6th ERA TAF TSI Regional Workshop
(EE, LT, LV, PL)

The Content of TAF TSI

EUROPEAN
UNION
AGENCY
FOR RAILWAYS

ERA Telematics Team

Warsaw 12-13. September 2017.

6th ERA TAF TSI Regional Workshop (EE, LT, LV, PL)

« to make the railway system work better for society »

Strategic Priorities

1 Regulatory framework harmonized for Safety

2 Simplified Vehicle Authorisation

3 Only 1 Train Control System in EU
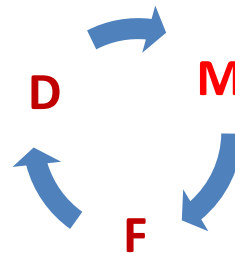
4 Simplified Access for Customers

ERA Actions

Development

Interoperability Rules*

Common Safety Methods

Databases and Registers

Monitoring / Review

Facilitate / Dissemination

D   M

F

* TSI

Clients / Stakeholders

EC + DG MOVE
Member States/ RISC
European Parliament

Railway Undertakings (RU)
Infrastructure Managers (IM)
Manufacturers

National Safety Authorities
National Investigation Bodies

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- New Legal Framework…..New Role!! -> System Authority!!

Article 23 - Telematics applications (*)

1. The Agency shall act as the system authority to ensure the coordinated development of telematics applications in the Union, in accordance with relevant TSIs. To that end, the Agency shall maintain, monitor and manage the corresponding subsystems requirements.

2. The Agency shall define, publish and apply the <u>procedure for managing requests for changes to specifications for telematics applications</u>. To that end, the Agency shall set up, maintain and update a register of requests for changes to such specifications and their status, accompanied by the relevant justifications.

3. The Agency shall develop and maintain the technical tools for managing the different versions of specifications for telematics applications and endeavour to ensure backward compatibility.

4. The Agency shall assist the Commission in the monitoring of deployment of specifications for telematics applications in accordance with relevant TSIs.

(*) **REGULATION (EU) 2016/796** OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of **11 May 2016** on the European Union Agency for Railways and repealing Regulation (EC) No 881/2004

COMMISSION REGULATION (EU) No 1305/2014 of 11 December 2014 on the technical specification for interoperability relating to the telematics applications for freight subsystem of the rail system in the European Union and repealing the Regulation (EC) No 62/2006

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EUROPEAN UNION AGENCY FOR RAILWAYS

⬤ = agenda item

TAF TSI

5   **6**

Railway Undertaking - Infrastructure Manager communication

8 & 9

Undertaking:

- Path Request
- Train Preparation
- Train Running Forecast
- Service Disruption Information
- Train Location
- Interchange Reporting
- Data Exchange for Quality Improvement

Infrastr. Manager:

Path Request
- Train Preparation
- Train Running Forecast
- Service Disruption Information
- Train Location
- Interchange Reporting
- Data Exchange for Quality Improvement

Railway Undertaking function

5 & 7

as "Railway Undertaking - Infrastructure Manager communication"

+

- Consignment Note data
- Shipment Estimated Time of Interchange / Arrival
- Wagon Movement

Wagon keeper function

13 & 14

Rolling Stock Reference Databases

11 & 12

Imple-men-tation   Repor-ting

Common TAF TSI elements

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TAF TSI process

Planning… Operation… After…

Consignment Note	Wagon trip plan	Path Allocation	Train Preparation	Train Running Forecast	Wagon Movement	Post-Trip
- Wagon loads - Wagon release	- Price and transit times - Wagon status and location	- Open Access - One Stop Shop	- Train Composition	- Train Running - Service Disruption	- Estimated Time of Arrival (ETA) - Estimated Time for Interchange (ETI)	- To improve the quality and productivity

