UNIFE Position Paper on the Revision of the TEN-T Regulation

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UNIFE position on the EC proposal for the revision of the TEN-T Regulation

Introduction

UNIFE, the Association of the European Rail Supply Industry, welcomes the Commission’s proposal for a revised Regulation on Union guidelines for the development of the Trans-European Transport Network (TEN-T), published on 14 of December 2021. UNIFE agrees with the Commission’s assessment that revising the Regulation offers a real opportunity to make the TEN-T Network fit for the future, and to align its development to the European Green Deal objectives and the climate targets of the EU Climate Law.

Rail is the most environmentally friendly mode of transportation and has a key role to play to achieve the decarbonisation of the economy. It is worth highlighting that rail accounts for less than 0.4% of GHG emissions from transport although it carries 17.9% of inland freight and 8.4% of passengers in Europe\(^1\).

Therefore, UNIFE believes that the revision of the TEN-T guidelines must enhance the role of rail as the backbone of sustainable mobility in Europe. This endeavour will require further boosting investments to complete the TEN-T rail network and facilitating the deployment of rail innovative and climate friendly technologies. This will be essential to cut greenhouse gas emissions from the transport sector by 90% by 2050, compared with 1990 levels, hence a key element to achieve climate-neutrality.

Regulatory Stability (Articles 15, 19)

While the rail supply industry is fully supportive of the goals set in the Sustainable and Smart Mobility Strategy (SSMS), and the expected ambition to accelerate the realisation of the TEN-T with the new proposed targets and requirements, UNIFE is concerned by the negative impact the current regulatory instability (too frequent revision of Technical Specifications for Interoperability - TSI) is having on rail projects, which creates serious risks on the economic viability of long-term investments in the sector. The proposed requirement for the TEN-T network to be compliant with the Rail Interoperability Directive implies in fact several upgrades between now and 2050.

Providing a clear and reliable planning for TSI evolution and application while ensuring sufficient regulatory stability to projects will be essential to secure investment in the sector and achieve the 2030, 2040 & 2050 deadlines. In this respect, UNIFE requests the European Commission to carefully consider the economic impact of further changes in the Technical Specifications for Interoperability (TSIs) and plan for transition rules in line with rail project and asset lifecycles, preventing negative impacts on ongoing projects.

In this regard, UNIFE also highlights the careful consideration necessary when determining how best to efficiently deploy the innovative technologies referred to in paragraph (e) of Art. 19 on additional priorities for railway infrastructure development\(^2\). It is important to develop and deploy these technologies but inclusion into the standardisation and/or regulation shall be supported by an economic impact assessment and implementation plan only once a mature technology readiness level has been demonstrated.

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\(^2\) Automatic train operation, advanced traffic management, and digital connectivity for passengers based on ERTMS and digital automatic couplings as well as 5G connectivity.
Infrastructure components and requirements (Articles 14, 15, 16)

UNIFE observes that Art. 14 extends the list of infrastructure components including rail services facilities, rail access routes and last mile connections. We welcome the clarification of Art. 14 (d) establishing that “the rail transport infrastructure shall comprise rail access routes and last mile rail connections to multimodal freight terminals connected by rail, including in inland and maritime ports and airports, and rail service facilities”.

However, we are concerned by the consequences as these facilities would also be required to deploy ERTMS, be fully electrified and be overall compliant with the Interoperability Directive. In the industry’s view, this set of requirements does not make economic sense everywhere. In particular, ERTMS, a safety system designed to enable trains to run safely at 300kph and above, is not needed in maintenance depots where trains are driven at 5 to 10 kph. We would request providing flexibility for such facilities regarding their compliance with technical criteria.

We also highlight the importance that Art. 21 on maritime and Art. 33 on air, mandate inland ports to be connected to the rail network by 2050 and a connection to the rail network for all airports on the Core network by 2030, and for certain airports on the comprehensive network by 2050 respectively. UNIFE is pleased to see that the Proposal establishes stronger synergies between infrastructure planning and the operation of transport services. For example, the additional requirements for the Extended Core and Core network established in Art. 16 of 100kph operation for freight trains & 160 kph for passenger trains as a minimum speed.

