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Proposal for a

REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

**on Union guidelines for the development of the trans-European transport network,
amending Regulation (EU) 2021/1153 and Regulation (EU) No 913/2010 and repealing
Regulation (EU) 1315/2013**

(Text with EEA relevance)

{SEC(2021) 435 final} - {SWD(2021) 471 final} - {SWD(2021) 472 final} -
{SWD(2021) 473 final}

EXPLANATORY MEMORANDUM

1. CONTEXT OF THE PROPOSAL

• Reasons for and objectives of the proposal

This legislative proposal for the revision of Regulation (EU) 1315/2013 – Union guidelines for the development of the trans-European transport network (TEN-T) is a key action of the European Green Deal and the Sustainable and Smart Mobility Strategy. The aim of the TEN-T Regulation is to build an effective EU-wide and multimodal network of rail, inland waterways, short sea shipping routes and roads which are linked to urban nodes, maritime and inland ports, airports and terminals across the EU. The problems addressed by the revision are insufficient and/or incomplete TEN-T infrastructure standards and a lack of integration of standards for alternative fuels infrastructure on the TEN-T with negative impacts on climate and environment. Secondly, the TEN-T network suffers from capacity bottlenecks and an insufficient network connectivity to all regions that hamper multimodality. Thirdly, the insufficient safety and reliability of the TEN-T infrastructure needs to be addressed. Finally, the governance instruments are inadequate compared to new needs and the TEN-T network design needs a review to increase coherence with other policies.

The TEN-T revision thus aims at reaching four main objectives. Firstly, it aims at making transport greener by providing the appropriate infrastructure basis to alleviate congestion and reduce greenhouse gas (GHG) emissions and pollution of air and water by making each mode of transport more efficient and by enabling increased transport activity by more sustainable forms of transport. It aims in particular to facilitate an increase in the share of rail, short sea shipping and inland waterways in view of a more sustainable modal composition of the transport system and consequently to reduce its negative externalities. Secondly, it aims at facilitating seamless and efficient transport, fostering multimodality and interoperability between the TEN-T transport modes and better integrating the urban nodes into the network. Removing bottlenecks and missing links, and improving multimodality and interoperability in the European transport system will contribute to the completion of the internal market. Thirdly, it strives to increase the resilience of TEN-T to climate change and other natural hazards or human-made disasters. TEN-T must be resilient to the potential adverse impacts of climate change in order to protect public investments and safeguard their continued usability in the new climate; and they should support climate-neutrality by integrating the costs of greenhouse gas emissions in the cost-benefit analysis. Last but not least, it points at improving the efficiency of the TEN-T governance tools, at streamlining the reporting and monitoring instruments and at reviewing the TEN-T network design.

With this revised TEN-T policy we should seek to build a reliable, seamless and high quality trans-European transport network which ensures sustainable connectivity throughout the European Union without physical gaps, bottlenecks or missing links by 2050. This network will contribute to the good functioning of the internal market, to the economic, social and territorial cohesion of the EU territory and to the European Green Deal objectives. It should be gradually developed in steps, with intermediate deadlines in 2030 and 2040.

This initiative is part of the Commission Work Programme 2021 under Annex I (new initiatives).

- **Consistency with existing policy provisions in the policy area**

As the main pillar of EU transport infrastructure policy, the TEN-T Regulation acts as enabler and also depends on complementary policies. The standards and requirements set in the TEN-T Regulation are directly connected with the relevant objectives and needs in other transport sectors/fields and thus with other more sector-specific legislations. This means, for example, that the TEN-T rail infrastructure – for ensuring seamless cross-border transport and mobility – has to comply with interoperability legislation set in railway policy. Similarly, TEN-T road infrastructure has to take up and comply with EU legislation on road safety. The implementation of sectoral policies also needs a strong TEN-T Regulation framework since the TEN-T provides the infrastructure network for the implementation of other sectoral measures or other pieces of legislation, some of which however go beyond the TEN-T.

The TEN-T Regulation performance on indicators such as those related to modal shares, better service quality, the uptake of recharging/refuelling infrastructure depends on coordinated efforts with related policy fields. This particularly relates to the synergies between TEN-T and the deployment of alternative fuels infrastructure (AFIR proposal) as well as TEN-T and Intelligent Transport Systems (ITS), since both are intrinsically dependent on each other. For instance, the AFIR regulates the provision of charging/fuelling points on the TEN-T whilst the TEN-T Regulation provides the infrastructure basis for their wide deployment in a European network perspective. Similarly, the ITS regulates the provision of intelligent transport systems on the TEN-T, as part of a broader package of measures. Both AFIR and ITS need a definition of the TEN-T for their implementation (i.e. a geographical scope of application), which is provided by the maps contained in the TEN-T Regulation. These considerations also apply to other initiatives which are part of the Sustainable and Smart Mobility Strategy action plan, such as the revision of the Rail Freight Corridor Regulation, the revision of the urban mobility package, or the NAIADES III Action Plan. The TEN-T Regulation will define the alignment of the European Transport Corridors that shall replace the Rail Freight Corridors and Core Network Corridors. This will ensure coherence in the network development and will contribute to build synergies between the infrastructure and operational aspects of the network.

- **Consistency with other Union policies**

The European Green Deal, adopted by the European Commission in December 2019, puts climate action at its core, by setting an EU climate neutrality objective by 2050. In the domain of transport, the European Green Deal calls for a 90% reduction in greenhouse gas emissions from transport in order for the EU to become a climate-neutral economy by 2050, while working towards the zero-pollution ambition.

Furthermore, the TEN-T is closely linked to the trans-European networks policies in the fields of energy and telecommunications and provisions to exploit synergies between the three policies are enshrined in the legislation. Similarly, the TEN-T is also closely linked to maritime policy, i.e. with maritime transport being one of the key sustainable blue economy sectors¹.

In terms of EU funding and financing, the TEN-T Regulation is directly linked to the Regulation of the Connecting Europe Facility (CEF) as it defines the projects of common interest that are eligible under CEF. In addition, the TEN-T infrastructure is largely funded by the European Structural and Investment Funds (ESIF) and since recently also through the Recovery and Resilience Fund (RRF). Finally, TEN-T is fully aligned with EU environmental

¹ Communication on a new approach for a sustainable blue economy in the EU, COM(2021)240

and climate policies such as the Biodiversity Strategy and legislation, including the Water Framework Directive and the Birds and Habitats Directives and the EU strategy on adaptation to climate change².

2. LEGAL BASIS, SUBSIDIARITY AND PROPORTIONALITY

• Legal basis

The Treaty on the Functioning of the European Union (TFEU) (Articles 170-172) stipulates the establishment and development of trans-European networks in the areas of transport, telecommunications and energy infrastructures³. The Union shall aim at promoting the interconnection and interoperability of national networks as well as access to such networks. It shall take account in particular of the need to link islands, landlocked and peripheral with the central regions of the Union (Article 170 TFEU). For this purpose, the Union shall establish a series of guidelines covering the objectives, priorities and broad lines of measures envisaged in the sphere of trans-European networks. These guidelines shall identify projects of common interest, shall implement any measures that may prove necessary to ensure the interoperability of the networks, in particular in the field of technical standardisation and may support projects of common interest supported by Member States. Furthermore, the Union may also contribute, through the Cohesion Fund set up pursuant to Article 177, to the financing of specific projects in Member States in the area of transport infrastructure. To ensure interoperability of networks cooperation with third countries is equally foreseen (Article 171 TFEU).

• Subsidiarity (for non-exclusive competence)

The TFEU defines that the trans-European networks shall enable citizens of the Union, economic operators and regional communities to derive full benefit from an area without internal frontiers. They shall also take account of the need to strengthen economic, social and territorial cohesion of the Union and to promote its overall harmonious development.

TEN-T policy is thereby, by its nature, a policy that extends beyond Member States borders since it focusses on a single European network scheme across borders. Such European wide network can obviously not be established by one Member State alone. If Member States developed infrastructure purely on their own, national interests would often outweigh the European interest. As such, the benefits of a European sustainable and high quality transport network would be foregone. In this case, it would be likely that issues of cross-border connectivity and interoperability would also not be sufficiently addressed since intra-national connections are mostly prioritised by Member States even if cross-border projects are essential to exploit the benefits of the entire network and to remove bottlenecks which generate congestion. This would not only lead to the risk of a lack of seamless travel connectivity across Europe, but also lead to possible incoherence of national planning approaches. In return, different standards and interoperability requirements in different EU Member States would hamper the seamless transport flows throughout the EU and even increase costs for transport users. Overall, a seamless TEN-T without physical gaps, integrating intelligent and innovative solutions is key to facilitating the internal market, increasing cohesion and contributing to the objectives of the European Green Deal.

² Forging a climate-resilient Europe – the new EU Strategy on Adaptation to Climate Change, COM(2021)82 final

³ Treaty on the Functioning of the European Union, Title XVI, Trans-European Networks (Articles 170-172)

Since its establishment as an EU policy in 1993, the added value of TEN-T policy overall has always been strongly affirmed by Member States, regions, cities and industrial stakeholders. The EU added value of TEN-T has also been one of the main conclusions of the evaluation of the current TEN-T Regulation. Indeed, concentrating efforts towards the creation of a common, Europe-wide transport network is clearly acknowledged as a vision whose benefits go beyond isolated national action. Ensuring a common and coherent EU-wide basis for the identification of ‘projects of common interest’ and, correspondingly, for the alignment of planning and implementation efforts of a wide range of actors is a clear and widely recognised added value of TEN-T.

