

European Register of Infrastructure (RINF) as reference data for EATL GIS application

73rd WP on Rail Transport



- RINF - European Register of Infrastructure - established in the Interoperability Directive (*Directive (EU) 2016/797, Art.49*): Database + Common user interface: Provides for **mandatory** data collection
- It provides for **transparency** concerning the main features of the European Railway infrastructure.
- The **common technical specifications** are set out in a Commission Implementing Decision (*Decision 2014/880/EU*)
- The RINF Decision **obliges** each Member State to nominate an entity (NRE) in charge of setting up and maintaining its register of infrastructure and to notify an implementation plan.
- **Member States remain responsible** of the correctness/ completeness of data published.

PROCESS SUPPORTED BY RINF (PURPOSE)		RINF I 2011/633/EU	RINF II 2014/880/EU	RINF III
<i>Implementation due date</i>		15/09/2014	16/03/2017 16/03/2019	31/12/2020
Administrative / Policy	Verification of technical compatibility between fixed installations	●	●	●
	Establishment of network statement			●
	Monitoring interoperability of the Union railway network	●	●	●
Train service planning	Designing rolling stock subsystems	●	●	●
	Check of the feasibility of train services	●	●	●
Train preparation	Publication of rules and restrictions of local nature			●
	Check before the use of authorised vehicles			●
Train operation	<i>Compilation of the Route Book</i>			●
	Reuse of data in the register of infrastructure in other IT tools			●

Parameters groups

Identification

Performance parameters (Category, Load, Speed, Altitude, Temperature range...)

Line parameters, Layout (Gauge, Gradient profile)

Track parameters (Track gauge, rail inclination, cant deficiency)

Switches and crossings, Tunnels, Platform, ...

Contact line system (Voltage and frequency, maximum train current, min/max contact wire height)

Train protection system (ETCS+GSM-R, Legacy systems + Radio)

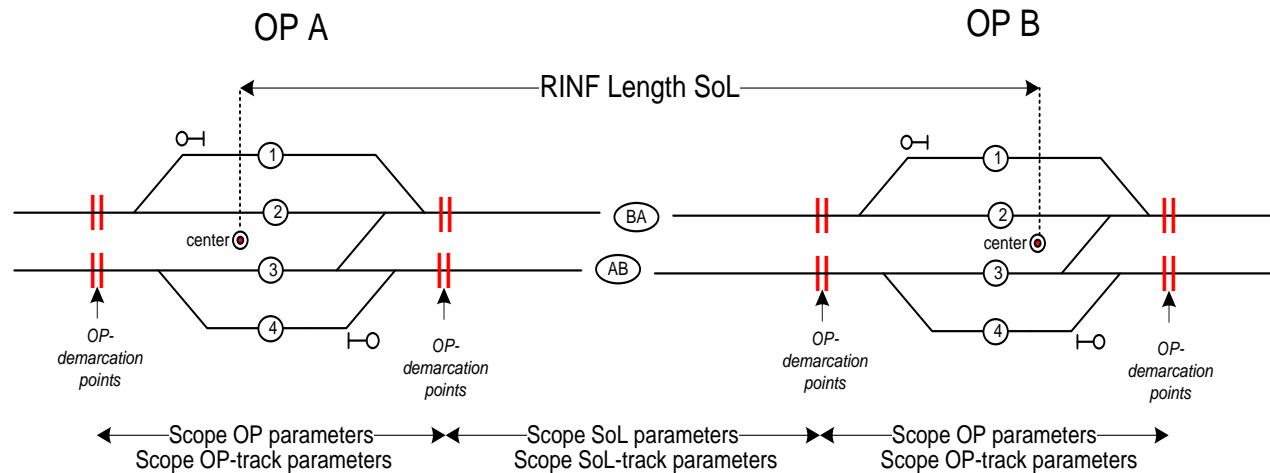
Train detection system

Fixed installations for servicing trains

...

150+ parameters in total

Schematic description, with parameters at the level of tracks



- ‘Operational Point’ (OP)
 - means any location for train service operations,
 - where train services may begin and end or change route,
 - and where passenger or freight services may be provided;
 - means also any location at boundaries between Member States or infrastructure managers;
- ‘Section of Line’ (SoL)
 - means the part of line between adjacent operational points and may consist of several tracks;
- ‘Running track’
 - means any track used for train service movements;
- ‘Siding’
 - means any track within an operational point, which is not used for operational routing of a train.

