

### **3.1.1. Rail interoperability**

#### General objectives

The general objective is to achieve interoperability within the European Union's rail system by meeting the provisions set out in Directive 2008/57/EC and, based on that Directive, notably those of the Technical Specifications for Interoperability (TSI) concerning Telematics Applications for Passengers (TAP) and Telematics Applications for Freight (TAF). Thereby, for the railway lines forming part of the TEN-T, compliance with the infrastructure requirements set out in the TEN-T Guidelines shall be ensured.

#### Specific objectives

Interoperability shall be promoted via the following specific objectives:

- Ensuring easy access for users to information about itinerary, time and availability, including consultation and dissemination activities for the promotion of TAP and TAF;
- Ensuring compliance of the rail system and its subsystems with the TSI, notably on infrastructure, energy, rolling stock for passengers and freight transport, operation, telematics applications, control command and signalling, safety in railway tunnels;
- Simplifying procedures for the authorisation, placing in service and use of rolling stock on the Union's railway network;
- Ensuring compliance with other relevant requirements of the TEN-T Guidelines.

Proposals under this priority:

- may address elements of more than one of the fields below;
- may be implemented in one or more Member States;
- may address only works;
- may not address ERTMS-related activities.

**a. Interoperability of the rail system with** Technical Specifications for Interoperability concerning Telematics Applications for Passengers (TAP) and Freight (TAF)

Technical Specifications for Interoperability (TSI) concerning Telematics Applications for Passengers (TAP) and Telematics Applications for Freight (TAF).

Proposals shall aim at ensuring easy access for users to information about itinerary, time and availability, including consultation and dissemination activities for the promotion of TAP and TAF. In particular, an application shall demonstrate its contribution to:

- Ensuring quality management of data for TAP TSI (timetable data availability in B4 format, tariff data availability in B1 – B3 format);
- Support small and medium size Railway Undertakings in TAP implementation (timetable data exchange according to B4, tariff data exchange according to B1-B3, reservations in B5 format, home print tickets in B7 format, PRM assistance in B10 format);

- Support rail stakeholders to develop a common Telematics Reference Files merging the existing TAF and TAP Reference Files sets to be used in the Telematics framework and by other registers managed by ERA or the rail sector;
- Support Infrastructure Managers and Railway Undertakings to implement and ensure the compliance of the rail system and its subsystems with the TAP and TAF TSI developing and implementing the unique Train ID in line with the commitment expressed in the TSI TAP and TAF master plans to replace Operation Train Number already in use;
- Support rail actors (Infrastructure Managers, Wagon keepers, Railway Undertakings or other rail related organizations/companies) to implement TAP and TAF TSI compliant databases and/or tools (such as for assessment of the compatibility of the rolling stock with the infrastructure, infrastructure restriction notices, rolling stock data, freight operational data for tracking wagon/ intermodal unit movements tariff data, timetable data, TAP registry and other TAP related registers);
- Support Infrastructure Managers and Railway Undertakings to implement and ensure the compliance of the rail system and its subsystem with the TAP and TAF TSI. For example, a subset of function like Train Running Information, Path Request, Service Disruption, Train Preparation and Reference Files for European Infrastructure Managers and Railway Undertakings or pre-arranged train paths and reserve capacity, traffic Management by Rail Freight Corridors;
- Support Railway Undertakings to implement and ensure the compliance of the rail system and its subsystem with the TAF TSI through the implementation of the Electronic Consignment Note in line with TAF requirements and including intermodal information, in order to remove missing links between different modes of transport.

**b. Railway system compliance with Interoperability<sup>1</sup> and Safety Directives<sup>2</sup> (including TSIs other than TAF/TAP) and TEN-T Guidelines**

Under this specific objective, proposals shall aim at reducing network diversity if possible by ensuring compliance of railway subsystems with Safety and Interoperability Directives (including TSIs other than TAF/TAP, and notably Infrastructure, Energy, Rolling Stock (including Noise), Operation, Safety in railway tunnels), and/or with infrastructure requirements, covering either comprehensive or core network, set-up in the TEN-T Guidelines.

In particular, proposals shall aim at one or more of the following goals:

- Contributing, by means of works actions, to the reduction in diversity of railway fixed equipment and therefore opening of supply markets including, wherever possible, ensuring TSI compliance of fixed railway installation, primarily in the area of infrastructure and energy subsystems;

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<sup>1</sup> Directive 2008/57/EC.

<sup>2</sup> Directive 2004/49/EC of the European Parliament and of the Council of 29 April 2004 on safety on the Community's railways and amending Council Directive 95/18/EC on the licensing of railway undertakings and Directive 2001/14/EC on the allocation of railway infrastructure capacity and the levying of charges for the use of railway infrastructure and safety certification (OJ L 164, 30.4.2004, p. 44).

- Contributing to the development of a location-specific risk model for the European Railway System to draw a clear link between risk levels measured at a European level and changes to railway infrastructure. As a result, it shall be possible to quantify the safety benefit from investments made in upgrading railway infrastructure or target investment where it will deliver the greatest benefits. This could support the convergence of risk levels across Europe and support the development of the Single European Railway Area;
- Supporting Railway Undertakings to implement and ensure compliance of the rail system and its subsystems with the Interoperability and Safety Directives including technical specifications for interoperability concerning the subsystems operation and traffic management, rolling stock and wagons;
- Supporting the development and establishment of interoperability registers, in particular the register of infrastructure for all existing infrastructure. This shall ensure consistency between interoperability registers and other existing registers. For more details, please refer to the European Railway Agency study on Coherence and Consistency of Registers<sup>3</sup>.