

UNIFE Position Paper

TSI Transitions for a Competitive European Railway Sector

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About UNIFE

Based in Brussels since 1992, UNIFE is the association representing Europe's rail supply industry at the European Union (EU) and international levels. UNIFE's members include more than 100 companies – from SMEs to major industrial champions – active in the design, engineering and manufacture of rolling stock (i.e. trains, metros, trams, freight wagons) as well as rail signalling and infrastructure equipment. UNIFE also brings together the national rail industry associations of 11 European countries.

Executive Summary

The TSI revision process is currently ongoing for the 2022 TSI package including a new transitions regime harmonized across the TSIs and an update to the TSI reference standards. These two objectives have been assigned to the ERA Topical Working Groups (TWG) Migration and Transition, and TWG on Standardisation.

The results of these TWGs will have significant impact on the business of the railway sector over the next decade. **Therefore it is essential to ensure stability to the business and predictability and transparency by the transition regime to be established.**

With this paper UNIFE - the European rail supply industry association - would like to raise the awareness of all sector stakeholders, European Institutions and Member States to the risks seen with the current proposals of the TWGs and actions needed to achieve a transitions regime that works for a competitive European railway sector.

The current TSIs maturity provides products that are interoperable and ensure a high level of safety. Nonetheless, in the sector today the current problems are still found:

- Frequency of recent and planned TSI amendments is incompatible with vehicle type development timescales;
- Frequent baseline changes and insufficient transitional arrangements results in costly modifications and diversification within the vehicle types and significant industrial risk to ongoing product development and long-term delivery projects;
- Maintenance of the current technical framework (TSIs and its interface to European Standards) is very complex and takes significant efforts and resources to maintain.

UNIFE calls on the European Commission, European Union Agency for Railways and Member States to take this opportunity of the 2022 TSI revision to simplify the TSI transitional provisions to improve the competitiveness of the European railway sector and its supply industry. We ask to benefit from today's TSI maturity especially regarding interoperability & safety and from market-driven product innovations.

Introduction

Technical interoperability of the different national rail networks across the EU has been a key objective of Europe's transport policy since the mid-1990s. To achieve this, the European Union has developed a common regulatory framework, notably using the Technical Specifications for Interoperability (TSIs) as the key tool in driving the gradual harmonisation of the railway systems.

The European rail supply industry is fully supportive of this objective and recognises the value in achieving a single European railway area that would strengthen rail supply industry competitiveness. However, we are concerned by **the frequency of changes** to the technical baselines which are **compelling the sector to continuously pay for adapting its products** (even during running contracts) and preventing it to take benefit from harmonized technical requirements and return of experience of products. Since 2002, no less than five TSI baselines have been issued in 2002, 2006/08, 2011/12, 2014/15, 2019/20, with the next TSI baseline now due for 2022. The frequency of these changes, every 3 to 5 years, is not aligned with the development and delivery timescales of the rail supply industry. This results in railway projects facing at least one baseline change during its execution, where even "minor" TSI amendments (e.g. EU 2018/868) have the consequence to interrupt vehicle production and require modifications and reauthorisation.

The European rail supply industry is convinced that today's TSIs (the latest 2019/20 baseline) have reached a maturity level that the entire rail sector can be confident in and that provide a stable ground for a safe and interoperable rail target system.

Secondly, the TSIs have from the beginning quoted European standards from CEN, CENELEC or ETSI as a way to demonstrate the compliance of systems or sub-systems to the TSI requirements. Such standards, produced originally by the rail sector on a voluntary basis, have become "referenced" into the regulatory domain making their application mandatory. Today, over 100 European standards and other documents are referenced in this way in the TSIs. While this has very strong advantages a number of drawbacks have become apparent over the years, particularly due to the fact that the referenced standards evolve over time thus becoming unaligned with the TSIs and secondly due to the general complexity this interface of references has created. Changes brought by each TSI baseline update are compounded by the need to take stock of evolutions in the referenced standards. This increases the regulatory delta that must be taken into account by the industry when adapting an existing product to a new baseline again, often with limited visible benefits for railway operators, maintainers, passengers or for the rail sector as a whole.

