7th ERA TAF TSI Regional Workshop
(Romania, Bulgaria, Greece)

The Content of TAF TSI:
RU/IM Communication and Legal Obligations

EUROPEAN UNION AGENCY FOR RAILWAYS

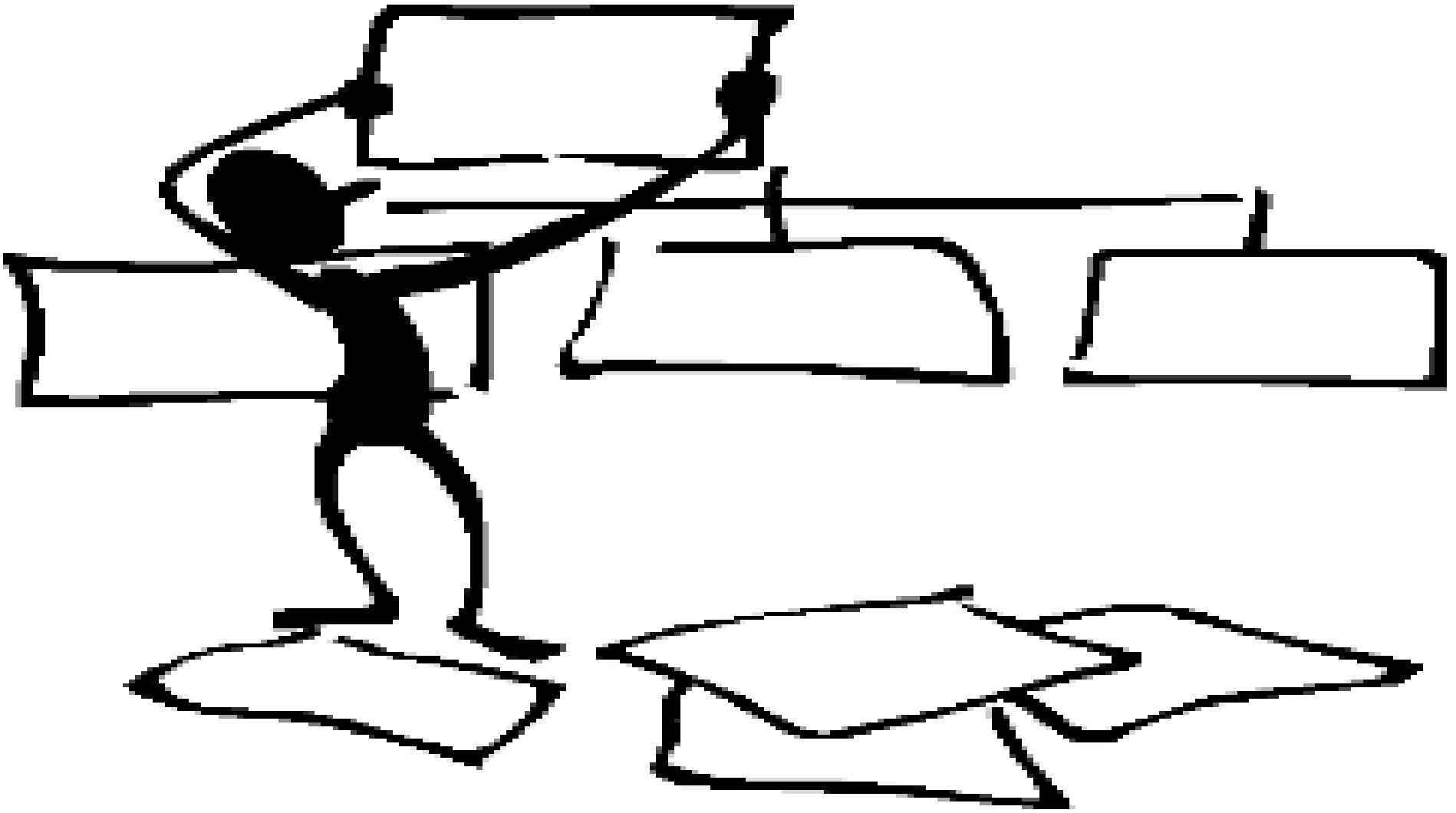
ERA Telematics Team

Bucharest, 7-8 March 2018

1 - Project Initiation

- **Project Requirements**
  - To make it easy and understable for all companies in particular small and medium size.
- **Business Case**
  - Small Company business case
  - Medium size Company business case
  - Incumbent / large size Company business case
- **Project Charter**: TAF TSI Master Plan
- **Project Initiation Checklist**
  - Do I have a company code?
  - All the reporting points I need are defined in the Primary Location Codes file?
  - Do I know how to create TAF TSI compliant messsages?