Rail Freight (Articles 18, 36, 40)

UNIFE believes that new and reinforced infrastructure requirements will aid in shifting transport flows towards rail. In this sense the creation of European Transport Corridors (ETCs) through the integration of Core Network Corridors (CNCs) and Rail Freight Corridors (RFCs) is also supported and welcomed because it will improve the cooperation between the governing bodies of RFCs and CNCs and will allow the identification of the investment priorities.

The rail industry welcomes the ambitious operational requirements established on Art. 18 to be achieved by 2030, notably that the dwelling time of all freight trains crossing the border does not exceed 15 minutes on average and that at least 90% of the freight trains crossing at least one border of a European Transport Corridor arrive at their destination, or at the external Union border if their destination is outside the Union, at their scheduled time or with a delay of less than 30 minutes. This improvement will be supported by much needed innovations e.g. integrated international timetable planning and cross-border real-time traffic management, standardised European Railway checkpoints, Digital Automated Couplers and others.

In relation to multimodal freight terminals, UNIFE considers very important that the infrastructure components listed under Art. 36 include the infrastructure related to facilities for alternative fuels. In relation to rail freight and urban nodes, UNIFE also supports the requirement by 2040 of having in place at least one multimodal passenger hub and one multimodal freight terminal allowing for sufficient transhipment capacity within or in the vicinity of the urban node. These efforts will further contribute to shifting road freight to rail and achieving the SSMS objective of doubling rail freight by 2050.

ERTMS (Article 17)

UNIFE has been actively calling upon the Commission on the need to speed up the deployment of ERTMS as both a major enabler of a truly interoperable TEN-T and as the backbone of the future digital railway. While deployment on board of the trains is a success, with 46% of all new trains already equipped, trackside deployment is lagging behind with only 4% of the complete European being equipped today. Hence, speeding up trackside deployment is urgently required.
In this sense, our industry welcomes that the proposed Regulation establishes the 2040 deadline for the decommissioning of class B systems in the entire TEN-T network as well as for full deployment of ERTMS. Particularly, we understand the focus on ERTMS Level 2 and 3 on the TEN-T Network from 2026 onwards, nevertheless we should accept that market demand for ETCS Level 1 is justified as well. We are convinced that ERTMS functionality and scalability allows economically viable solutions for all types of railway lines on the entire European network, from low-density lines to high speed and high-density lines. UNIFE believes this is a step into the right direction for ERTMS to be at the heart of a digital rail system, taking into account that a transition period of 18 years (2022-2040) for class B decommissioning will be also established.

Nevertheless, UNIFE also stresses the importance of strong coordination between Member States when proceeding with the so-called decommissioning. UNIFE also wonders what will happen on the non-TEN-T parts of the network, and whether class B systems will continue to coexist with ERTMS.

**Urban nodes (Articles 40, 41)**

UNIFE applauds the fact that the proposal gives proper consideration to urban nodes. In fact, the rail sector agrees that the further integration of urban nodes into the TEN-T network is crucial as rail is still missing a significant number of last mile infrastructure for freight and multimodal connections for passengers.

Furthermore, the rail industry supports the new proposal will require that 424 identified cities develop by 2025 a Sustainable Urban Mobility Plan (SUMP) that includes measures to integrate the different modes of transport and to promote zero-emission mobility. UNIFE calls on the Commission to seek the highest level of ambition by establishing mandatory targets for the deployment and/or extension of infrastructure for urban rail (light rail, metro and tram systems) in the SUMPs.

Notably, UNIFE expects recharging points and hydrogen refuelling stations to be deployed along the urban nodes of the Core and Comprehensive TEN-T Networks as well as within multimodal freight centres in the urban nodes, in order to potentially enable connections with rail and inland shipping. UNIFE is a vocal supporter of the concept of “urban nodes” along the TEN-T Core Network. Urban nodes, at the crossroads between long-distance and metropolitan mobility, represent the strongest business case for the deployment of alternative fuels infrastructures, and they are also crucial to foster multimodality, with rail transport playing a central role for both passenger and freight.