This also applies to the dimension of urban nodes as it is important that urban traffic is well connected with interregional and international traffic. Indeed, the role of urban nodes on the TEN-T goes beyond the local level, as transport activities on the TEN-T start and/or end in such nodes, or transit them, requiring good coordination between the different levels in order to avoid bottlenecks.

However, urban mobility is and shall remain a policy mainly under the remit of the Member States (local authorities). EU action should remain limited to aspects of urban mobility which are connected with interregional and international traffic. This also accounts for the maintenance of infrastructure: while maintaining infrastructure is and will remain the main responsibility of Member States, it is essential to guarantee through minimum rules in the TEN-T Regulation that the TEN-T will continue to provide a high quality of services to citizens and businesses.

- **Proportionality**

As detailed in chapter 7 of the Impact Assessment accompanying this proposal none of the policy options goes beyond what is necessary to reach the overall policy objectives. The proposed intervention incentivises a shift of transport volumes to more sustainable modes of transport necessary to deliver on the increased climate ambition for 2030 and the overall objective of reaching climate neutrality by 2050. The Policy Options are designed to create a coherent policy framework and a coherent, high standard transport network as the basis for other sectoral policies to deliver on their objectives. They are designed to avoid disproportionate impacts on public authorities, operators of infrastructure and mobility service providers, notably by building on and further developing a well-established governance system. This has been fully demonstrated in the evaluation of Regulation (EU) 1315/2013 and the baseline analysis underpinning the impact assessment for the revision of that Regulation. Thus, they fully respect the principle of proportionality.

- **Choice of the instrument**

Since this is a proposal for revising an existing Regulation it seems legitimate to keep the status of the instrument as it is.

3. RESULTS OF EX-POST EVALUATIONS, STAKEHOLDER CONSULTATIONS AND IMPACT ASSESSMENTS

- **Ex-post evaluations/fitness checks of existing legislation**

The evaluation of the TEN-T Regulation (SWD(2021)117final)⁴ concluded that the TEN-T provides all relevant actors (i.e. Member States, regions, cities, transport industry, infrastructure managers of all transport modes, users) with a common policy framework which works towards the gradual completion of the common and consistent European transport infrastructure network. As such, it adds a European perspective to national infrastructure planning and addresses needs and benefits beyond single national approaches. However, the evaluation also concluded that efforts need to be stepped up in order to reach new political targets. Indeed, since the establishment of the TEN-T Regulation in 2013 the policy context has changed significantly, particularly through the adoption of the European Green Deal and the Sustainable and Smart Mobility Strategy as well as the Zero Pollution Action Plan. The links between the conclusions of the ex-post evaluation, including the shortcomings identified, and the proposal are presented here below:

Main conclusions of the ex-post evaluation	Proposal
Conclusions on relevance	
All four specific objectives of the TEN-T Regulation remain relevant, are equally important and complementary to each other.	The proposal maintains and develops the specific objectives of the Regulation further
The design structure as well as the completion deadlines of 2030 and 2050 have proven their appropriateness.	The proposal broadly maintains the network structure and the completion deadlines but adds a new intermediate deadline (2040) to ensure a stepwise approach toward 2050.
For the specific objectives “efficiency of infrastructure development to facilitate the internal market” and “social, economic and territorial cohesion”, there is a strong need to advance on requirements enhancing the quality of the TEN-T infrastructure.	The proposal aims to increase the quality of the TEN-T and ensure that this quality is preserved over the lifetime of the infrastructure. Further measures are introduced to advance on interoperability and accessibility of the network.
For the specific objective “sustainability”, the lack of appropriateness to enable decarbonisation in line with the objective of the European Green Deal needs to be overcome. The reduction of transport emissions by 90% by 2050 cannot be achieved without a proper TEN-T allowing for greener transport.	The proposal reinforces the requirements in line with the needed contribution to the objectives of the European Green Deal for all transport modes.
For the specific objective “increasing user benefits”, the TEN-T Regulation should be advanced to strengthen the identification, combination and implementation of projects from the perspective of integrated door-to-door user services. This current lack of appropriateness seems to be particularly evident in the passengers’ sector.	In the proposal, measures are defined to strengthen the service and user perspective of the TEN-T especially in relation to passenger transport.
Complementarity between core and comprehensive network could be strengthened to help overcoming remaining accessibility and connectivity gaps and ensuring the broadest	The proposal defines measures targeted at an alignment of standards and requirements between the two network layers

⁴ Evaluation of the Regulation (EU) N° 1315/2013 on Union Guidelines for the development of a trans-European transport network, SWD (2021) 117 final of 26 May 2021

Main conclusions of the ex-post evaluation	Proposal
possible and most effective coverage of new infrastructure quality parameters.	(comprehensive and core networks) in fields such as railway infrastructure, alternative fuels or urban nodes.
Conclusions on effectiveness	
The TEN-T Regulation, overall, has been very effective in identifying thousands of projects on the basis of a single Europe-wide policy framework.	The framework for identifying projects on the network is maintained in the proposal.
However there remain problems of delays for a number of projects caused by complex preparatory procedures, remaining divergences between agreed European objectives and national infrastructure and investment planning or limited EU level governance tools.	The proposal defines measures to ensure alignment of national interests and responsibilities with TEN-T objectives, while respecting subsidiarity. ⁵
TEN-T implementation could be further enhanced – especially in the light of the new challenges and objectives (decarbonisation, digitalisation and increasing risks of unforeseen crisis events)	The proposal defines measures further strengthening existing EU instruments (e.g. core network corridors, work plans, implementing decisions of the Commission). Furthermore it defines measures targeted at improving the resilience of the network.
The instrument of the core network corridors, including the European Coordinators, has found to be both highly relevant and effective.	The proposal further develops and extends the corridor concept and strengthens the role of the European Coordinators
Conclusions on efficiency	
In relation to the reporting and monitoring obligations set out in the TEN-T Regulation there is some room for streamlining and strengthening these tools.	The proposal defines measures streamlining monitoring instruments and facilitating reporting.
The coordination between Core Network Corridors and Rail Freight corridors has led to certain efficiency gains but there is untapped potential in a better alignment between the two instruments in terms of investment planning and project identification.	The proposal ensures the geographical alignment of both corridor instruments into European Transport Corridors and further strengthen the coordination between the two instruments.
Conclusions on coherence and coordination	
Achieving the objectives of the European Green Deal would require that the TEN-T infrastructure is fully aligned with the provisions resulting from the other policy initiatives in the fields of alternative fuels (AFIR), FuelEU Maritime and the ReFuelEU Aviation.	The proposal ensures full alignment with other policy initiatives on alternative fuels.
Need to enhance coherence with the challenges of the digital transition and other new technologies	The proposal ensures full alignment with other policy initiatives on intelligent transport systems.
Conclusions on EU added value	
The added value of TEN-T policy overall has always been strongly affirmed by Member States, regions, cities and industrial stakeholders. TEN-T policy also attracts increasing interest outside the EU, notably in neighbouring States but also in other regions of the world, for example in relation to the extension of land transport connections to Asia.	The approach to third and neighbouring country involvement is maintained. The vision of the EU on the extension of the TEN-T to third countries is addressed in a separate communication of the Commission

⁵ The question of complex and lengthy preparatory procedures is also addressed through Directive (EU) 2021/1187 of 7 July 2021 of the European Parliament and of the Council on streamlining measures for advancing the realisation of the trans-European transport network (TEN-T)

Main conclusions of the ex-post evaluation	Proposal
Ensuring a common and coherent EU-wide basis for the identification of ‘projects of common interest’ and, correspondingly, for the alignment of planning and implementation efforts of a wide range of actors is a clear and widely recognised and would not have been possible without Regulation (EU) 1315/2013.	The TEN-T framework for a harmonised planning and implementation of the network has been maintained and further developed in the proposal.

- **Stakeholder consultations**

The following stakeholder consultations were carried out during the evaluation phase:

Open Public Consultation: the Commission as the first step of the formal revision process between the 24th of April and the 17th of July 2019 carried out an Open Public consultation. The questionnaire was available in all official EU languages. This consultation generated more than 600 responses from a wide range of stakeholders, including public authorities (from international to local), infrastructure managers, commercial transport users, civil society and citizens. Importantly, more than 150 stakeholders - including a number of Member States and key European Associations - used this initial step already to submit position papers highlighting strengths and weaknesses of the policy and – notably – its future opportunities and needs. The OPC results were analysed and fed into the overall evaluation process.

Targeted stakeholder consultations: the approach to consult expert stakeholders designed by the consultant consisted of three main elements: online surveys, interviews and case studies on issues of specific importance. The aim of the targeted consultations was to collect data from specific stakeholder groups at local, national and EU level. Generally, stakeholder views showed a very coherent perception of views and no noteworthy distinction could be found between different stakeholder groups, unless otherwise specified in the evaluation.

Online surveys: A survey questionnaire has been implemented between 20 January and 16 March 2020 in order to collect data on stakeholders’ perceptions and experiences with the TEN-T Regulation, its implementation and outcomes to date, and their views on recommendations for future EU policy developments in this area. Overall, more than 2000 stakeholders with expertise in the subjects at stake have been contacted for online surveys. In total 198 valid responses were received.