2 - Project Planning

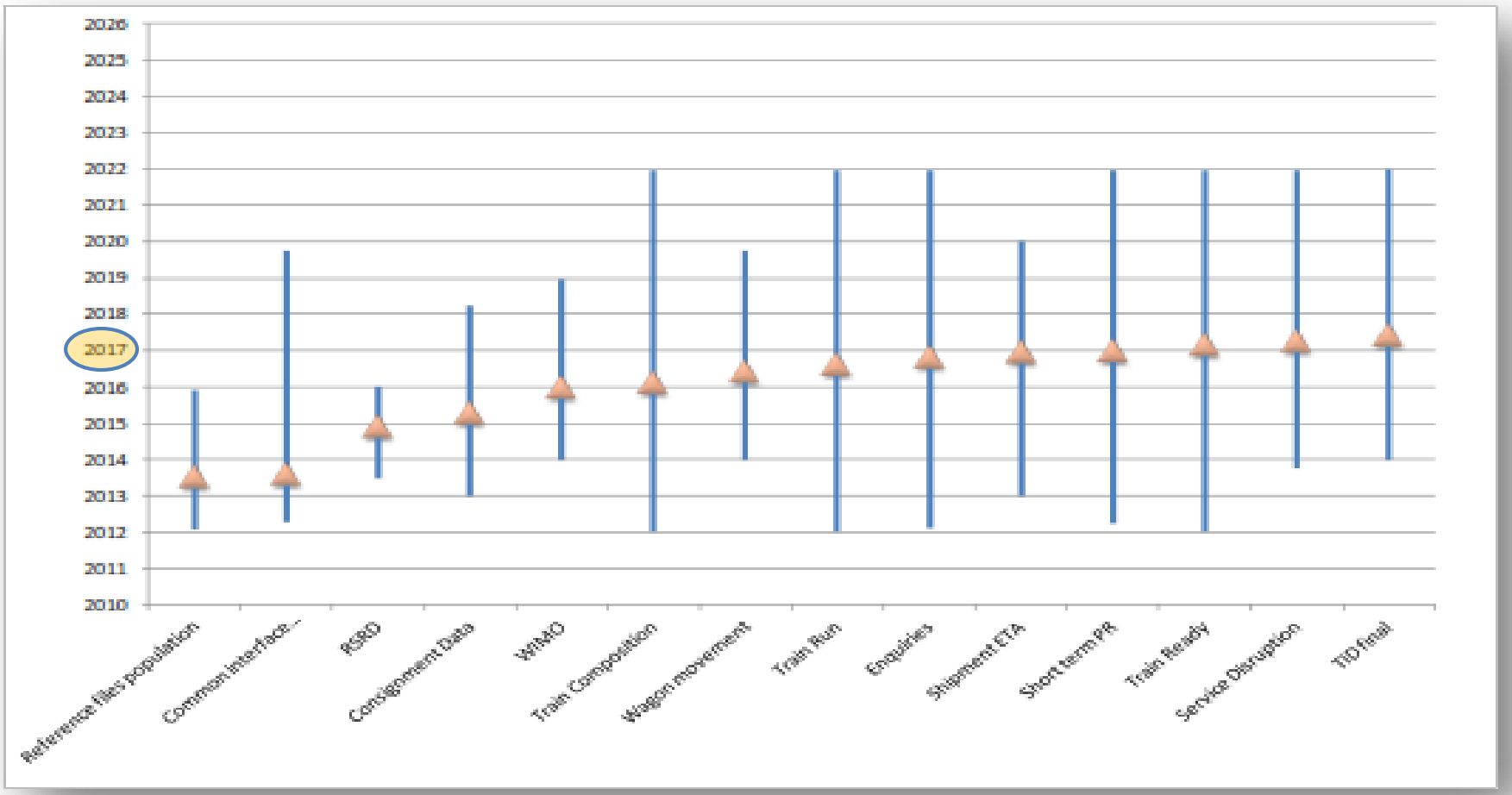


Project Scope & Business Objectives

- To implement TAF TSI :
  - TAF TSI Legal Framework: http://www.era.europa.eu/Document-Register/Pages/TAF-TSI.aspx
  - TAF TSI Master Plan: http://www.era.europa.eu/Document-Register/Documents/TAF-TSI-Master-Plan.pdf

Project Scope & Business Objectives

- TAF TSI Master Plan:



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Work Breakdown Structure

The target dates for every function in this Master Plan are based on the year in which 80% of the respondents have realized a function.
Whether significant differences in implementation dates between the IM and RU responses, a median target date was chosen where partial implementation of a function could be achieved using existing applications.

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Work Breakdown Structure

For those companies not delivered Individual Master Plan -> To stick to the **Target Implementation Milestone.**

Realisation of the Reference File Function – Chapter 4.2.11

- To get a Company Code:
  - Download from UIC website a form application.
  - Submit application to UIC.
  - UIC code validation.