On 24 January 2020 the European Commission (EC) sent a request to the European Union Agency for Railways (ERA) for the preparation of the Digital rail and Green freight TSI revision package (2022 revision). This package "shall include provisions reviewing and if possible **simplifying the strategy for the application of the TSIs** in a way ensuring a **gradual, but timely reduction of the divergences** from the target system while providing the **predictability and legal certainty necessary to the sector**. These provisions shall cover future transition periods as well as the issue of the validity period of the certificates for interoperability constituents and subsystems." With the same objective "provisions providing **flexibility in the application of updated versions of standards** shall be considered."¹ These two objectives have been assigned to the recently established ERA Topical Working Groups (TWG) Migration and Transition, and TWG on Standardisation. The results of these TWGs will have significant impact on the

¹ Objectives quoted from the latest TSI LOC&PAS and WAG amendment (EU) 2020/387.

overall application of the TSIs and by extension the vehicle projects and daily business of the railway sector over the next decade.

TWG Migration and Transitions

Discussions in the TWG Migration and Transition are ongoing regarding a new transition regime harmonized across the TSIs. The current proposal from ERA is based on categorizing the new TSI requirements, X1/2/3², based on their assessed impact and priority to determine their category and with it the transition regime. It is noted however that the work of this TWG is time critical as its output shall be applied by all the other TWGs and finally approved by the ERA Working Party (WP) for the 2022 TSIs. In fact, ERA has already begun to pre-emptively apply the proposed categorization in a dry run for the latest WP meeting on TSI revision, even before the system has been agreed by the TWG or the WP. **At this stage, UNIFE cannot agree to the current categorization without first having an agreement on the entire transition regime model (including clear process, responsibility and criteria for categorisation). In addition UNIFE is concerned of the little progress made with ERA in the last weeks due to the limited availability of resources in ERA.**

UNIFE recognises the positive signs and direction of travel in the TWG with the latest proposal, i.e. the unlimited validity of EC Type certificates and a default 7 years transition period from new TSI version publication to implementation of new X2 TSI requirements on projects during modifications and the 'new authorisation' of variants. However, **further work and clarifications are needed especially on the X2 criteria and the consequences when exceeding the 7 years period.** The TWG must come to a mature proposal that demonstrates clear benefits and simplification from today's TSIs as outlined in the revision objectives.

In particular, **UNIFE considers that the X3 requirements category (mandatory implementation) presents significant risk and uncertainty to the sector** where these come with specific transition period which would interrupt vehicle type production phases. To move forward with the current proposal, when not related to a critical safety issue, we must ensure that:

- Clear substantive criteria are established to limit the number of X3 requirements to the minimum necessary in order to secure existing investment and planning project execution.
- X3 requirements shall be connected to a performed cost benefit analysis (CBA) which demonstrates a positive impact assessment for the rail sector and a business case³ with an EU funding/compensation for the authorisation applicant and migration strategy established.
- A harmonized implementation date for X3 requirements is set to avoid multiple dates which would result in continuous modifications and recertifications/reauthorisations significantly impacting the stability and predictability of long-term projects.

² ERA Transitions Concept Paper – presented TWG SG meeting 01/02/21 and WP on TSI 09/03/21.

³ (EU) 2016/797 Article 5.(3) When drafting or reviewing each TSI, including the basic parameters, **the Agency shall take account of the estimated costs and benefits of all the technical solutions considered**, together with the interfaces between them, so as to establish and implement the most viable solutions. That assessment **shall indicate the likely impact on all the operators and economic actors involved** and shall take due account of the requirements of Directive (EU) 2016/798. Member States shall participate in this assessment by providing, where appropriate, the requisite data.

TWG on Standardisation

UNIFE fully supports the goal of this TWG to update the reference standards annexes in the TSIs to not only **allow the use of new or latest versions of the standards** but also the previous version of the standards to **provide added flexibility in the choice of standards to be used** and also to **remove the reference to standards where not “strictly necessary”** as stated in the Interoperability Directive⁴. Updating and cleaning the TSI annexes in this way will contribute to the flexibility and simplification of the application of the TSI system, improve the requirements management process and ensure stability for vehicle projects, and improve the exportability of the TSI system.

Position of the European Rail Supply Industry

The current TSIs maturity provides products that are interoperable and ensure a high level of safety. However, the complexity of the current technical framework (TSIs and its interface to European Standards) together with insufficient transitional provisions has stunted the competitiveness of the European rail supply industry by adding unnecessary technical complexity, generating extra costs and administrative burdens for the European rail supply industry and the railway sector as a whole.