Interviews: In total 44 stakeholders have been interviewed with cross-sections of respondents to the survey and representatives of relevant stakeholder groups. The main aim of these semi-structured interviews was to gain in-depth insights into the implementation of the TEN-T Regulation, progress achieved and success factors/challenges from the perspective of different stakeholders. The global interviews complemented the desk research, open public consultation and global survey to explain the quantitative data obtained and fill in any gaps, support the thematic case studies, and elaborate on key issues where data from other sources were unclear or needed further explanation.

Case studies: In addition to the general evaluation of the TEN-T Regulation nine thematic case studies on selected TEN-T policy areas have been performed. They were undertaken in areas in which the Commission’s work during the implementation phase of the TEN-T Regulation has produced evidence that there might be a lack of relevance, both in light of developments over the last years and of foreseeable future developments. Three online workshops with stakeholders comprising EU officials, transport stakeholders and social

partners have been developed and implemented to validate the findings, and to discuss conclusions and recommendations of the case studies which related to urban mobility, (digitalisation) and innovation and new technologies.

The following stakeholder consultations were carried out during the impact assessment phase:

An **additional Open Public consultation** was carried out during the impact assessment phase. It was undertaken between 10 February and 5 May 2021 on the EU Survey website. The consultation was divided into five sections, starting with a general question on the Regulation, followed by questions on additional measures that might be taken in, and the potential focus of, an amended Regulation. The consultation received 496 responses in total. The main issues covered were:

- Measures enabling the decarbonisation and the reduction of air pollutant emissions in the transport system;
- Measures related to infrastructure quality and resilience;
- Measures related to innovation, digitalisation and automation; and
- Potential focus areas for the policy options.

All stakeholder input was used in the process of developing the proposal. While the input received during the evaluation phase was in particular used to define and refine the different measures to be further analysed in the impact assessment, the input received in the impact assessment phase was important to validate the measures and options chosen and thus the approach for the revision of the Regulation.

• **Collection and use of expertise**

Court of Auditors

The Court of Auditors has carried out several audits and reviews on policies related to transport infrastructure and TEN-T, in particular on the European high speed rail network, on maritime transport in the EU, on rail freight transport in the EU, as well as on EU transport infrastructures⁶. Wherever applicable and in line with the replies it has given to the respective reports, the Commission has considered the relevant recommendations in the preparation of the present proposal.

Evaluation

The evaluation of Regulation (EU) 1315/2013 on Union Guidelines for the development of the trans-European transport network started in September 2018 and built in particular on the support study for the TEN-T evaluation by Coffey consultants⁷ and on the support study for the TEN-T policy review, by Panteia⁸. While the former was addressing the provision of the TEN-T Regulation in its entirety and collected information from all concerned stakeholders

⁶ Special report 19/2018, Special report 23/2016, Special report 08/2016, Special report 10/2020, but see also Review 09/2018 and Special report 19/2019.

⁷ Support study for the evaluation of Regulation (EU) 1315/2013 on Union Guidelines for the development of the trans-European transport network. <https://op.europa.eu/en/publication-detail/-/publication/1f938a68-4c20-11ec-91ac-01aa75ed71a1/language-en/format-PDF/source-243058839> (and related case studies)

⁸ Support study for the TEN-T policy review, concerning relevant national plans and programmes in member states. <https://op.europa.eu/en/publication-detail/-/publication/9beb4836-d55b-11eb-895a-01aa75ed71a1>

and modes of transport the latter was addressed mainly to Member States authorities. A standard triangulation approach was applied to address the evaluation questions, through different angles: desk research, interviews and surveys.

Impact Assessment

The impact assessment has been based on research and analyses done by the Commission. The Commission also contracted an external, independent consultants team (Ricardo Nederland B.V. as leader of the group together with Ricardo-AEA Limited, TRT Trasporti e Territorio srl (TRT) and M-Five GmbH Mobility, Futures, Innovation, Economics (M-FIVE)) to support the impact assessment in specific tasks, i.e. the assessment of the policy options, the comparison of the options, the assessment of the administrative costs as well as the analysis of the open public consultation. The external support study will be published alongside this proposal. In addition, the Baseline scenario has been developed by E3Modelling with the PRIMES-TREMOVE model, drawing on the MIX scenario underpinning the impact assessments of the 'Fit for 55' package. ASTRA and TRUST models have been calibrated on this Baseline scenario by M-FIVE and TRT, respectively.

- **Impact assessment**

To adequately address the objectives of the TEN-T revision, three policy options (PO) have been assessed in terms of their economic, social and environmental impacts. PO1 aims at updating existing TEN-T infrastructure quality requirements and standards and provides for the adequate infrastructural basis for the deployment of alternative fuels and intelligent transport systems. In addition, it includes measures to harmonise and streamline the existing TEN-T monitoring and reporting tools. In terms of TEN-T network, it also includes a review of the transport network and transport nodes. PO2, building upon PO1, represents a step change by introducing new, more ambitious standards for all transport modes as to contribute to decarbonisation, pollution reduction, digitalisation, resilience and safety of the transport infrastructure system. In addition, a better integration of the urban nodes in the TEN-T is ensured through specific requirements to manage traffic of passengers and freight to/from cities. PO3, being the preferred option, accelerates the completion of the TEN-T by advancing the deadline for the completion of certain standards and network sections from 2050 to 2040 whilst keeping the ambitious standards and requirements introduced through PO2. It also ensures a broad and coherent development on the network, translating into a substantial review of the TEN-T network design.

In terms of results PO3 brings significant economic benefits, notably an increase of 0.4% of GDP in 2030, 1.3% in 2040 and 2.4% by 2050 relative to the baseline. This translates into €57 billion increase in GDP relative to the baseline in 2030, €229 billion in 2040 and €467 billion in 2050. Higher investments on the TEN-T also create employment, leading to an estimated 0.1% increase of employment in 2030 relative to the baseline, 0.3% in 2040 and 0.5% by 2050, equivalent to 200,000 additional employed persons in 2030, 561,000 in 2040 and 840,000 by 2050. PO3 also performs well in shifting freight and passenger transport activity to more sustainable modes of transport. The anticipated implementation of a new passenger rail standard (160 km/h line speed), the introduction of the P400 loading gauge (allowing circulation of semi-trailers on railway wagons) as well as the extension of some rail standards from the core to the comprehensive network, coupled with the extension of the latter, is projected to increase rail transport activity. This is also reflected in a higher rail share in the modal split to the detriment of the road sector. Although the modal share of inland waterway and maritime transport stays broadly stable, the implementation of new standards allows the sector to absorb the projected growth of EU27 traffic volumes and of intra-EU maritime traffic. Moreover, the shift from road to less emitting modes enabled by the bundle of

measures included in PO3 are projected to result in CO₂ emissions and air pollution emissions reductions. The reduction in the external costs of CO₂ emissions is estimated at around €387 million relative to the baseline over the 2021-2050 period, expressed as present value, while the reduction in the external costs of air pollution at around €420 million. In addition, improvements of road safety are brought by setting quality standards and related safety features to all network sections above a certain daily traffic threshold reducing the number of fatalities and injured persons. The reduction in the external costs of accidents is estimated at around €3,930 million relative to the baseline over the 2021-2050 period, expressed as present value. The reduction in the external costs of inter-urban road congestion is estimated at around € 2,891 million relative to the baseline over the 2021-2050 period.

In terms of costs the preferred option strikes the best balance between the achieved objectives and the overall implementation costs. The investments to implement all measures under PO3 are estimated at €247.5 billion relative to the baseline, expressed as present value over 2021-2050. In addition, the administrative costs for the private sector are estimated at €8.6 million relative to the baseline, expressed as present value over 2021-2050, and those for the public authorities at €25.4 million. Other impacts, related to noise emissions and potential biodiversity loss, were difficult to quantify since noise impacts strongly depend on the local (traffic) situation and biodiversity on the specific location and characteristics of the infrastructure.

The upgrade of the infrastructure for combined railway transport and of terminals is an important element to ensure that intermodal transport is primarily done by rail, inland waterways or short-sea shipping and that any initial and/or final legs carried out by road are as short as possible. Those infrastructure upgrades will generate opportunities to SMEs even though in some segments also large players exist. Main stakeholders concerned are the railway undertakings in the freight market, the rail freight terminal operators, trucking companies and operators at passenger terminals. In the road sector, improving the rest areas and parking situation for regional and long-distance trucking will benefit the large number of small driver-owned trucking companies, which are actually among the smallest enterprises in the transport domain, as they depend on a dense and quality network of parking areas.

PO3 adds an important dimension to the cohesion objective of TEN-T through the identification of urban nodes and the integration of passenger / freight terminals on the whole EU territory playing a crucial role for regional connectivity. PO3 also stimulates best the resilience and climate change adaptation of the TEN-T infrastructure. Finally, PO3 adds important value to ensure coherence with other policies by reviewing the TEN-T network design (e.g. through the creation of European Transport Corridors, replacing the two existing types of corridors – Core Network Corridors and Rail Freight Corridors).

- **Regulatory fitness and simplification**

This initiative is part of the Commission Work Programme 2021 under Annex I (new initiatives) and is not part of Annex II (REFIT initiatives).

It improves the functioning of the TEN-T policy by increasing the efficiency of the regulatory framework as a whole. On top of that, it clarifies certain requirements and concepts. For instance, the concept of Motorways of the Sea as currently defined in the Regulation has been acknowledged by a large number of experts and project promoters as overly complex. The evaluation of the TEN-T Regulation confirms that it would benefit from simplification and integration in an overarching and integrated concept of the TEN-T covering ports, shipping and all other maritime infrastructure elements for the benefit of the entire ‘European Maritime Space’. Another example is the alignment of the Rail Freight Corridors with the Core

Network Corridors which will allow optimising the instruments and avoid duplication, for example the requirement to draw up investment plans under the Rail Freight Corridor Regulation which should be simply removed as such investment plans overlap with the work plans which are regularly prepared by the European TEN-T Coordinators.