  - Code transferred to RNE.
  - RNE as Central Administration Service will publish the code.
- ERA is notified and Company Codes File for TAF TSI updated (publication on ERA website)
- Target Implementation Milestone 2013

Realisation of the Reference File Function - Chapter 4.2.11

- To define Primary Location Codes:
  - To contact National Entity in charge in every country
  - National Entity will store a new Location Code in Reference Files hosted by RNE
- Location Code will follow TAF TSI rules: ISO Country Code + 5 numeric Code
- Target Implementation Milestone 2013 Impact IM and RU

Realisation of the Common Interface Function - Chapter 4.2.11

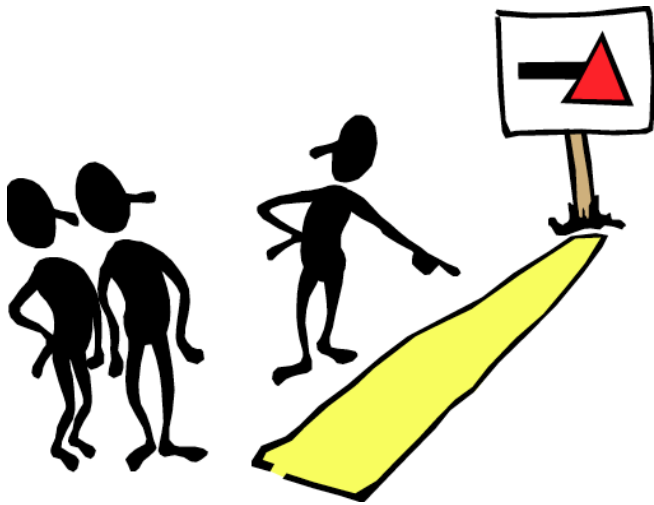
- Steps:

1. To evaluate the need of implementing the Common Interface
    - Is it needed for RU/IM communication?
    - Is it needed for RU functions?
    - Reference Implementation: CI (RNE-CCS)

2. Can I deliver TAF compliant messages?
3. Target Implementation Milestone 2013

Realisation of the Unique Train Identifiers

- There is already handbook drafted by the sector to implement this function.
- Latest function to be implemented.
- Target Implementation Milestone 2021