As a general rule, the rail industry needs predictability and transparency of the applicable requirements in order to successfully design, develop and deliver vehicle products to the market using the standard long-term contracts applicable in the railway sector, to minimize industrial risk and to guarantee its investment for the projects already signed and calculated.

As explained above, adapting an existing, authorised vehicle design to a new TSI baseline has inadvertently become a frequent occurrence in recent years. These unexpected modifications have generated significant extra costs on the sector and avoidable delays for ongoing products and contracts, often without practical benefit or value for the customers and end users compared to the original vehicle type, already demonstrated to be safe and interoperable. This also leads to unnecessary fleet diversity for railway undertakings and maintainers resulting in extra costs and efforts and decreased operational flexibility. Compelling the sector to continuously pay to adapt its products also prevents it to benefit from return of experience of products, provide repeat orders to customers or off-the-shelf vehicles for all actors, incumbents and new entrants.

In recent months, UNIFE members have met with the EC and ERA to demonstrate the associated and often unplanned costs experienced in past projects where the regulations have introduced new technical requirements without sufficient transitions, at the detriment of the European rail sector’s competitiveness. The examples given showed that even small changes of requirements have a large impact on cost increase and project delivery. Mandatory changes to technical requirements can have a negative impact on bids and on product development programmes and on delivery schedules, with one-off and recurring costs and increased risk of severe delay penalties. These have the potential to off-set or

⁴ The Interoperability Directive Article 4.8 states that “TSIs may make an explicit, clearly identified reference to European or international standards or specifications or technical documents published by the Agency where this is **strictly necessary** in order to achieve the objectives of this Directive.”

even cancel the business/profit margin of the European rail supply industry, thus making it unsustainable for the European rail sector.

UNIFE underlines that the goal of the stable technical baseline for projects is not to delay the application of the latest legislation but to carefully manage each individual project delivery. Indeed, for new vehicle types the application of the TSI package in force shall be ensured.

UNIFE calls on the European Commission, European Union Agency for Railways and Member States to take this opportunity of the 2022 TSI revision to simplify the TSI transitional provisions to improve the competitiveness of the European railway sector and its supply industry. We ask to benefit from today's TSI maturity especially regarding interoperability & safety and from market-driven innovations.

The European rail supply industry asks that:

1. The TSI Transition provisions **guarantee predictability and stable product development and delivery** to allow the industry to offer proven, existing, interoperable solutions as off-the-shelf vehicles for all actors, incumbents and new entrants, where modifications are purely optional for customer needs. This will allow for faster delivery times and cost improvement. This stability can be achieved while still providing enough flexibility to facilitate innovation uptake in accordance with the needs of the market.
2. The principle should be that **each vehicle type benefits from a type authorisation of unlimited duration on the basis of a specific TSI baseline**. This link to a specific TSI baseline remains the same and does not change with future TSI revisions. New requirements, which would **as an exception** require modifications to existing vehicles types, must be determined according to **a clear process predefined** in the TSI transitions rules so as to ensure minimal disruption. The process should include a cost-benefit analysis of the proposed change, including **an agreed corresponding EU funding/compensation mechanism** regarding cost and time and the establishment of an implementation plan.
3. The **TSI-Standards interface should be updated** to provide additional flexibility in the application of standard versions and where possible **to be cleaned-up** to remove reference to standards which are not strictly necessary. This is needed to reduce the overall complexity of the current system, improve requirements management and improve the exportability of the TSI system.
4. The **TSI transitions together with the updated of referenced European standards must avoid unexpected modifications and associated costs** to existing vehicle projects as seen in the past. We ask that once the TWG proposals are matured, to test the model against the past and current 2022 TSI Change Requests to demonstrate the positive impact on the competitiveness of the sector.
5. **A high technology readiness level (TRL 8/9) should be achieved and demonstrated before inclusion of any proposed change to the TSIs text**, whether in the TSI requirement itself or by reference to a European standard.

6. Following the TSI 2022 package, the industry asks for **no major TSI amendments or packages for a further 5-7 years**, with a regular long-term schedule established.

Last but not least UNIFE would like to underline that these asks are aligned with the recommendations listed in the Report of the European Commission expert group on the competitiveness of the European rail supply industry published in October 2019, especially the recommendation addressed to the European Commission in the chapter Internal Market: “Action for the Commission - Set out long-term strategy for predictable evolution of TSIs. Ensure that TSIs remain fit for purpose and enable fast adoption of proven performance-enhancing technologies, making appropriate use of European standards.”

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