Given the good experience with climate earmarking in the 2021-2027 funding programming including under NextGenerationEU, UNIFE calls on the Commission to establish at least 75% climate spending earmarking in the SUMPs in order to assure that green investments are significantly reflected in these plans. Furthermore, the Commission must also ensure that Member States allocate significant funding resources to this task, notably, under those offered under the European Regional Development Fund (ERDF). Finally, the rail industry also calls on the Commission to allocate funding under the future EU Social Climate Fund to support the SUMPs with the objective of promoting zero-emission urban rail transport.

**Alternative fuels infrastructure for the rail network (Articles 14, 15, 16, 18)**

Rail is by far the greenest mode of mass transportation and is the only mode to both steadily improve its energy efficiency while increasing capacities. However, as of today only 54%3 of the current European rail network is electrified. Meaning that there remain a significant number of diesel trains and locomotives in service. Considering that the life cycles of rail industry assets are long, for example, several decades for rail rolling stock, urgent decarbonisation measures need to be put in place now to support deployment of alternative fuels infrastructures for rail, especially for those lines that are not mandated to be electrified under the TEN-T Network.

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UNIFE welcomes that Art. 15 and Art. 16 on transport infrastructure requirements for rail for the comprehensive network and core and extended core respectively incorporate the exception whereby “isolated networks are exempted from requirements such as electrification and that at the request of a Member State [other TEN-T sections than those of the isolated networks], in duly justified cases, other exemptions may be granted by the Commission in respect of the requirements referred to”, notably the electrification one. It’s also reflects the coherence with the current eligibility funding rules under CEF.

Furthermore, UNIFE positively observes that Art. 19 (g) on additional priorities for railway infrastructure development explicitly mentions that attention shall be given to “developing innovative alternative fuels technologies for railways, such as hydrogen for sections that are exempted from the electrification requirement”. However, UNIFE believes that more attention must be paid to the overall decarbonation of rail operations, through the extension of the electrified network and, where electrification is not feasible, more ambitious requirements of alternative fuels infrastructure should be established. This is absolutely needed because due to the long-life cycle of rail rolling stock, a diesel train or locomotive that is ordered today will still be there in 2050 and beyond. Therefore, if Europe wants to decarbonise the transport sector and rail by 2050, it needs to start now.

Based on this TEN-T proposal and in connection with the proposal on AFIR, UNIFE believes that the potential to further decarbonise the rail sector with the support of alternative fuels as a complement of overhead line electrification is not properly considered. In this sense, UNIFE regrets that while Art. 20 on infrastructure components for inland waterway, Art. 24 for maritime, Art. 28 for road, and Art. 32 for air transport infrastructure respectively include “infrastructure necessary for the production and supply of alternative fuels as defined in Regulation (EU) […] [on the deployment of alternative fuels infrastructure]”, the same provision is missing in Art. 14 on infrastructure components for rail. This would even contradict Recital (57) which outlines the need for “adequate and concerted deployment of requirements [for the alternative fuel infrastructure rollout] across Europe for each transport mode […] in order to obtain the benefits of the network effect and to make efficient long-range trans-European transport operations possible”.

This is particularly relevant observing that sustainability is now the first listed objective on the new proposed TEN-T Regulation, (Art. 4 a) and not the fourth as in the previous case. Furthermore, it includes the promotion of zero-emission mobility in line with the relevant Union CO2 reduction targets (all transport modes) and including by further developing a long-distance rail passenger network at high speed and a fully interoperable rail freight network.

**Innovative technologies on the TEN-T rail network (Articles 19, 44)**

The strategic dimension of TEN-T also lies on the fact that it sets standards and requirements to be met along its entire network, and they include smart and innovative components to facilitate efficient infrastructure use and high-quality services. In fact, in the SSMS, the Commission announced that it will “drive the deployment of innovative and sustainable technologies in transport” and mentions the importance of “tomorrow’s deployment, through instruments like the Connecting Europe Facility (CEF), the Cohesion Fund, the European Regional Development Fund or InvestEU”.