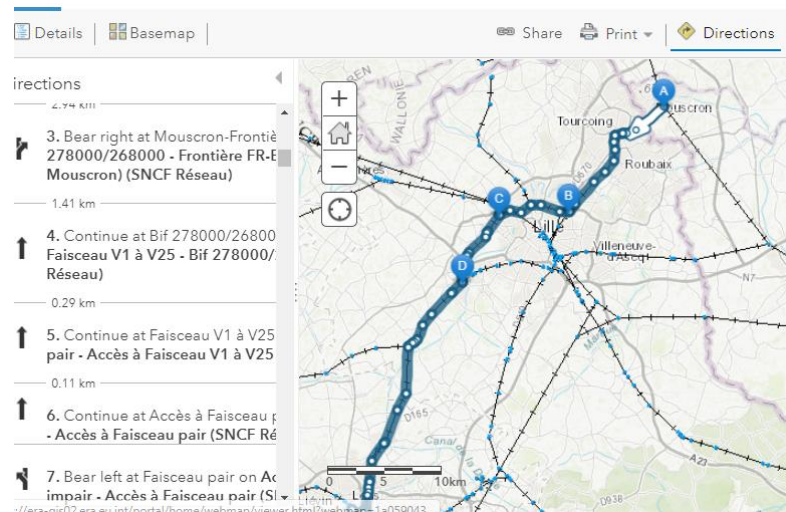
- Matching external parties line description (GIS) remains laborious, since **primary location and subsidiary location codes** (typically used by other IT tools) are not among mandatory parameters.
- Nevertheless, several IMs indicated preparedness to complement their RINF data with them in near future. Moreover, Agency may suggest to EC to make them mandatory under the next revision.
- Besides, an API development is foreseen in 2020.
- As a result, seamless integration of RINF network data in EATL GIS application can be ultimately envisaged.
- Agency has started to work with the Secretariat on the technicalities.

Focus on:

- Facilitation of the **compatibility check: vehicle - infrastructure**
- Enabling/Enhancing the **re-use of RINF data** by other IT systems

New functions:

- Possible **routing** on the network
- Accurate geometry of the network



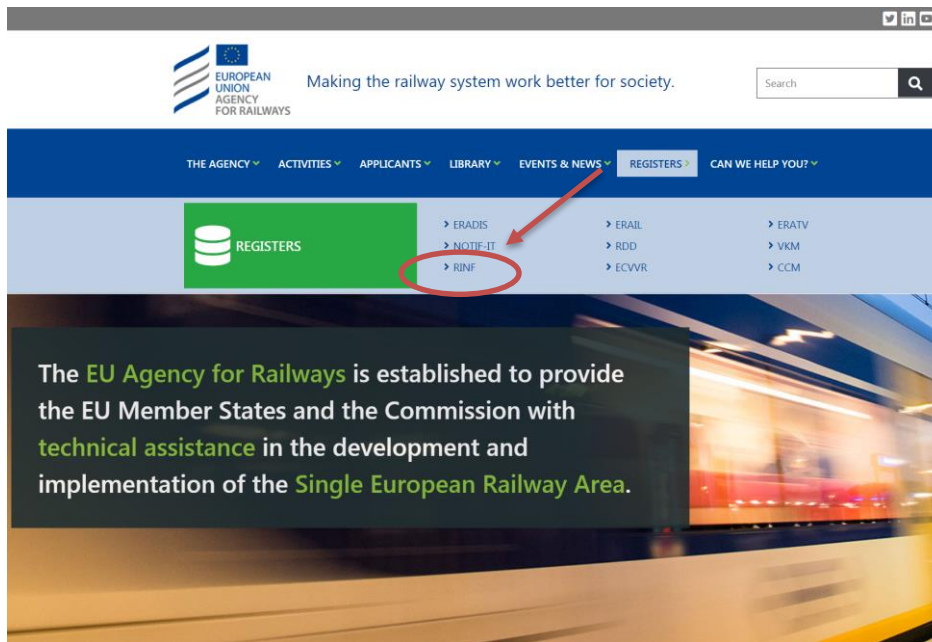


Making the railway system work better for society.

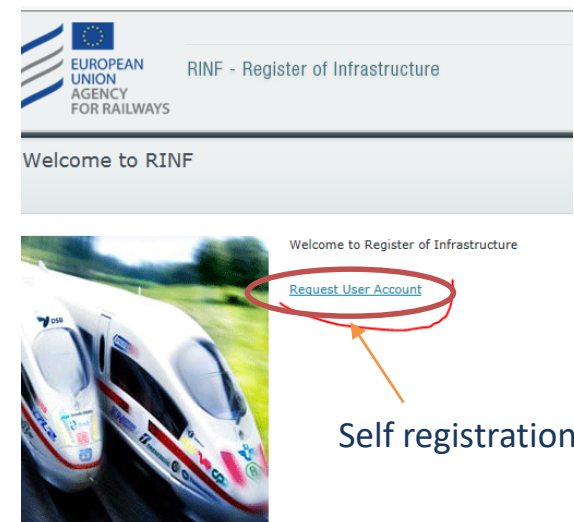
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RINF CUI is accessible since March 2015 to any person who request a user account.

