



TSI Migration and Transitions – TSI 2022 and beyond

The Position of the European Rail Sector

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Introduction

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). Within the package the European Commission submitted the change request CR236 'Review and streamline transitional provisions'. This change request was assigned to the recently established ERA Topical Working Group (TWG) Migration and Transition, the results of which will have significant impact on the overall application of the TSIs and by extension the vehicle/infrastructure projects and daily business of the rail sector over the next decade.

The TWG Migration and Transition was established with the following objectives:

for migration:

- set up a coherent framework to assess the new/updated optional and mandatory vehicle requirements
- recommend a balancing framework in case of unbalanced distributions of costs and benefits within the different concerned railway stakeholders
- analyse if and how a balancing framework can be legally binding so that it provides sufficient guarantees for investors

for transition:

- propose a coherent single framework for the transition phase for all vehicle related TSIs

Position of the European Rail Sector

As a general rule, the rail sector 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 minimise industrial risk and to guarantee the investment of all stakeholders for the projects already signed and calculated. Only as an exceptional case of a major critical safety issue should new requirements invalidate a vehicle type and require mandatory modifications to existing vehicles types and/or vehicles/infrastructure in operation. 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. Thus stability can be achieved while at the same time providing the openness and the flexibility required to facilitate innovation uptake in accordance with the needs of the market.

Adapting an existing, authorised vehicle design to a new TSI baseline, however, has inadvertently become a frequent occurrence in recent years where the regulations have introduced new technical requirements without sufficient transitions. Examples of these have been demonstrated to the EC and ERA in recent months. 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. Mandatory changes to technical requirements can have a negative impact on bids and on



product development programmes and delivery schedules, with one-off and recurring costs and increased risk of severe delay penalties. These have the potential to undermine the business case for railway projects, putting at risk the sustainability of the European rail sector and risk delaying future investments.

This also leads to unnecessary fleet diversity for railway undertakings and maintainers resulting in extra costs and efforts and decreased operational flexibility. The capacity of the sector to manage and integrate changes must also be considered, taking into account the supply, vehicle reserves and workshop capacities, including the necessary processes for new authorisations plus conformity to type authorisations. Compelling the sector to continuously pay to adapt its products and existing fleet also prevents it to benefit from return of experience, provide repeat orders to customers or off-the-shelf vehicles for all actors, incumbents and new entrants.

TSIs shall ensure the backwards compatibility¹ to smoothly integrate new assets into the existing railway system without interrupting the ongoing operations as well as to protect earlier investments in design, production and operation. TSIs shall also take into account the upwards compatibility to provide visibility of future evolutions. We underline that the goal of the stable technical baseline for projects is to carefully manage each individual project delivery in a balanced way while considering the evolution of the state of the art, reflected by the regulation, and the life cycle costs and revenues of the assets. This shall not prevent the TSI package in force to be applied to new vehicle types.

Position and Asks on the TWG Migration and Transition

The creation of the Single European Railway Area (SERA) is not for free. Moving from legacy systems to a European target system is technically, organisationally and financially challenging. Compensation schemes as discussed in the TWG Migration subgroup could be one of the urgently needed solutions to cover the costs of this migration to the SERA. However, discussions in the subgroup have shown that current intra-sectoral cost-balancing mechanisms have their limitations and given the existing EU legislation such schemes may currently work in a few exceptional cases only. Other solutions are then needed to support the rail sector when contributing to the smart and sustainable mobility strategy of the European Commission. Funding would be the most obvious one, however the financial means in Europe are finite and again the relevant legal provisions are limited and not linked to the technical legislation, creating technical and political work streams without a bridge.

No clear way forward has been found so far in the TWG because of its mandate limitation regarding a binding and predictable compensation framework. However, in view of the TSI change requests ahead, the question and necessity of funding and financing will certainly arise again when ambitious transition phases are proposed which cannot be managed within the rail sector alone.

¹ (EU) 2016/797 Article 5.(10) *When the revision of a TSI leads to a change of requirements, the new TSI version shall ensure compatibility with subsystems placed in service in accordance with former TSI versions.*



Discussions in the TWG Migration and Transition are now focusing on a new transition regime harmonised across certain TSIs. The current proposal from ERA is based on categorising the new TSI requirements, C1/2/3², based on their assessed impact and priority to determine their category and with it the transition regime.

The rail sector recognises the positive signs and direction of travel in the TWG with the latest proposals, notably with categories C1/2 and the unlimited validity of EC Type certificates. **However, the rail sector highlights the significant levels of risk on the sector connected to the C3 requirements category (mandatory implementation)** where these come with various specific transition periods that would interrupt vehicle type production phases and impact existing vehicles in operation.

To move forward with the current TWG Migration and Transition proposal for the TSI 2022 package, when not related to a critical safety or technical compatibility issue, **the rail sector asks that:**

1. Clear substantive **criteria are established to limit the number of C3 requirements to the minimum** necessary in order to secure existing investment, to foster predictability and stability for project execution, and to safeguard operational capacity.
2. **C3 requirements shall be connected to a full impact assessment** which demonstrates a positive cost/benefit assessment³ for the rail sector considering the impact on all sector stakeholders and end users.
3. As part of this impact assessment a detailed **implementation plan supported by all impacted stakeholders** is necessary which considers the **impact on new and existing projects/assets** in all phases (design/production/operation), the **availability of EU and/or national funding/compensation mechanisms**, the **technology readiness level** of the proposed change or new requirement, and the **supply and integration capacity** of the sector. All these aspects together need to be considered when defining the appropriate transition period for a given change .
4. Within the TSI Change Control Management (CCM) procedure to define categorisation and transitions for all potential C3s, **a separate forum shall be created in-between the TWGs and Working Party on TSIs to bring together the impacted stakeholders with the appropriate experts** to assess the economic impact, migration and transitional strategy and funding/compensation requirements. This forum must be a mandatory stage for every potential C3 change and could be organised along the lines of the Work Package 5 of the European DAC Delivery Programme.
5. Where the impact assessment concludes there would be a funding and financing issue, major operational problems concerning the implementation, and/or unbalanced cost distribution, the timeframe for such C3 transitions need to be adapted. Where there is a considerable **negative**

² ERA Transitions Concept Paper – latest version dated 210331

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.***



impact on the competitiveness of the sector stakeholders the change shall use the default C1/2 transitions.

6. Where possible **for vehicles in production phase and rolling stock in operation harmonised implementation deadlines for C3 requirements** are set to avoid multiple dates which would result in continuous modifications and recertifications/reauthorisations that would significantly impact the stability and predictability of long-term projects, and the continuous availability of vehicles in operation.

On the mid-term beyond the TSI 2022 package, **the rail sector asks that:**

7. Where European policy objectives see a need for a faster implementation, support shall be given to achieve this. **The legal framework on TEN-T / CEF, SERA, Interoperability and Safety needs to be better linked** to pave the way for sound funding and financing schemes supporting innovation and major technical changes in the rail sector when specified in the TSIs. The European Commission and the European Union Agency for Railways are asked to investigate how changes in the **technical framework with specific transitions can be legally supported by funding and/or compensation mechanisms** to ensure balanced distributions of costs and benefits and provide sufficient guarantees for investors.