



*The Voice
of European
Railways*



Joint position paper by CER and EIM on the

Register of Infrastructure - RINF

-

Request to adopt the principles of an industry- standardised data exchange format for RINF

RINF

Brief introduction of RINF

RINF is the abbreviation for “Register of Infrastructure”.

This register is intended to contain and provide specified data about rail infrastructure and has to be implemented in the context of technical specifications that support interoperability on the railway networks within the European Community.

The basic requirements of the RINF come from the interoperability directive 2008/57/EC (ref.[2]). To achieve this interoperability, Technical Specifications for Interoperability (TSIs) are developed to achieve accepted specifications for both TEN and non TEN-lines (according Directive 2008/57) for each structural subsystem such as infrastructure, rolling stock, or functional subsystem like operation and traffic management.

The RINF does not replace TSIs.

ERA has the mandate to develop the specifications for the RINF (result see ref.[1]).

Legal justification

The formal specification of the RINF is stated in ref. [1].

It is mainly based on Article 18 (1) of Regulation 1335/2008 amending Regulation 881/2004 establishing a European Railway Agency (ERA) and Articles 17, 18 (2) and 35 of ref. [2] on the Interoperability of the Rail System within the Community.

According to the Agency Regulation (ref.[3]) and the Interoperability Directive (ref.[2]) the Agency shall draw up and recommend to the Commission a common specification for the Register of Infrastructure, which shall be adopted “in accordance with the regulatory procedure referred to in Article 29(3)”. This specification on the Register of Infrastructure shall comprise essential information regarding its presentation and format, revision cycle and instructions for use.

Synopsis of this position paper

In the architecture of RINF there is an interface between a Member State (represented by a National Registry Entity (NRE)) and the centralized part of the RINF system (CUI). By means of this interface NRE’s are obliged to upload the RINF-data of their national network according the prescribed scope of RINF. Currently, in the design of RINF, the upload files are intended to be XML files following a proprietary XSD.

This document is a joint CER/EIM position paper on adopting the principle of standardization and harmonization of data exchange formats in the rail sector all over Europe.

Context

The RINF implementation involves three main activities for NRE and Infrastructure Manager (IM) side:

1. Data collection by IM’s
2. Structuring and integration of IM-data collections to a Member State national data collection by NRE’s
3. Data extract from the national data collection and file transfer to ERA

Data collection and structuring is based on RINF items specifications (objects and properties).

Data structuring is related to a national data model. Data extract and file building is designed based on a proprietary RINF file format as currently described in the RINF application guide (ref.[4]).

Request

The RINF application guide determines the title, definition and data presentation of each infrastructure object/attribute, which is of relevance for the infrastructure data exchange within the railway industry. ERA is requested to direct the RINF development in terms of data exchange towards a **standardised data exchange format**, supporting the set of parameters which are named¹ in the application guide. Exchange formats defined by TSIs need to be considered.

The joint CER/EIM working group on RINF requests ERA to elaborate the intended process for achieving this objective together with experts from the railway sector.

Expected benefits

Such a scenario would give an opportunity for IMs to develop their data extracts and formatting as a reusable investment, not only for RINF purposes, but also for any other future needs of infrastructure data exchanges (this development, currently viewed by IMs as a cost could then be presented as an investment). Moreover, the strength of law for RINF deployment would give the railway sector and ERA a unique opportunity to roll out a Europe-wide universal standard, thus increasing interoperability and productivity.

Conclusions

The joint CER/EIM working group on RINF:

- recognises that RINF has already made some progress in its implementation.
- considers the current solutions for the data exchange from NRE to the RINF-CUI as being too proprietary for the longer term
- recommends open standards (in general) for data exchange in the open market of railway operations and the rail sector in Europe.
- foresees potential future benefits for NREs and IMs in migrating to a standardised way of data collection and integration on MS level

and appeals to the ERA to investigate the adoption of an open standard and consult on a draft plan to migrate from the current interface from NRE to RINF-CUI, after the investigation of some necessary preconditions, including cost, resource and timescale implications.

References.

Ref. N°	Document Reference	Title
[1]	Decision 2011/633	Decision of 15 September 2011 on the common specifications of the register of railway infrastructure
[2]	Directive 2008/57/EC	Interoperability of the rail system within the Community
[3]	Regulation (EC) No 1335/2008	Amending Regulation (EC) No 881/2004 establishing a European Railway Agency (Agency Regulation)
[4]	Guide for Application of RINF v0.8 or higher	Guidance on the application of the Register of Infrastructure as the European system operated and managed by Common User Interface (CUI), both for supplying MS-network data to the CUI and for end-users to retrieve data from the CUI.

¹ "Named" means: human readable text e.g. "TEN classification of track" instead of 1.1.1.1.2.1