Realisation of the Path Request Function – 4.2.2

- It comprises following messages:
  - Path Request (RU -> IM)
  - Path Details (IM -> RU)
  - Path Confirmed (RU -> IM)
  - Path Details Refused (RU -> IM)
  - Path Cancelled from (RU -> IM)

- **To check the process in place in the company**
- **To assess the existence of an IT tool supporting this process.**
  - Functionality implemented -> Conversion into TAF compliant messages using CI.
  - Functionality not implemented-> IT tools in the market providing some service / functionality : **PCS - RNE. Others: HEROS H20 – H ITRAIL.**
- **Target Implementation Milestone 2017**

Realisation of the Train Preparation Function - Chapter 4.2.3

- **To deliver the Train Composition of a train RU needs:**
  - the infrastructure restriction notices
  - the technical wagon data (Rolling Stock Reference Database - RSRD)
  - The dangerous goods reference file
  - the updated information status of the wagons (Wagon and Intermodal Unit Operational Database – WIMO)

- **Reflection: Is it your company ready to collect this data?**
  - **The processes are in place?**
  - To assess the existence of an IT tool supporting this process: Functionality implemented -> Conversion into TAF compliant messages using CI.
  - Functionality not implemented-> IT tools in the market providing some service / functionality : **ISR - RAILDATA, TIS - RNE, RSRD2, HEROS - HITRAIL.**

- **Target Implementation Milestone 2018**

Realisation of the Train Running Function

- **This functionality comprises 2 functions:**
  - Train Running – Chapter 4.2.4
    - **Target Implementation Milestone – Train Running: 2017**
    - Train Running Information Message
    - Delay Cause Message
  - Service Disruption – Chapter 4.2.5
    - **Target Implementation Milestone – Service Disruption 2018**
    - Train Running Interrupted message

- **To check the process in place in the company**

- **To assess the existence of an IT tool supporting this process.**
  - Functionality implemented -> Conversion into TAF compliant messages using CI.
  - Functionality not implemented-> IT tools in the market providing some service / functionality : **TIS - RNE. Others: HITRAIL**

Realisation of the Consignment Data Function - Chapter 4.2.1

- **This function implies the following processes:**
  - Wagon order creation:
    - Create preliminary trip plan
    - Create wagon orders
    - Create final trip plan
    - Create internal wagon order

- **To check the process in place in the company**

- **To assess the existence of an IT tool supporting this process.**
  - Functionality implemented -> Conversion into TAF compliant messages using CI.
  - Functionality not implemented-> There are tools in the market as TIS providing such service / functionality: **ORFEUS by RAILDATA. Others: HEROS-HITRAIL in cooperation with RAILDATA.**

- **Target Implementation Milestone 2017**

Realisation of the WIMO Function – Chapter 4.2.12.2

- **This function implies the following processes:**
  - Each Railway Undertaking must be able to **SEND**, **RECEIVE** and **STORE** the appropriate information using the TAF-TSI defined messaging and processes. The following messages must be exchanged:
    - 4.2.8.6 WagonException
    - 4.2.9.5 WagonRefusedAt Interchange
    - 4.2.8.8 WagonArrivalNotice
    - 4.2.8.9 WagonDeliveryNotice

- **To check the process in place in the company**

- **To assess the existence of an IT tool supporting this process.**
  - Functionality implemented -> Conversion into TAF compliant messages using CI.
  - Functionality not implemented-> There are tools in the market as TIS providing such service / functionality: **ISR by RAILDATA. Others: HEROS-HITRAIL in cooperation with RAILDATA.**

- **Target Implementation Milestone 2016**

Realisation of the Wagon Movement Function – Chapter 4.2.7

- **This function implies the following processes:**
  - For the reporting of the movement of a wagon, the following data must be stored, sent and received by the WIMO.
    - 4.2.8.2 WagonReleaseNotice
    - 4.2.8.3 WagonDepartureNotice
    - 4.2.9.2 WagonInterchangeNotice
    - 4.2.8.4 WagonYardArrivalWagonInterchangeSubNotice
    - 4.2.8.5 WagonYardDepartureWagonReceived_AtInterchange
    - 4.2.12.2 Wagon and Intermodal Unit Operational Database
    - 4.2.8.6 WagonException
    - 4.2.9.5 WagonRefusedAtInterchange
    - 4.2.8.8 WagonArrivalNotice
    - 4.2.8.9 WagonDeliveryNotice