In this respect, UNIFE has called the Commission on numerous occasions to reflect and showcase the activities of the Shift2Rail JU and its successor programme Europe’s Rail in the further deployment of the network, in order to leverage the potential of R&I in the TEN-T network.

Therefore, UNIFE welcomes that Art. 19 paragraph e incorporates the following provision whereby attention shall be given to “developing and deploying innovative technologies for railways, building in particular on the work of the Shift2Rail and Europe’s Rail Joint Undertakings, notably automatic train operation, advanced traffic management, and digital connectivity for passengers based on ERTMS and digital automatic couplings as well as 5G connectivity”.

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Digital infrastructures should also be at the heart of transport infrastructure policy at EU level. Facilitating EU wide deployment of innovative transport solutions will also require a strong digital infrastructure policy to be applied at the transport sector. In this sense, Gigabit connectivity (5G and 6G) can play a disruptive role. In fact, there are several areas where fifth-generation connectivity can enable significant progress for rail transport operations. UNIFE acknowledges that 5G technology will contribute to the development of the successor of GSM-R (railways telecommunication system), namely FRMCS – the Future Railway Mobile Communication System. FRMCS will be a game changer for the roll-out of the European Rail Traffic Management System (ERTMS) as well as Automatic Train Operations (ATO). In this particular point, UNIFE welcomes that the CEF digital component will support the development of 5G transport corridors including for the rail network.

The rail industry will remain strongly committed to advance on R&I innovative technologies for the benefit of Europe’s rail system by working together with the rail sector and the European Commission, including through the new Europe’s Rail Joint Undertaking and supporting their deployment on the TEN-T Network.

Nevertheless, UNIFE questions the reference of hyperloop in Art. 44 as there are already existing and market ready zero-emissions alternative fuels solutions for decarbonising transport. It is therefore not justified to make a distinguished reference to hyperloop.

**Cybersecurity (Article 46)**

UNIFE welcomes that the proposal requests that Member States shall improve the security and the resilience of the transport infrastructure, and that in particular, when implementing projects Member States shall take into consideration cyber-security and resilience of infrastructure, with particular attention to cross-border infrastructure.

In this sense, UNIFE considers extremely important to ensure regulatory consistency as a key objective of the NIS 2 Directive proposal given the envisaged scope expansion and concurrent legislative proposals on cyber-security or containing specific cyber-security requirements. Thus, horizontal and sectoral legal instruments should be sufficiently aligned, and regulatory overlaps should be avoided. Clear jurisdiction rules for all entities that fall under the scope of the NIS 2 Directive proposal shall be defined. Considering the nature of the TEN-T – cross-border priority transport networks it is essential to avoid ambiguity as to which Member State is allowed to enforce the obligations.

Furthermore, even though cyber security will be slightly addressed under Europe’s Rail, more EU funding outside of the Europe’s Rail Joint Undertaking is needed for railway research and innovation to ensure that cybersecurity is properly addressed, as it requires constant innovation to keep up with evolving threats.

**Public Procurement (Article 47)**

UNIFE welcomes Article 47 on “Risks to security or public order”, which is a new provision and proves the growing awareness of potential risks linked to certain foreign State-owned or controlled entities.

In particular, UNIFE welcomes the fact that Member states shall notify the participation of a third country undertaking in their projects with a view to assess the impact on security or public order in the EU, and that the Commission may issue an opinion when this constitutes a risk. UNIFE stresses the importance that Member States effectively “take utmost account of the Commission's opinion and provide an explanation to the Commission if its opinion is not followed”.

Furthermore, UNIFE believes that the TEN-T policy should be used as an opportunity for the EU to incentivise Member States to swiftly implement the 2014 EU public procurement framework. More particularly, UNIFE calls on the European Commission and Member States to ensure that the TEN-
T policy promotes the “Most Economically Advantageous Tender” (MEAT) principle, understood as the Best-Price Quality Ratio, in rail procurement. Indeed, through the choice that contractors can make to favour more qualitative, social and environmental criteria (including life-cycle cost approach), public procurement is an instrumental driver for deploying smart, sustainable and innovative technologies on the TEN-T network. And because contractors can already decide to reject bids if more than 50% of the product value is added outside the EU (Article 85 of Directive 2014/25/EU), public procurement can also be used as a lever to foster European value and maintain industrial jobs within Europe.