TAF TSI published on EU Journal: COMMISSION REGULATION (EU) No 1305/2014

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- Chapter 1.3 of TAF TSI: … In this respect the term **users means not only infrastructure managers or railway undertakings** but also all other **service providers such as wagon companies, intermodal operators and even customers**…
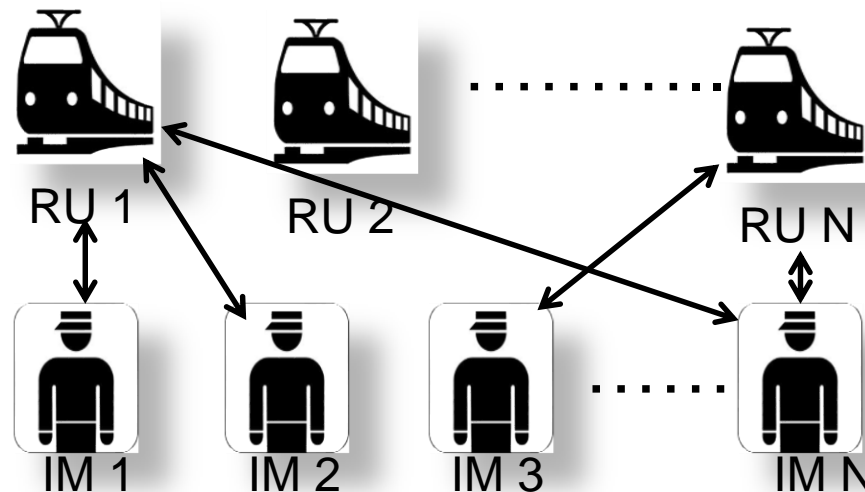
- Alleviate non-physical barriers allowing the adoption and Implementation of **inter-operable IT systems in Trade & Transport** (REBIS report).

- **Simplified Custom Procedures** with EU partners.

- Adoption of inter-connected IT systems in transit operations.
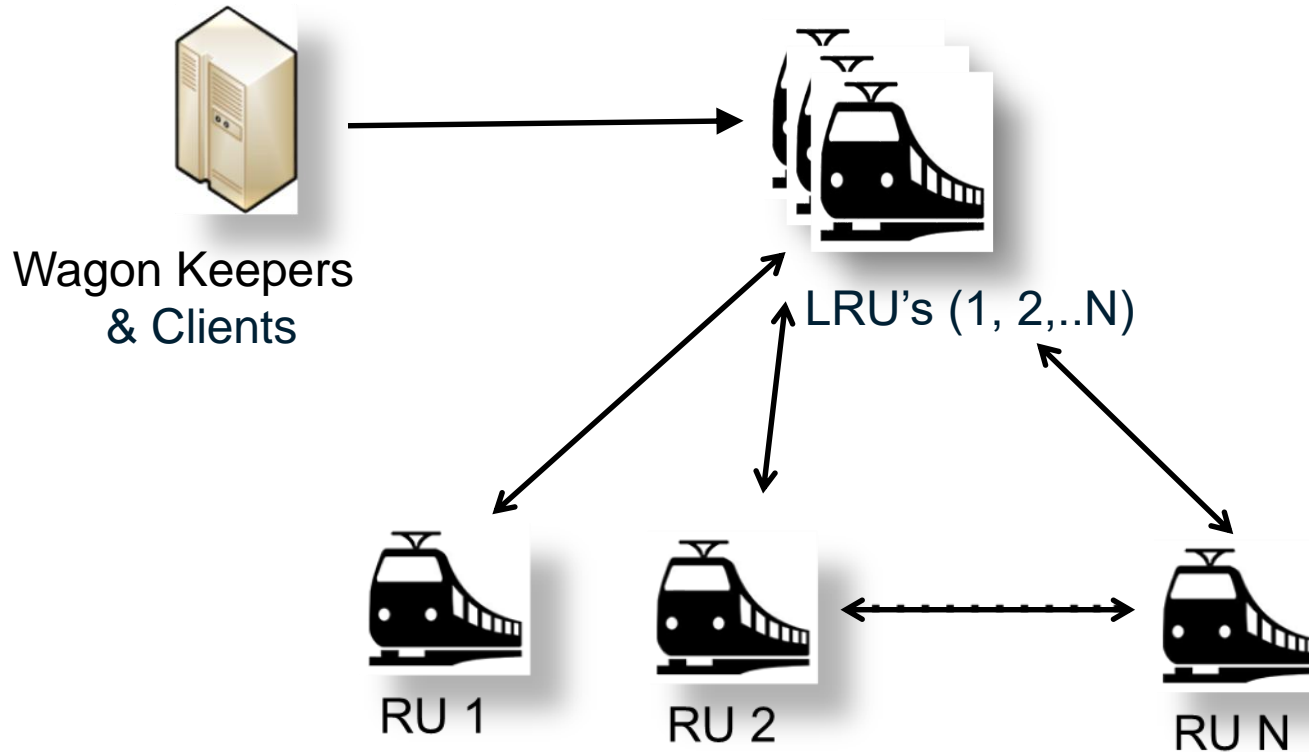
- **Development – EU Rail Freight Corridors.**