Two further simplifications that will lead to potential cost savings have been identified:

- automated data input into the TENtec system allowing an exchange directly from the data source (Member State, infrastructure manager);
- replacing the biennial work plans of the European Coordinators and the biennial progress reporting on the implementation of the TEN-T by the Member States with a work plan including the priorities for the respective corridor development every four years, with a brief annual status report on the state of implementation of the Corridors, Motorways of the Seas (in future European Maritime Space) and ERTMS.

While the proposal increases the overall implementation costs for authorities, it generates improvements, in particular economic and employment gains and enables more sustainable forms of transport that more than offset the increase in regulatory costs.

- **Fundamental rights**

By setting relevant infrastructure requirements, the proposal will strengthen accessibility for all users, thereby enhancing accessibility for persons with disabilities and with reduced mobility and contributing to gender equality.

4. BUDGETARY IMPLICATIONS

The administrative costs relative to the baseline have been estimated in the impact assessment as being moderate, especially compared with the ambitious revision plans under the preferred policy option. Expressed as present value over 2021-2050, administrative costs for the public authorities have been estimated at €25.4 million (i.e. €15.8 million for the European Commission⁹ and €9.6 million for Member States public authorities). In addition, the largest part of investments is estimated to originate from public funding (national public funds, EU funds) and would amount to €244.2 billion relative to the baseline, expressed as present value over 2021-2050.

5. OTHER ELEMENTS

- **Implementation plans and monitoring, evaluation and reporting arrangements**

The Commission will follow the progress, the impacts and results of this initiative through a set of governance instruments, based on the TEN-T governance, such as the strengthened European Coordinators and their work plans. Monitoring will be further strengthened in the revised Regulation.

The European Coordinators have in this regard been instrumental as they act as ambassadors of TEN-T policy and mediators for all relevant stakeholders that they gather in so called Corridor Fora. This work will be further boosted through a reinforced role of the European

⁹ These costs are an estimation done within the framework of the impact assessment based on past costs and experience. They are not to be understood as being additional costs for the Commission. All appropriations related to TEN-T are fully covered under the Budget of the Connecting Europe Facility (Regulation (EU) 2021/1153).

Coordinators. In addition, each European Transport Corridor and the two horizontal priorities will be supported by dedicated studies which monitor the progress made with regard to the fulfilment of standards, deadlines and priority setting. This is for instance reflected in a very close monitoring of all projects planned or ongoing on the TEN-T (so called “project pipeline” analysis and half-yearly “project implementation reports”). Projects are thereby being assessed in terms of their financial maturity as well as their status in terms of permitting and procurement, so that problems e.g. in terms of delays can be easily spotted and interventions being planned by Commission and/or European Coordinators. The new Regulation will also include the possibility to build more than in the past on implementing acts. They will not only foster the priority setting at national level, but also facilitate the monitoring of progress made on the TEN-T against defined and agreed milestones in those implementing acts. As such, they are also a very solid basis for the monitoring of those projects since regular progress can be checked per milestone and appropriate measures taken in case of delays. When adopting these implementing acts, the Member States concerned also agree to a regular reporting on the progress achieved. In terms of monitoring, the progress of the TEN-T will be monitored in terms of the technical completion of the TEN-T infrastructure with the defined TEN-T standards and against the defined deadlines of 2030, 2040 and 2050. The standards and requirements will thereby constitute the key performance indicators against which the success of TEN-T will be monitored (e.g. percentage of length of rail freight sections that are electrified, cater for 22.5 axle load and for 740 m train length; number of maritime ports with a railway access etc.). Next to it, there is a constant monitoring through the so-called TENtec database, a powerful information system which will allow in future an automated exchange of data directly from the data source (Member State, infrastructure manager) in a timely manner.

- **Detailed explanation of the specific provisions of the proposal**

The structure of the revised Regulation will deviate from the structure of the current Regulation. It will no longer be organised by network layer (core and comprehensive) but by transport mode, which will allow a better understanding of the various requirements. It will include specific requirements and maps for the European Transport Corridors and the new intermediary deadline of 2040. The first chapters of the Regulation explain the overall objectives of the TEN-T and the stepwise approach to complete the network. It will consist of the following main chapters:

Recitals

The recitals will in particular put the focus on the contribution of the TEN-T to the European Green Deal and the objectives of the Sustainable and Smart Mobility Strategy. They furthermore detail the links of the revised TEN-T with other transport policies in the different modes and with policy areas outside of the transport sector e.g. environmental and climate policy, social policy, cohesion policy, foreign policy etc. The recitals furthermore highlight aspects of EU and national infrastructure planning and of funding and financing.

Chapter I: General principles

Chapter 1 lays down the general principles of the TEN-T Regulation. It defines the subject matter and the scope of application of the Regulation. It contains the definitions of the different elements of the Regulation and of the terminology used throughout the text. Furthermore, it introduces the objectives of the Regulation (cohesion, sustainability, efficiency and user benefits) and how they shall be reached. This chapter also provides that the trans-European transport network shall be planned, developed and operated in a resource-efficient way, complying with the applicable EU and national environmental requirements.

The following articles describe the geographical dimension of the network structure and the European Transport Corridors (ETC). Finally, chapter 1 describes the principles of the projects of common interest and of the cooperation with third countries.

Chapter II: General provisions

Chapter 2 contains the general provisions of the Regulation specifying the core, the extended core and the comprehensive network as well as the European Transport Corridors (ETCs) and lays out the prioritisation of measures on the different networks.

Chapter III: Specific provisions

Chapter 3 contains the specific provisions concerning the requirements for each mode of transport addressed by the Regulation with a view to the:

- definition of infrastructure components,
- transport infrastructure requirements for the comprehensive network,
- requirements for the core and extended core network,
- additional priorities.

In addition this chapter contains provisions concerning the requirements of the revision applicable to multimodal freight terminals and urban nodes.

Chapter IV: Provisions for smart and resilient transport

Chapter 4 contains additional provisions with regard to the requirements of the Regulation with a view to ICT systems for transport, sustainable services, new technologies and innovation, safe and secure infrastructure, resilience, investments by third countries, maintenance and project life-cycle as well as accessibility for all users.

Chapter V: Implementation of instruments of European Transport Corridors and horizontal priorities

Chapter 5 concerns the implementation of the European Transport Corridors and of the horizontal priorities (European rail traffic management System and European Maritime Space). It describes the instrument of ETC and the horizontal priorities and contains provisions on how they shall be coordinated and governed. The chapter furthermore contains provisions on the implementation tools e.g. the coordinators work plans and the implementing acts.

Chapter VI: Common provisions

Chapter 6 contains the common provisions of the Regulation with regard to reporting and monitoring obligations, the procedures for updating the network and the principles for engagement with public and private stakeholders. It contains provisions concerning the alignment of national plans with EU transport policy. It furthermore contains provisions regarding the exercise of delegation, the committee procedure, the review of the Regulation, the procedures with regards to delays in implementing the network and the possibility of exemptions. Lastly, it outlines the impact of the Regulation on other legislative acts with a view to the need for their amendment.

Annexes:

The Annexes of the Regulation contain detailed maps of the core, extended core and the comprehensive network, lists of transport and urban nodes in the scope of this Regulation as well as the definition of alignment and maps of the European Transport Corridors. It furthermore contains indicative maps for the neighbouring countries as well as specifications for the requirements for the development of Sustainable Urban Mobility Plans. It also contains an article amending Regulation (EU) 2021/1153 and a correlation table between Regulation (EU) 1315/2013 and this Regulation.

Proposal for a

REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

**on Union guidelines for the development of the trans-European transport network,
amending Regulation (EU) 2021/1153 and Regulation (EU) No 913/2010 and repealing
Regulation (EU) 1315/2013**

(Text with EEA relevance)

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,
Having regard to the Treaty on the Functioning of the European Union, and in particular
Article 172 thereof,
Having regard to the proposal from the European Commission,
After transmission of the draft legislative act to the national parliaments,
Having regard to the opinion of the European Economic and Social Committee¹,
Having regard to the opinion of the Committee of the Regions²,
Acting in accordance with the ordinary legislative procedure,
Whereas:

- (1) The Commission Communication ‘The European Green Deal’³ of December 2019 sets a climate neutrality objective to be achieved by the Union by 2050 as well as a clear objective to reduce net greenhouse gas emissions by at least 55% by 2030, compared to 1990 levels. Those objectives are set as a target in Regulation (EU) 2021/1119 of the European Parliament and of the Council⁴.
- (2) Transport emissions represent around 25% of the Union’s total greenhouse gas emissions, and these emissions have increased over recent years. The European Green Deal therefore calls for a 90% reduction in greenhouse gas emissions from transport in order for the Union to become a climate-neutral economy by 2050, while working towards the zero-pollution ambition⁵.

¹ OJ C [...].

² OJ C [...].

³ Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions ‘The European Green Deal’, COM(2019)640 final.

⁴ Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 (OJ L 243, 9.7.2021, p. 1).

⁵ Commission Communication “Pathway to a Healthy Planet for All EU Action Plan: ‘Towards Zero Pollution for Air, Water and Soil’” of 12 May 2021, COM(2021)400 final.