**Funding**

UNIFE supports the introduction of the new 2040 deadline linked to the completion of the new concept of the extended core network and the full deployment of ERTMS. We believe these new ambitious measures will contribute to completing the TEN-T by 2050. Nevertheless, our industry alerts that if no significant funding is allocated to this endeavour, achieving the desired targets will prove challenging. In this sense, the Commission estimates that the largest part of investments is estimated to originate from public funding (national public funds, EU funds) and would amount to €244.2 billion over 2021-2050.

As possible and suitable funding support, UNIFE suggests the Commission to increase Connecting Europe Facility (CEF) transport related funding for rail to at least 80% of the total envelope for 2021-2027, i.e. to €20.6 bn out of the total €25.8 bn. This 10% increase compared to the 2014-2020 allocation (which accounted to 70%, i.e. more than €16 bn) will significantly contribute to the full deployment of ERTMS and the completion of the extended core network within the 2040 deadline, especially those cross-border sections where Member States are always more reluctant to invest national resources.

Furthermore, given the significant funding allocated to rail infrastructure including for the TEN-T Network within Member States’ National Recovery Plans (NRPs) (i.e. more than €40 bn), the tight deadline for the commitment of funds (2023) and its subsequent implementation (2026), UNIFE supports the Commission to increase and facilitate further synergies between CEF and funding from the NRP and the Cohesion Policy Programmes. Particularly for Cohesion funding, UNIFE calls on the Commission to assure that Member States prioritize sustainable transport funding including for rail within their Operational Programmes. According to EC data, over the last programming 2014-2020, Cohesion Policy funds have injected €18 billion in rail projects across the EU, representing 27% of all Cohesion Policy investments in the transport sector. Hence, in the current programming 2021-2027, it is imperative that the Commission assures that Member States allocates at least 50% of the related transport cohesion funding to rail. In this sense, Member States count with over €300 bn to make Europe greener, smarter, and more connected. This is even more relevant when the rules governing these funds mandate a clear 30% budget marketing for climate action, where rail related investments account for 100% contribution to tackling climate change.

**Conclusion**

UNIFE congratulates the European Commission for its efforts in revising the landmark TEN-T Regulation. Together with the rail sector, the industry agrees that the revision is timely and necessary to achieve the European Green Deal’s ambitious climate targets, wand to help achieve a 55% reduction in transport emissions by 2030 and 90% by 2050.

To make the revision a real success and make rail the backbone of sustainable mobility in Europe, UNIFE calls on the European Commission to:

- Allocate significant financial envelopes to be dedicated to TEN-T implementation at EU, national and regional level and keeping in mind the important synergies of CEF, Cohesion Policy Funds and National Recovery Plans for boosting rail investments.
• Keep the 2030, 2040 and 2050 completion as irrevocable mandatory targets, respectively for the Core, extended Core and the Comprehensive Networks.

• Clarify the compliance requirement with the Interoperability Directive, considering the frequency of changes in the Technical Specifications for Interoperability. In addition, carefully consider the economic impact of further changes in the Technical Specifications for Interoperability (TSIs) and plan for transition rules in line with the asset life in the industry.

• Provide flexibility in the technical compatibility criteria set in articles 15 and 16 for rail service facilities and rail access routes and last mile rail connections (point c) and d) of article 14) to avoid mandating investments with no operational benefits.

• Further increasing the level of ambition and further facilitating the uptake and deployment of alternative fuel infrastructure for the rail network, in the cases where direct use of electrification is not possible.

• Advance on the deployment of innovative technologies for railways, building in particular on the work of the Shift2Rail and Europe’s Rail Joint Undertakings, notably automatic train operation, advanced traffic management, and digital connectivity for passengers based on ERTMS and digital automatic couplings as well as 5G connectivity.

• Promote the implementation of the MEAT principle in rail procurement and maintain a strong mechanism to evaluate risks to security and public order in case of investment from third country actors and entities on TEN-T infrastructure.