- **Exchange of data (process & protocol) between Railway Undertaking (RU) and Infrastructure Manager (IM) :**

✓ Path Request

✓ Train Preparation

✓ Train Running Forecast

✓ Service Disruption Information

✓ Data exchange for

   Quality Improvement
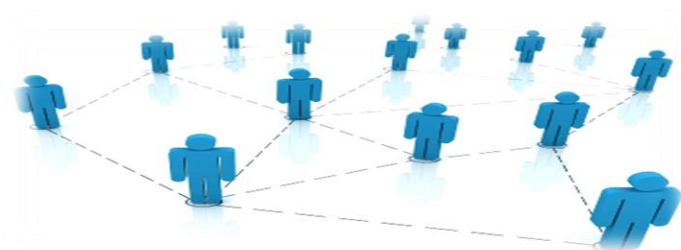
RU 1   RU 2   RU N

IM 1   IM 2   IM 3   IM N

TAF TSI – Exchange of Data RU – RU (Railway Undertaking)

- Consignment Note Data, Shipment ETI/ETA, Wagon Movement and Interchange Reporting

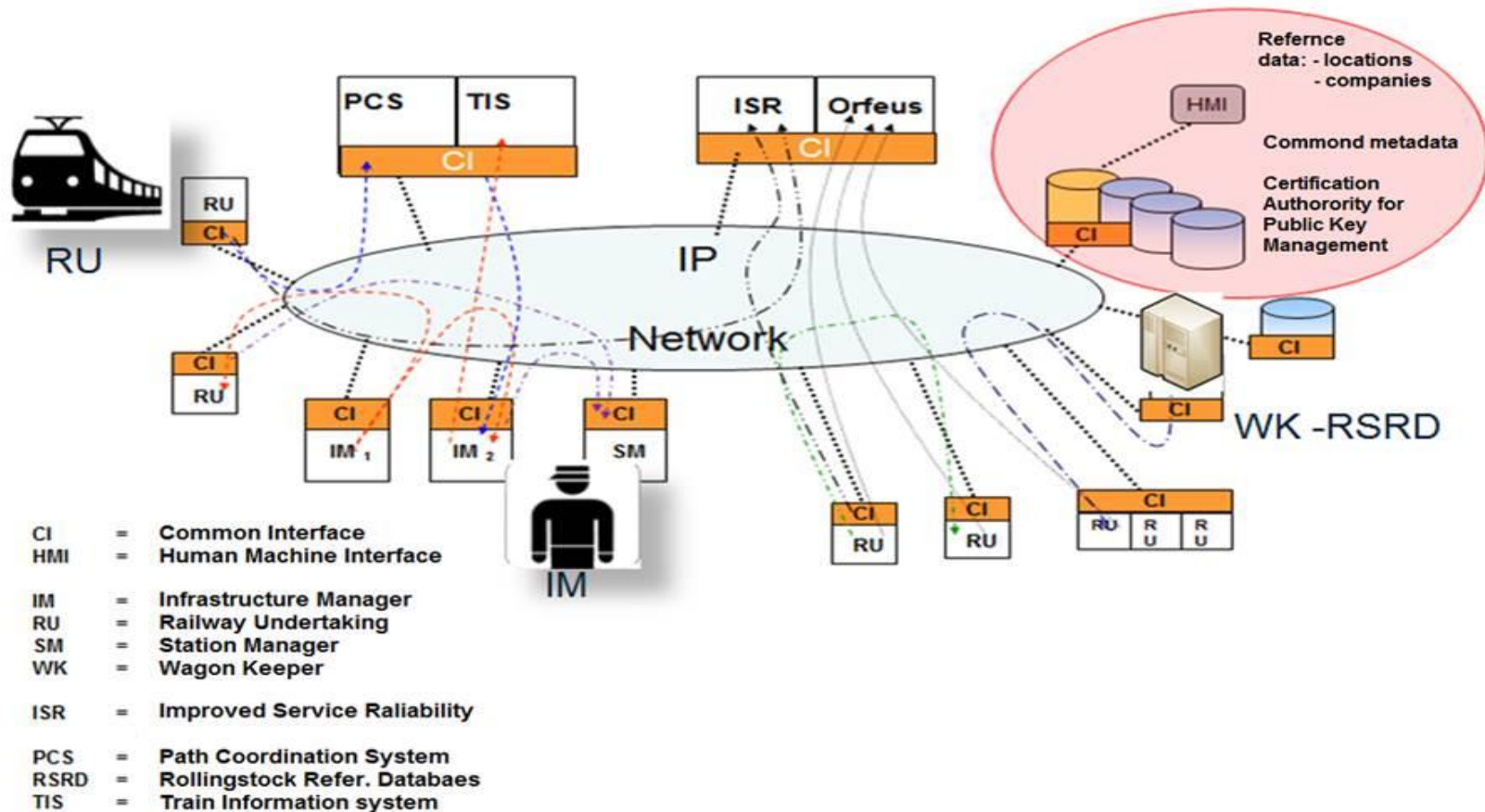Wagon Keepers & Clients

LRU's (1, 2,..N)

RU 1

RU 2

RU N

Databases to be deployed by **RU, IM, Wagon Keepers or Customers:**

- **Rolling Stock Reference Databases (RSRD).**

- **Wagon and Intermodal Operational Unit Database (WIMO)**.

- **Wagon Trip Plan Databases.**

- **Reference Files:**
  - **Centrally stored and administrated:** (Coding for all IMs, RUs, Service provider companies; Coding for Freight Transport Customers; Coding of Locations (Primary and subsidiary),
  - **Locally stored and administrated:** Reference File of the emergency services, correlated to type of hazardous goods.

- Communication « Peer to peer » IP network - Central Repository and an individual Common Interface (CI)

I liide

Tehniliste dokumentide loetelu

Nr	Viide	Pealkiri	Versioon	Kuupäev
1	ERA-TD-100	TAF KTK — LISA A.5: TAF KTK TEADETE ARVNÄITAJAD JA JÄRJESTUSE JOONISED	2.0	17.10.2013
2	ERA-TD-101	TAF KTK — lisa D.2: liide A (vagunite/ILU reisi planeerimine)	2.0	17.10.2013
3	ERA-TD-102	TAF KTK — lisa D.2: liide B — vaguni ja ühend-veoüksuse käitamise andmebaas (WIMO)	2.0	17.10.2013
4	ERA-TD-103	TAF KTK — lisa D.2: liide C — viitefailid	2.0	17.10.2013
5	ERA-TD-104	TAF KTK — lisa D.2: liide E — ühine liides	2.0	17.10.2013