RINF page (Agency Web site)



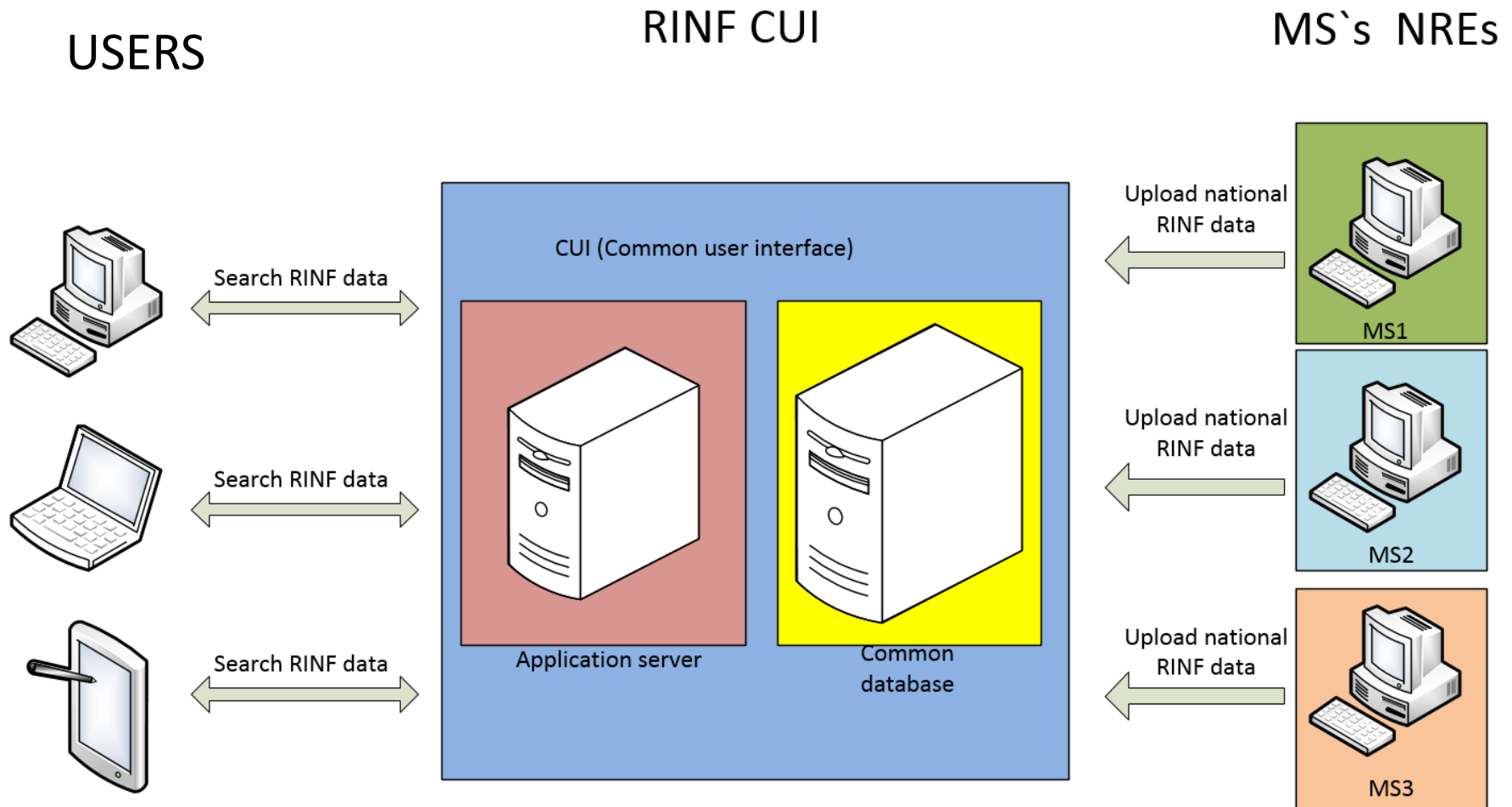
Home page (RINF CUI)



Direct link:

<https://rinf.era.europa.eu/rinf>

<https://rinf.era.europa.eu/rinf>



RINF: Register of Infrastructure
CUI: Common User Interface
NRE: National Register Entities