketing system allows easy feedback on data issues

Reporting by RUs
(supported by RSRD²)

- Send Email
- Use XML via API
- Mark the element in web portal

Data quality process RSRD²
(ticketing system)



RSRD² IN THE EUROPEAN DATA FRAMEWORK

TODAY'S CHALLENGES

Data demand by ERA (based on RSRD² dataset)

- Administrative (registration country, date put into service, ERATV no, authorisation data, owner, keeper, ecm)
- Comprehensive technical data, excluding maintenance information
- Ideally **as data dump** from RSRD²

EUROPEAN UNION AGENCY FOR RAILWAYS

Data access request
RSRD2

Moving Europe towards a sustainable and safe railway system without frontiers.

Dear Sir/Madam,

The European Union Agency for Railways kindly requests access to selected vehicle data as available in RSRD². The reason for this request is twofold.

First, ERA is increasingly aware of data quality issues in the European Vehicle Register. Cross-checking RSRD² data against the EVR would help to determine the extent to which issues exist on selected items. This information is valuable in view of decisions towards improving the railway data landscape and the future revision of the EVR Decision (EU)2018/1614.

Second, as ERA is responsible for performing impact assessments for Recommendations regarding changes to the Technical Specifications for Interoperability, including TSI WAG, it is of importance that the assessments are based on high quality information. RSRD² data would allow the Agency to increase its understanding of the European wagon fleet, improve its assessments and thus better inform policymaking.

We therefore request reading rights for the elements as indicated in the attached Excel file. In addition, we request your agreement for drafting aggregate statistics that could be used in ERA Impact Assessments and analytical publications.

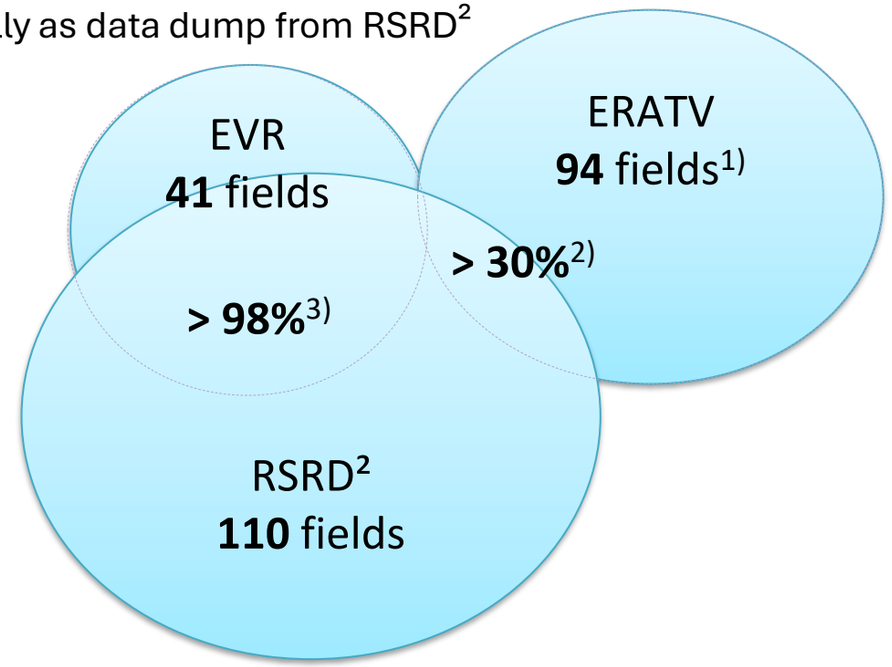
ERA and its staff are strictly bound to regulations and decisions ensuring that data is not used beyond the above stated intend. The requested data access is strictly limited to ERA and does not extend to any other European Institution. ERA shall moreover ensure that at no point information is published that would reveal confidential data of a single keeper.

Let us thank you in advance for your cooperation and do not hesitate to contact us in case of questions.

Kind regards,

Correlation of RSRD² Data Set with EVR and ERATV

- Administrative (registration country, date put into service, ERATV no, authorisation data, owner, keeper, ecm)
- Comprehensive technical data, excluding maintenance information
- Ideally as data dump from RSRD²



1 Only freight wagon related fields counted
2 ERATV provides wagon-type information, whereas RSRD² provides single-wagon information
3 Restrictions not recorded in same format; RSRD² provides wide range of tech data, e.g. curve radius, max speed, wagon gauge etc.)

ASPECTS OF DIGITAL TRANSFORMATION

DEFINING THE WAY FORWARD

COLLABORATE	In a fragmented industry, internal and external collaboration are key to ensure digital transformation fits into interoperability objectives
MAKE INFRASTRUCTURE & ASSETS DIGITAL	Define digital infrastructure and digital assets. Ensure compatibility of solutions to create conditions for new collaborations and business offers.
DEFINE NEW BUSINESS PROCESSES	Develop new but common processes, existing processes may not be digitized and automated but disappear.
CREATE INTELLIGENT SYSTEMS	Connection with the Internet makes objects intelligent (Internet of Things). Sharing data, information and knowledge to deliver benefits (Big Data and Data Mining)

THANK YOU FOR YOUR ATTENTION!

THE DIGITAL WORLD DEMANDS A ROBUST FRAMEWORK FOR DATA EXCHANGE, ENSURING BOTH INNOVATION AND COMPANY RIGHTS ARE PROTECTED.

DATA EXCHANGE REGULATIONS MUST BE DESIGNED WITH THE USER IN MIND, ENSURING THEY HAVE CONTROL OVER THEIR INFORMATION AND ITS USE.