6	ERA-TD-105	TAF KTK — lisa D.2: liide F — TAF KTK andmete ja teadete mudel	2.0	17.10.2013

Expected benefits for Railway Companies:

- 1 single communication system for all business cases an operator can find -> **Economies of Scale**.
- Improved communication between RU and IM (in terms of quality and speed) -> **Process Coordination**.
- 1 single standardized way of working, providing cost savings through better management quality system; establishment of homogeneous procedures; **Reduction in system maintenance costs**.
- **Standardized and Interoperable** communication interfaces.
- Participants can join a **strong and committed TAF Users' Community**.

Regarding the value chain passengers / freight customers:

- Access to more transparent railway products -> **more efficient**.
- Monitoring becomes more transparent -> **no "black box".**
- **Quicker and better information delivery** to freight customers and business partners.

- TAF TSI Regulation EU 1305/2014: http://www.era.europa.eu/Document-Register/Pages/TAF-TSI.aspx

- TAF TSI Technical Documents: http://www.era.europa.eu/Document-Register/Pages/Technical-Documents.aspx

- TAF/TAP Reference Files (Company Codes and Primary Location Codes): http://teleref.era.europa.eu/

- TAP TSI GIS Interactive Implementation Maps: http://www.era.europa.eu/tools/TAFTSI/Pages/Home.aspx

- TAF TSI Master Plan: http://www.era.europa.eu/Document-Register/Documents/TAF-TSI-Master-Plan.pdf

Thank you very much for your kind attention!

Your ERA TELEMATICS TEAM

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Making the railway system work better for society.

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