- (3) The Sustainable and Smart Mobility Strategy⁶ sets out milestones to show the European transport system's path towards achieving the objectives of a sustainable, smart and resilient mobility. It envisages that rail freight traffic should increase its market share by 50% by 2030 and double by 2050; transport by inland waterways and short sea shipping should increase its market share by 25% by 2030 and by 50% by 2050; traffic on high-speed rail should double by 2030 and triple by 2050; at least 30 million zero-emission cars and 80,000 zero-emission trucks should be in operation on Union roads by 2030, and nearly all cars, vans and buses and new heavy-duty vehicles should be zero-emission by 2050; scheduled collective travel under 500 km should be carbon-neutral by 2030 within the Union; by 2030, there should be at least 100 climate-neutral cities in Europe.
- (4) The realisation of the trans-European transport network creates the enabling conditions in terms of infrastructure basis allowing to make all transport modes more sustainable, affordable and inclusive, to make sustainable alternatives widely available in a multimodal transport system and to put in place the right incentives to drive the transition, notably by ensuring a fair transition, in line with the objectives presented in the Council Recommendation (EU) [...] of [...] on ensuring a fair transition towards climate neutrality.
- (5) The planning, development and operation of the trans-European transport network should enable sustainable forms of transport, provide for improved multimodal and interoperable transport solutions and for an enhanced intermodal integration of the entire logistic chain, thereby contributing to a smooth functioning of the internal market by creating the arteries that are necessary for smooth passenger and freight transport flows across the Union. In addition, the network should aim at strengthening economic, social and territorial cohesion by ensuring accessibility and connectivity for all regions of the Union, including a better connectivity of the outermost regions and other remote, rural, insular, peripheral and mountainous regions as well as sparsely populated areas. The development of the trans-European transport network should also enable seamless, safe and sustainable mobility of goods and persons in all their diversity, and should contribute to further economic growth and competitiveness in a global perspective, by establishing interconnections and interoperability between national transport networks in a resource-efficient and sustainable way.
- (6) Growth in traffic has resulted in increased congestion in international transport. In order to ensure the international mobility of passengers and goods, the capacity of the trans-European transport network and the use of that capacity should be optimised and, where necessary, expanded by removing infrastructure bottlenecks and bridging missing infrastructure links within and between Member States and, as appropriate, neighbouring countries, and taking into account the ongoing negotiations with candidate and potential candidate countries.
- (7) The trans-European transport network consists to a large extent of existing infrastructure. In order to fully achieve the objectives of the new trans-European transport network policy, uniform requirements regarding the infrastructure should be established.

⁶ Communication from the Commission to the European Parliament, the Council, the European Economic And Social Committee and the Committee of the Regions 'Sustainable and Smart Mobility Strategy – putting European transport on track for the future', COM(2020)789 final.

- (8) The trans-European transport network should be developed and sustained through the creation of new transport infrastructure, through the maintenance and upgrading of existing infrastructure and through measures promoting its resource-efficient use.
- (9) In the implementation of projects of common interest, due consideration should be given to the particular circumstances of the individual project concerned. Where possible, synergies with other policies should be exploited, for instance with tourism aspects by including, within civil engineering structures such as bridges or tunnels, bicycle infrastructure for cycling paths, including the EuroVelo routes, or with security aspects by including new technologies such as sensors in bridges.
- (10) In order to achieve a high-quality and efficient transport infrastructure across all modes, the development of the trans-European transport network should take into account the security and safety of passengers and freight movements, the contribution to climate change and the impact of climate change and of potential natural hazards and human-made disasters on infrastructure and accessibility for all transport users, especially in regions that are particularly affected by the negative impacts of climate change.
- (11) When planning, procuring and implementing projects of common interest, Member States and other project promoters should give due consideration to Directive (EU) 2021/1187 of the European Parliament and the Council⁷.
- (12) During infrastructure planning, Member States and other project promoters should give due consideration to the risk assessments and adaptation measures that seek to improve resilience, for example to climate change, natural hazards and human-made disasters. By providing further incentives to develop sustainable forms of transport and with the implementation of high-level standards for green transport infrastructure, the realisation of the trans-European transport network will support the “do no significant harm” principle.
- (13) Given the evolution of the Union infrastructure needs and the decarbonisation goals, the Conclusions of the 2020 July European Council, according to which Union expenditure should be consistent with Paris Agreement objectives and the “do no significant harm” principle, within the meaning of Article 17 of the Taxonomy Regulation⁸, projects of common interest should be assessed in order to ensure that TEN-T policy is coherent with transport, environmental and climate policy objectives of the Union. Member States and other project promoters should carry out environmental assessments of plans and projects which should include the “do no significant harm” assessment based on the latest available guidance and best practice. In cases that the implementation of a project of common interest entails a significant harm to an environmental or climate objective, reasonable alternatives should be considered.
- (14) Infrastructure projects under the TEN-T Regulation should be resilient to the potential adverse impacts of climate change through a climate vulnerability and risk assessment, including through relevant adaptation measures. Projects for which an environmental

⁷ Directive (EU) 2021/1187 of the European Parliament and the Council of 7 July 2021 on streamlining measures for advancing the realisation of the trans-European transport network (TEN) (OJ L 258, 20.7.2021, p.1).

⁸ Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment, and amending Regulation (EU) 2019/2088 (Text with EEA relevance) (OJ L 198, 22.6.2020, p. 13).

impact assessment must be carried out should be subject to climate proofing and integrate the costs of greenhouse gas emissions and the positive effects of climate mitigation measures in the cost-benefit analysis. The climate proofing should be undertaken based on the latest available best practice and guidance⁹. This contributes to the integration of climate change-related risks as well as climate change vulnerability and adaptation assessments into investment and planning decisions under the Union budget.

- (15) Member States and other project promoters should carry out environmental assessments of plans and projects according to the relevant legislation in order to avoid or, where avoidance is not possible, to mitigate or compensate for negative impacts on the environment, such as landscape fragmentation, soil sealing and air and water pollution as well as noise, and to protect biodiversity effectively.
- (16) The interests of regional and local authorities, as well as those of the public concerned by a project of common interest, should be appropriately taken into account in the planning and construction phase of projects.
- (17) The definition of the trans-European transport network should be based on a common and transparent methodology and should represent the highest level of infrastructure planning within the Union. It should be multimodal, that is to say it should include all transport modes and their connections as well as relevant traffic and travel information management systems.
- (18) The trans-European transport network should be gradually developed in three steps with the overall aim to realise a multimodal and interoperable European wide network of high quality standards, while respecting the overall Union climate neutrality and environmental objectives: the completion of a core network by 2030, of an extended core network by 2040 and of the comprehensive network by 2050.
- (19) Next to the deadlines of 2030 and 2050 that have already been introduced under Regulation (EU) 1315/2013 of the European Parliament and of the Council¹⁰, an intermediary deadline of 2040 for the compliance of the network with this Regulation should be added for the extended core network that is part of the European Transport Corridors. The same intermediary deadline should also apply for new standards on the core network that have been introduced in addition to the requirements in Regulation (EU) 1315/2013 as to allow for the necessary investments in due time.
- (20) The comprehensive network should be a Europe-wide transport network ensuring the accessibility and connectivity of all regions in the Union, including the outermost regions and other remote, rural, insular, peripheral and mountainous regions as well as sparsely populated areas, and strengthening social, economic and territorial cohesion between them. The requirements for the infrastructure of the comprehensive network should be set in order to promote the development of a high-quality network throughout the Union.
- (21) The comprehensive network should be sufficiently equipped with alternative fuels infrastructure in order to ensure that it effectively supports the transition to zero-

⁹ Commission Notice - Technical guidance on the climate proofing of infrastructure in the period 2021 - 2027 (OJ C 373, 16.9.2021, p. 1).

¹⁰ Regulation (EU) No 1315/2013 of the European Parliament and of the Council of 11 December 2013 on Union guidelines for the development of the trans-European transport network and repealing Decision No 661/2010/EU (OJ L 348, 20.12.2013, p. 1).

emission mobility, in line with the milestones set in the Sustainable and Smart Mobility Strategy.

- (22) In addition to the core network, an extended core network should be defined on the basis of priority sections of the comprehensive network which are part of the European Transport Corridors.
- (23) The core network has been identified on the basis of an objective planning methodology. That methodology has identified the most important urban nodes, ports and airports, as well as border crossing points. Wherever possible, those nodes are to be connected with multimodal links as long as they are economically viable and feasible by 2030. The methodology has ensured the interconnection of all Member States and the integration of the main islands into the core network.
- (24) The core network with a deadline of 2030 and the extended core network with a deadline of 2040 should constitute the foundation of the sustainable multimodal transport network, representing the strategically most important nodes and links of the trans-European transport network, according to traffic needs. They should stimulate the development of the entire comprehensive network and enable Union action to concentrate on those components of the trans-European transport network with the highest European added value, in particular cross-border sections, missing links, multimodal connecting points and major bottlenecks.
- (25) Certain existing standards of the core network should be extended to the extended core and comprehensive network in order to reap full network benefits, to increase interoperability between network types and to enable more activity by more sustainable forms of transport, including through higher digitalisation and other technological solutions.
- (26) Exemptions from the infrastructure requirements applicable to the core, extended core and comprehensive network should be possible only in duly justified cases and subject to certain conditions. This should include cases where investment cannot be justified, or where there are specific geographic or significant physical constraints, for example in outermost regions and other remote, insular, peripheral and mountainous regions or in sparsely populated areas, or for isolated or partially isolated networks.
- (27) The land-side infrastructure network, established through the core network, extended core network and comprehensive network, should integrate with the maritime dimension of the trans-European transport network. To this end, a truly sustainable, smart, seamless and resilient European Maritime Space should be created. It should encompass all maritime infrastructure components of the trans-European transport network.
- (28) The European Maritime Space should be implemented in close cooperation with the European macro-regional and sea-basin strategies which provide a suitable European territorial cooperation framework both at transnational Union level and at cross-border level with third countries.
- (29) The Rail Freight Corridors established on the basis of Regulation (EU) No 913/2010 of the European Parliament and of the Council¹¹ and the Core Network Corridors defined in Regulation (EU) No 1315/2013 are complementary policy instruments,

¹¹ Regulation (EU) No 913/2010 of the European Parliament and of the Council of 22 September 2010 concerning a European rail network for competitive freight (OJ L 276, 20.10.2010, p. 22).

pursuing closely related objectives, in particular to boost sustainable, efficient and safe transport services. Although cooperation has been fruitful on many aspects, in some cases overlapping of activities and needs for a better exchange of information have been identified. Moreover, the Rail Freight Corridors and the Core Network Corridors are not entirely geographically aligned, limiting the possibility for coordination, for example on issues such as the deployment of the infrastructure requirements of the trans-European transport network or the improvement of the quality of railway services. There is therefore an important untapped potential for streamlining, increased effectiveness and synergies.