- **To check the process in place in the company**
- **To assess the existence of an IT tool supporting this process.**
  - Functionality implemented -> Conversion into TAF compliant messages using CI.
  - Functionality not implemented-> There are tools in the market as TIS providing such service / functionality : **ISR by RAILDATA. Others: HEROS-HITRAIL in cooperation with RAILDATA.**
- **Target Implementation Milestone 2016**

Realisation of the Shipment ETA Function – Chapter 4.2.6

- **ETA for the shipment is the most important information for a customer.** The ETA for the Wagon must be sent by RU to the LRU. The ETA must be electronically stored along with wagon movement. For each wagon the Lead RU must establish/update a wagon trip plan:
  - 4.2.12.2 Trip plan for wagon / Intermodal unit
  - 4.2.12.2 Wagon Trip Plan Databases
  - 4.2.8.7 WagonException ReasonETI_ETA_Reuest
  - 4.2.7.3 WagonETA/ETI Message

- **To check the process in place in the company**
- **To assess the existence of an IT tool supporting this process.**
  - Functionality implemented -> Conversion into TAF compliant messages using CI.
  - Functionality not implemented-> There are tools in the market as TIS providing such service / functionality: **ISR by RAILDATA , TIS by RNE and HITRAIL with X-Rail.**
- **Target Implementation Milestone 2018**

Realisation of the Rolling Stock Reference Database – Chapter 4.2.10.2

- **Unique legal requirement for WKs. the individual Rolling Stock Reference Databases is described in detail and must contain all items for**:
  - identification of rolling stock,
  - assessment of the compatibility with the infrastructure,
  - assessment of relevant loading characteristics,
  - brake relevant characteristics,
  - maintenance data,
  - environmental characteristics.

- **To check the process in place in the company**

- **To assess the existence of an IT tool supporting this process.**
  - Functionality implemented -> Conversion into TAF compliant messages using CI.
  - Functionality not implemented-> There are tools in the market as TIS providing such service / functionality: RSRD2 sponsored by UIP

- **Target Implementation Milestone 2015**

3 - Project Execution & Control

- Change Request: **TAF TSI CCM WP**
- Project Dashboard: **Implementation Reports (2 per year)**
- Issues to be treated : **ERA TAF TSI Implementation Co-operation Group**
- Project Status Report: **Status Report Implementation TAF TSI**
- Steering Committee : **TAF TSI Steering Committee**

4 - Project Closure

Project Closure Report: Expected by 2020: Let's go for it!

Certification Process

- TAF TSI is **not a structural** TSI.
- There are not **NO**tified BOdieS.
- For the time being no Interoperable Constituents have been defined.