- (30) As stated in the Sustainable and Smart Mobility Strategy, an integration of the Core Network Corridors and of the Rail Freight Corridors into ‘European Transport Corridors’ is needed to increase synergies between infrastructure planning and the operation of transport. The European Transport Corridors should become the instrument for the development of sustainable and multimodal freight and passenger transport flows in Europe and for the development of interoperable high quality infrastructure and operational performance. As such, they should also be the tool to realise the vision of creating a highly competitive rail network across the Union.
- (31) European Transport Corridors should cover the most important long-distance transport flows and consist of key European transport multimodal axis, based on parts of the trans-European transport network, be multimodal and open to the inclusion of all transport modes covered in this Regulation and cross at least two borders and involve at least three transport modes.
- (32) In order to establish the trans-European transport network in a coordinated and timely manner, thereby making it possible to maximise network effects, Member States concerned should ensure that appropriate measures are taken to finalise the projects of common interest of the core, the extended core and the comprehensive network by the given deadlines 2030, 2040 and 2050 respectively. To this end, Member States should ensure that there is coherence of the national transport and investment plans with the priorities set out in this Regulation and in the work plans of the European Coordinators.
- (33) It is necessary to identify projects of common interest which will contribute to the achievement of the trans-European transport network and which contribute to the achievement of the objectives and correspond to the priorities established in this Regulation. Their implementation should depend on their degree of maturity, on their compliance with Union and national legal procedures and on the availability of financial resources, without prejudging the financial commitment of a Member State or of the Union.
- (34) Projects of common interest to develop the trans-European transport network in line with the requirements set out in this Regulation have European added value, as they contribute to a high-quality, interoperable and multimodal European network, increasing sustainability, cohesion, efficiency or user benefits. The European added value is higher if it leads, in addition to the potential value for the respective Member State alone, to significant improvements of transport connections or transport flows between Member States or between a Member State and a third country. Such cross-border projects should be the subject of priority intervention by the Union in order to ensure that they are implemented.
- (35) Member States and other project promoters should ensure that assessments of projects of common interest are carried out efficiently, avoiding unnecessary delays.

- (36) Projects of common interest for which Union funding is sought should be the subject of a socio-economic cost-benefit analysis based on a recognised methodology, taking into account the relevant social, economic, climate-related and environmental benefits and costs as well as the life-cycle approach. The analysis of climate-related and environmental costs and benefits should be based on the environmental impact assessment carried out pursuant to Directive 2011/92/EU of the European Parliament and of the Council¹².
- (37) In order to contribute to the climate reduction targets of the European Green Deal of a 90% cut in greenhouse gas emissions by 2050, measures to mitigate the greenhouse gas impacts of projects of common interest in the form of new, extended or upgraded transport infrastructures should be analysed.
- (38) Cooperation with third countries, including neighbouring countries, is necessary in order to ensure connection and interoperability between the infrastructure networks of the Union and those countries. In view of this, where appropriate, the Union should promote projects of common interest with those countries, assessing and ensuring that the objectives and requirements of the trans-European transport network are complied with in order to ensure the interoperability of the Union network.
- (39) To achieve transformation of the transport sector into a truly multimodal system of sustainable and smart mobility services, the Union should build a high quality transport network with rail services meeting minimum line speed. Competitive passenger rail has a high potential for the decarbonisation of transport. There is the need to develop a coherent and interoperable European high speed rail network linking its capitals and major cities. Complementing existing high speed lines with passenger lines at a minimum line speed of 160 km/h should in return lead to network effects, a more coherent network and an increased number of passengers travelling by rail. The completion of a high-performance network will also facilitate the development and introduction of new or different models of capacity allocation, for example interval-service timetables enabled by the Timetable Redesign (TTR) initiative.
- (40) A more sustainable, resilient and reliable rail freight network across Europe should be established to contribute to the competitiveness of combined transport. The infrastructure for combined railway transport and of terminals should be upgraded to ensure that intermodal transport is primarily done by rail, inland waterways or short-sea shipping and that any initial and/or final legs carried out by road are as short as possible.
- (41) Given the fact that the deployment of the European Rail Traffic Management System (ERTMS) in Europe is accelerating, and several Member States have already adopted plans to deploy ERTMS on their entire national rail networks by 2040, there is a need to take account of this paradigm shift and set a more ambitious ERTMS deployment deadline for the comprehensive network.
- (42) ERTMS should be deployed in a continuous manner not only on the core network, extended core network and comprehensive network, including in the urban nodes, but also on access routes to multimodal terminals. This will enable operations with ERTMS only and boost the business case of railway undertakings.

¹² Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment (OJ L 26, 28.1.2012, p. 1).

- (43) As deployment of a radio-based ERTMS further contributes to the elimination of national rules affecting operation, Member States should ensure that only radio-based ERTMS will be deployed from 2025 and the entire trans-European transport network equipped with radio-based ERTMS by 2050.
- (44) ERTMS deployment should be coupled with a regulatory deadline for decommissioning of class B systems trackside, thus making ERTMS the only signalling system used in Member States. Decommissioning of class B systems trackside will bring about significant maintenance savings for infrastructure managers, as deploying ERTMS and keeping additional trackside systems for a prolonged period is very costly and complicated. Class B systems should be removed in a coordinated way with a sufficient transitional period, by 2040, allowing the railway undertakings to anticipate the change and adopt the most suitable migration strategy. ERTMS, being a system, requires a synchronised deployment both trackside and on-board and full system benefits only occur when both trains and trackside are equipped.
- (45) Inland waterways in Europe are characterised by a heterogeneous hydro-morphology which hampers a coherent performance for all waterway stretches. Inland waterways, especially free flowing stretches, may be heavily impacted by climate and weather conditions. In order to ensure reliable international traffic, while respecting the hydro-morphology and applicable environmental legislation, TEN-T requirements should take into account the specific hydro-morphology of each waterway (for example free-flowing or regulated rivers) as well as the objectives of environmental and biodiversity policies. Such an approach should be considered at river basin level.
- (46) Being the entry and exit points for the land infrastructure of the trans-European transport network, maritime ports play an important role as cross-border multimodal nodes which serve not only as transport hubs, but also as gateways for trade, industrial clusters and energy hubs, for example with regard to the deployment of off-shore wind installations.
- (47) Short sea shipping can make a substantial contribution to the decarbonisation of transport by carrying more freight and passengers. The European Maritime Space should be promoted by creating or upgrading short-sea shipping routes and by developing maritime ports and their hinterland connections as to provide an efficient and sustainable integration with other modes of transport.
- (48) Road transport in the Union accounts for three-quarters of the total inland freight transport (based on tonne-kilometres performed) and for around 90% of the total inland passenger transport (based on the total number of passenger kilometres). Given the importance of road transport and the commitment to improve road safety in line with the milestone of the Sustainable and Smart Mobility Strategy, there is a need to enhance the road infrastructure from the safety point of view.
- (49) The trans-European transport network should ensure efficient multimodality in order to allow better and more sustainable modal choices to be made for passengers and freight and in order to enable large volumes to be consolidated for transfers over long distances. Multimodal terminals should play a key role to meet this objective.
- (50) Urban nodes play an important role on the trans-European transport network as starting point or final destination ("last mile") for passengers and freight moving on the trans-European transport network and are points of transfer within or between different transport modes. It should be ensured that capacity bottlenecks and an

insufficient network connectivity within urban nodes do no longer hamper multimodality along the trans-European transport network.

- (51) As an effective single framework for tackling urban mobility challenges, urban nodes should develop a Sustainable Urban Mobility Plan (SUMP), which is a long-term, all-encompassing integrated freight and passenger mobility plan for the entire functional urban area¹³. It should include objectives, targets and indicators underpinning the current and future performance of the urban transport system, at minimum, on greenhouse gas emissions, congestion, accidents and injuries, modal share and access to mobility services, as well as data on air and noise pollution in cities.
- (52) Member States should establish a national SUMP support programme aimed at promoting the uptake of SUMPs and improving coordination among regions, cities and towns. It should support regions and urban areas to develop high-quality SUMPs and reinforce monitoring and evaluation of the SUMP implementation through legislative measures, guidance, capacity building, assistance and possibly financial support.
- (53) The Mission on Climate-neutral and Smart Cities, set up under the Horizon Europe framework programme, aims to have 100 climate neutral cities in the Union by 2030. The cities involved in the Mission will act as experimentation and innovation hubs for others to follow by 2050.
- (54) Multimodal digital mobility services help to enhance the integration of the different transport modes by combining several transport offers into one. Their further development should contribute to nudge behaviours towards the most sustainable modes, public transport and active modes such as walking and cycling.
- (55) Information and Communication Technology (ICT) systems for transport are necessary in order to provide the basis for optimising traffic and transport operations and traffic safety and improving related services. Information flows in the transport and mobility network should be facilitated, including through the deployment of the Union Mobility Data Space. Information to passengers, including information on ticketing and reservation systems, should be available.
- (56) Intelligent transport systems and services as well as new emerging technologies should serve as a catalyst for the deployment of intelligent transport systems and services on all roads of the trans-European transport network.
- (57) Adequate planning of the trans-European transport network is required. This also entails the implementation of specific requirements throughout the network in terms of infrastructure, ICT systems, equipment and services, including the requirements for the alternative fuel infrastructure rollout as defined in Regulation (EU) [...] of the European Parliament and of the Council [on the deployment of alternative fuels infrastructure]¹⁴. It is therefore necessary to ensure adequate and concerted deployment of such requirements across Europe for each transport mode and for their interconnection across the trans-European transport network and beyond, in order to obtain the benefits of the network effect and to make efficient long-range trans-

¹³ The SUMP concept was first proposed in the 2013 EU Urban mobility package (COM(2013)913 final, Annex I)

¹⁴ Regulation of the European Parliament and of the Council of [...] on the deployment of alternative fuels infrastructure, and repealing Directive 2014/94/EU of the European Parliament and of the Council (OJ L [...]).

European transport operations possible. In order to ensure the deployment of alternative fuels across the entire road network of the trans-European transport network in line with the targets set in Regulation (EU) [...] [on the deployment of alternative fuels infrastructure], references to ‘core network’ in Regulation (EU) [...] [on the deployment of alternative fuels infrastructure] should be construed as references to ‘core network’ as defined in this Regulation. References to ‘comprehensive network’ in Regulation (EU) [...] [on the deployment of alternative fuels infrastructure] should be construed as references to ‘extended core network’ and ‘comprehensive network’ as defined in this Regulation.

- (58) The trans-European transport network should provide the basis for the large-scale deployment of new technologies and innovation, such as 5G infrastructure, which can help enhance the overall efficiency of the European transport sector and capacity to enable secure passenger flows using efficient means, make public or greener transport means more attractive for passengers, and reduce its carbon footprint. This will contribute towards the objectives of the European Green Deal and at the same time contribute to the objective of increasing energy security for the Union. In order to achieve those objectives, the availability of alternative fuels and related infrastructure should be improved throughout the trans-European transport network.
- (59) A sufficient number of fast recharging points for light and heavy-duty vehicles accessible to the public should be deployed across the trans-European transport network. This aim should ensure full cross-border connectivity and allow electric vehicles to circulate throughout the Union. Distance-based targets for the trans-European transport network as defined in Regulation (EU) [...] [on the deployment of alternative fuels infrastructure] are to ensure a minimum of sufficient coverage of electric recharging points along the Union’s main road networks.
- (60) Publicly accessible recharging infrastructure along the trans-European transport network as defined in Regulation (EU) [...] [on the deployment of alternative fuels infrastructure] should be complemented with requirements on the deployment of recharging infrastructure in multimodal terminals and for multimodal passenger hubs, to provide charging opportunities for long haul trucks when they are being loaded or unloaded or when the driver is taking a rest or for busses in multimodal passenger hubs. In order to ensure free circulation, where the terminals or passenger hubs receive Union or public support, the access for purposes of charging, should be on fair, transparent and non-discriminatory basis, so as to avoid market lock in for specific enterprises or possible distortions of competition. Pricing should be made on transparent and non-discriminatory basis for all authorised undertakings or persons, where the charging infrastructure is build using Union or public funding.
- (61) Insufficient safety, security and reliability of the infrastructure, caused by natural hazards, including climate related events and other exceptional occurrences such as pandemics, human-made disasters such as accidents, or disruptions caused by intentional acts such as terrorism and cyber-attacks, is a major problem for the efficiency and functioning of the trans-European transport network. For instance, accidents caused by several natural disasters due to extreme weather events have interrupted the transport flows significantly in the past years. The resilience of the transport network to climate change, natural hazards, human-made disasters and other disruptions should hence be improved, drawing on the risk assessment and resilience

enhancing measures taken by critical entities for the transport sector pursuant to Directive [...] on the resilience of critical entities¹⁵.

- (62) Taking stock of the experience with regard to the crisis management during the Covid-19 pandemic¹⁶ and in order to avoid traffic disruptions and contingencies in future, Member States should take into account the security and resilience of the transport infrastructure to climate change, natural hazards, human-made disasters and other disruptions affecting the functioning of the Union transport system, when planning infrastructure. To that aim, the European Transport Corridors should also include important diversionary lines which can be used in case of congestion or other problems on the principal routes. In addition, due to their multimodal nature, one mode can substitute the other in case of emergencies.
- (63) The participation of undertakings, including those, which are owned or controlled by a natural person of a third country or an undertaking of a third country, including those, which are established in a third country, can accelerate the realisation of the trans-European transport network. However, under specific circumstances, the participation of or contribution by undertakings owned or controlled by a natural person of a third country or an undertaking of a third country to projects of common interest might compromise security and public order in the EU. Without prejudice and in addition to the cooperation mechanism pursuant to Regulation (EU) 2019/452¹⁷, greater awareness of such participation or contribution is necessary to allow intervention of public authorities if it appears that they are likely to affect security or public order in the Union and the participation or contribution does not fall under the scope of Regulation (EU) 2019/452.
- (64) While maintenance is and will remain the main responsibility of the Member States, it is important that the trans-European transport network – once built – is properly maintained to ensure a high quality of services. A life cycle approach should be followed when planning and procuring infrastructure projects.
- (65) In order to implement parts of the trans-European transport network of highest strategic importance within the given timescale, a corridor approach should be used as an instrument to coordinate different projects on a transnational basis and to synchronise the development of the corridor, thereby maximising network benefits.
- (66) European Transport Corridors should help to develop the infrastructure of the trans-European transport network in such a way as to address bottlenecks, enhance cross-border connections and improve efficiency and sustainability. They should contribute to cohesion through improved territorial cooperation. They should also address wider transport policy objectives and facilitate interoperability, modal integration and multimodal operations. The corridor approach should be transparent and clear and the

¹⁵ This Directive refers to the Commission's proposal for a Directive of the European Parliament and of the Council on the resilience of critical entities, COM/2020/829 final.

¹⁶ Communication on the implementation of the Green Lanes under the Guidelines for border management measures to protect health and ensure the availability of goods and essential services; C(2020)1897 final (OJ C 96 I, 24.3.2020, p. 1) and Communication of 28 October 2020 from the Commission to the European Parliament, the European Council and the Council on "upgrading the transport Green Lanes to keep the economy going during the COVID-19 pandemic resurgence"; COM(2020)685 final.

¹⁷ Regulation (EU) 2019/452 of the European Parliament and of the Council of 19 March 2019 establishing a framework for the screening of foreign direct investments into the Union (OJ L 79I , 21.3.2019, p. 1).

management of such corridors should not create additional administrative burdens or costs.

- (67) In agreement with the Member State concerned, European Coordinators should facilitate the coordinated implementation of the European Transport Corridors and of the two horizontal priorities, ERTMS and European Maritime Space. They should facilitate measures to design the right governance structure and to identify the priority investments along the European Transport Corridors and of the two horizontal priorities.
- (68) The European and national frameworks for transport infrastructure planning and implementation as well as work plans established by the European Coordinators should contribute to the timely schedule and planning of investments necessary for the achievement of the objectives of this Regulation.
- (69) The work plans of the European Coordinators should be used to promote cooperation between all relevant stakeholders, to strengthen complementarity with actions by Member States and infrastructure managers and in particular to set the milestones and priorities for investments. Based on the work plans, the Commission should adopt implementing acts setting out the priorities for infrastructure planning and for funding.
- (70) The technical basis of the maps specifying the trans-European transport network is provided by the interactive geographical and technical information system for the trans-European transport network (TENtec).
- (71) Taking into account the Union Action Plan on Military Mobility of March 2018¹⁸ the Commission should assess the need to adapt the trans-European transport network to reflect the military use of the infrastructure. Based on the gap analysis between the trans-European transport network and the military requirements¹⁹ additional roads and railways should be included in the trans-European network to enhance the synergies between civilian and military transport networks.
- (72) In order to maximise consistency between the guidelines and the programming of the relevant financial instruments available at Union level, trans-European transport network funding should comply with this Regulation and be based, in particular, on Regulation (EU) No 2021/1153 of the European Parliament and of the Council²⁰. In addition, network funding should also build on funding and financing instruments provided under other Union law, including InvestEU, the Recovery and Resilience Facility, Cohesion Policy, Horizon Europe and other financing instruments established by the European Investment Bank. To enable the financing of projects of common interest, references to ‘multimodal logistics platforms’, ‘motorways of the sea’ and ‘telematic applications’ in Regulation (EU) 2021/1153 should be respectively construed as references to ‘multimodal freight terminals’, ‘European Maritime Space’ and ‘ICT systems for transport’ as defined in this Regulation. For the same purpose, references to ‘core network’ in Regulation (EU) 2021/1153 should be construed as including ‘extended core network’ as defined in this Regulation.