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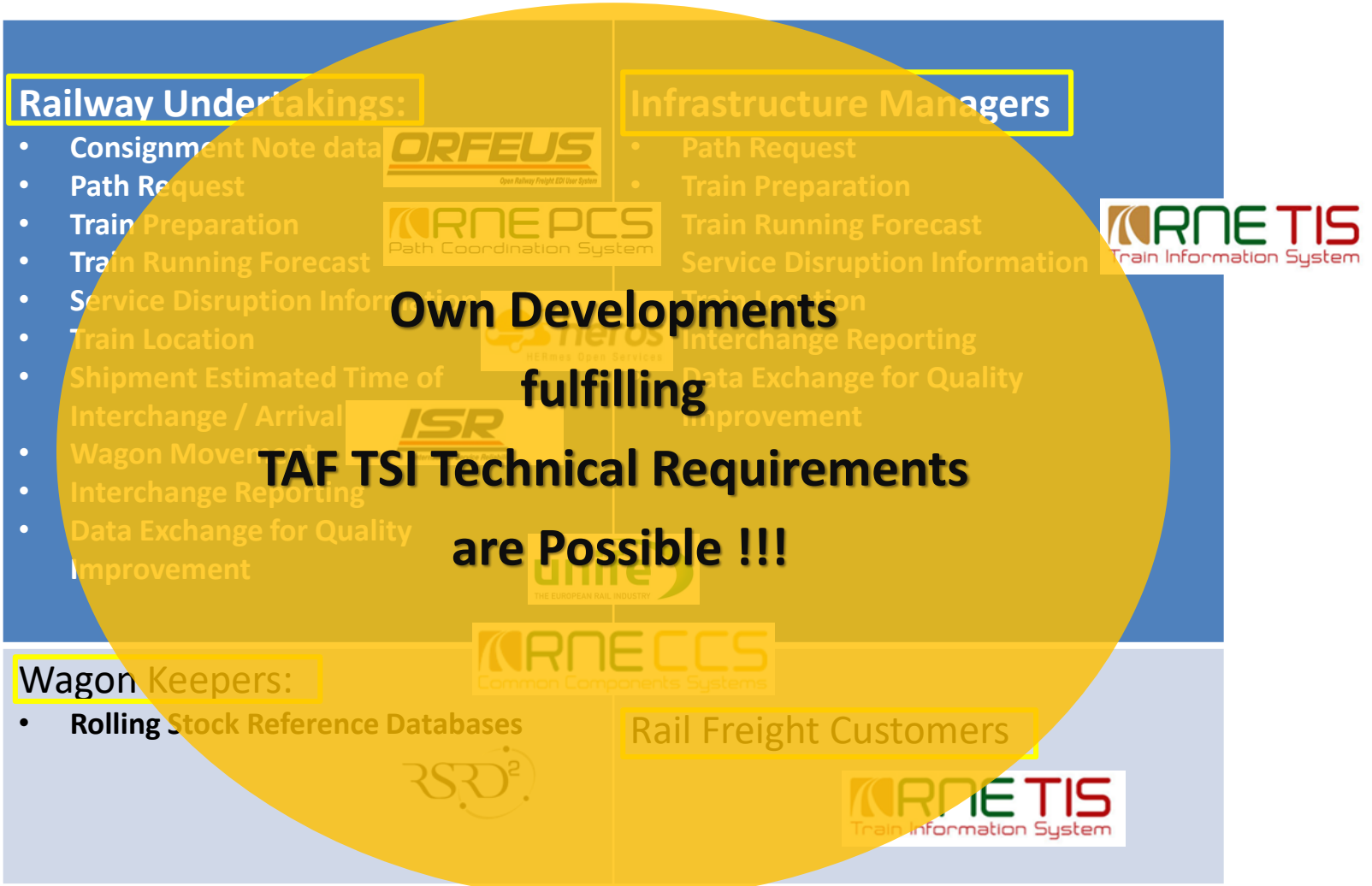
Useful Documents to be consulted!

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

- TAP TSI and TAF TSI Sector Handbook for the Communication between Railway Undertakings and Infrastructure Managers .

To Sum up!!


Railway Undertakings:
Consignment Note data
Path Request
Train Preparation
Train Running Forecast
Service Disruption Information
Train Location
Shipment Estimated Time of Interchange / Arrival
Wagon Movement
Interchange Reporting
Data Exchange for Quality Improvement
Infrastructure Managers
Path Request
Train Preparation
Train Running Forecast
Service Disruption Information
Train Location
Interchange Reporting
Data Exchange for Quality Improvement
Wagon Keepers:
Rolling Stock Reference Databases
Rail Freight Customers
Own Developments
fulfilling
TAF TSI Technical Requirements
are Possible !!!

EUROPEAN UNION AGENCY FOR RAILWAYS

Technical Support & Help : JSG + EUAR Telematics Team

Administrative Support: National NCP

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Thank you

ERA TELEMATICS TEAM!

TAF TSI Regional Workshop

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