¹⁸ Joint Communication to the European Parliament and the Council on the Action Plan on Military Mobility (JOIN(2018)05 final).

¹⁹ Joint Staff Working Document on the updated Gap Analysis between the military requirements and the trans-European transport network requirements, 17 July 2020, (SWD(2020) 144 final).

²⁰ Regulation (EU) No 2021/1153 of the European Parliament and of the Council of 7 July 2021 establishing the Connecting Europe Facility and repealing Regulations (EU) No 1316/2013 and (EU) No 283/2014 (OJ L 249, 14.7.2021, p. 38).

- (73) The achievement of the objectives of the trans-European transport network, in particular with regard to the decarbonisation and digitalisation of the transport system in the Union, requires a robust regulatory framework. Ambitious reforms should be implemented by Member States to address the challenges of sustainable transport as identified in the European Semester. The Recovery and Resilience Facility supports both reforms and investments to make transport more sustainable, reduce emissions, improve safety and efficiency. Relevant measures to that effect are included in approved Recovery and Resilience Plans.
- (74) In order to update the maps and the list of ports, airports, terminals and urban nodes included in Annexes I and II to take into account possible changes resulting from the actual usage of certain elements of transport infrastructure analysed against pre-established quantitative thresholds, the power to adopt delegated acts in accordance with Article 290 of the Treaty on the Functioning of the European Union should be delegated to the Commission in respect of amendments to Annexes I and II. It is of particular importance that the Commission carry out appropriate consultations during its preparatory work, including at expert level, and that those consultations be conducted in accordance with the principles laid down in the Interinstitutional Agreement of 13 April 2016 on Better Law-Making²¹. In particular, to ensure equal participation in the preparation of delegated acts, the European Parliament and the Council receive all documents at the same time as Member States' experts, and their experts systematically have access to meetings of Commission expert groups dealing with the preparation of delegated acts.
- (75) Some parts of the network are managed by actors other than Member States. However, Member States are responsible for ensuring that the rules governing the network are correctly applied within their territory.
- (76) In order to ensure a smooth and effective implementation of the obligations laid down in this Regulation, the Commission supports Member States through the Technical Support Instrument²² providing tailor-made technical expertise to design and implement reforms, including those promoting the development of the trans-European transport network.
- (77) In order to ensure uniform conditions for the implementation of this Regulation, implementing powers should be conferred on the Commission as regards implementing acts which specify reference water levels and minimum requirements per river basin (good navigation status), which define a single entity for the construction and management of cross-border infrastructure projects of common interest, which establish a methodology for the urban mobility data to be collected by Member States and implementing acts for each work plan of the European Transport Corridors and the two horizontal priorities as well as for the implementation of specific sections of the European Transport Corridor or for the implementation of specific transport infrastructure requirements of the European Transport Corridor or of

²¹ Interinstitutional Agreement between the European Parliament, the Council of the European Union and the European Commission on Better Law-Making of 13 April 2016 (OJ L 123, 12.5.2016, p. 1).

²² Regulation (EU) 2021/240 of the European Parliament and of the Council of 10 February 2021 establishing a Technical Support Instrument.

the horizontal priorities. Those powers should be exercised in accordance with Regulation (EU) No 182/2011 of the European Parliament and of the Council²³.

- (78) Since the objectives of this Regulation, in particular the coordinated establishment and development of the trans-European transport network, cannot be sufficiently achieved by the Member States and can therefore, by reason of the need for coordination of those objectives, be better achieved at Union level, the Union may adopt measures in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty on European Union. In accordance with the principle of proportionality, as set out in that Article, this Regulation does not go beyond what is necessary in order to achieve those objectives.
- (79) It is necessary to amend Regulation (EU) 2021/1153 in order to adapt its provisions with the view to integrating the Core Network Corridors into European Transport Corridors. The definition and the alignment of the European Transport Corridors will be defined in this Regulation and will replace the Core Network Corridors as defined in that Regulation.
- (80) It is necessary to amend Regulation (EU) No 913/2010 in order to adapt its provisions with the view to integrating the Rail Freight Corridors into European Transport Corridors.
- (81) Regulation (EU) No 1315/2013 should be repealed.

HAVE ADOPTED THIS REGULATION:

CHAPTER I

GENERAL PRINCIPLES

Article 1

Subject matter

- 1. This Regulation establishes guidelines for the development of a trans-European transport network consisting of the comprehensive network and of the core and extended core network, the two latter being established on the basis of the comprehensive network.
- 2. This Regulation identifies:
 - (a) European Transport Corridors of highest strategic importance on the basis of priority sections of the trans-European transport network;
 - (b) projects of common interest and specifies the requirements to be complied with for the development and implementation of the infrastructure of the trans-European transport network.

²³ Regulation (EU) No 182/2011 of the European Parliament and of the Council of 16 February 2011 laying down the rules and general principles concerning mechanisms for control by Member States of the Commission's exercise of implementing powers (OJ L 55, 28.2.2011, p. 13).

3. This Regulation sets out the priorities for the development of the trans-European transport network and provides for measures for the implementation of the trans-European transport network.

Article 2

Scope

1. This Regulation applies to the trans-European transport network as shown on the maps set out in Annex I. The trans-European transport network comprises transport infrastructure, including infrastructure for the deployment of alternative fuels, ICT systems for transport as well as measures promoting the efficient management and use of such infrastructure and permitting the establishment and operation of sustainable and efficient transport services.
2. The infrastructure of the trans-European transport network consists of the infrastructure for railway transport, inland waterway transport, maritime transport, road transport, air transport, multimodal transport and transport in urban nodes, as laid down in the relevant sections of Chapters II, III and IV.

Article 3

Definitions

For the purpose of this Regulation, the following definitions apply:

- (a) 'project of common interest' means any project carried out pursuant to this Regulation;
- (b) 'neighbouring country' means a country falling within the scope of the European Neighbourhood Policy, the Enlargement Policy, and the European Economic Area, the European Free Trade Association or the EU-UK Trade and Cooperation Agreement;
- (c) 'NUTS region' means a region as defined in the Nomenclature of Territorial Units for Statistics;
- (d) 'cross-border section' means the section which ensures the continuity of a project of common interest on both sides of the border, between the closest urban nodes to the border of two Member States or between a Member State and a neighbouring country;
- (e) 'bottleneck' means a physical, technical, functional, operational or administrative barrier which leads to a system break affecting the continuity of long-distance or cross-border flows;
- (f) 'urban node' means an urban area where elements of the transport infrastructure of the trans-European transport network, such as ports including passenger terminals, airports, railway stations, bus terminals, logistic platforms and facilities and freight terminals, located in and around the urban area, are connected with other elements of that infrastructure and with the infrastructure for regional and local traffic;
- (g) 'isolated network' means the rail network of a Member State, or a part thereof, with a track gauge different from that of the European standard nominal track gauge (1435 mm), for which certain major infrastructure investments cannot be justified in economic cost-benefit terms by virtue of the specificities of that network arising from its geographic detachment or peripheral location;

- (h) 'infrastructure manager' means any body or undertaking that is responsible, in particular, for establishing or maintaining transport infrastructure, including the management of infrastructure control and safety systems;
- (i) 'multimodal transport' means the carriage of passengers or freight, or both, using two or more modes of transport;
- (j) 'multimodal digital mobility services' means services as defined in Article 4 of Directive (EU) [...] on the framework for the deployment of Intelligent Transport Systems²⁴;
- (k) 'interoperability' means the ability, including all the regulatory, technical and operational conditions, of the infrastructure, including digital infrastructure in a transport mode or segment, to allow safe and uninterrupted traffic and information flows which achieve the required levels of performance for that infrastructure mode or segment;
- (l) 'multimodal passenger hub' means a connection point between at least two transport modes for passengers, where travel information, access to public transport and transfers between modes, including Park and Ride stations and active modes, are ensured and which act as an interface between urban nodes and longer-distance transport networks;
- (m) 'multimodal freight terminal' means a structure equipped for transshipment between at least two transport modes or between two different rail systems, and for temporary storage of freight, such as terminals in inland or maritime ports, along inland waterways, in airports as well as rail road terminals, including multimodal logistics platforms as referred to in Regulation (EU) 2021/1153;
- (n) 'logistic platform' means an area which is directly linked to the transport infrastructure of the trans-European transport network, which includes at least one freight terminal and enables logistics activities to be carried out;
- (o) 'sustainable urban mobility plan' (SUMP) means a document for strategic mobility planning, aiming at improving accessibility to and mobility within the functional urban area (including commuting zones) for people, businesses and goods;
- (p) 'active modes' means the transport of people or goods, through non-motorised means, based on human physical activity;
- (q) 'ICT systems for transport' means information and communications technology systems and applications using information, communication, navigation or positioning/localisation technologies, enabling to process, store and exchange the data and information needed to manage infrastructure, mobility and traffic on the trans-European transport network effectively, to report relevant information to authorities and to provide value-added services to citizens, shippers and operators, including systems for resilient, safe, secure, environmentally sound and capacity-efficient use of the network. They include systems, technologies and services referred to in points (r) to (x) and may also include on-board devices with corresponding infrastructure components;

²⁴ Directive 2021/... revising Directive 2010/40/EU of the European Parliament and of the Council of 7 July 2010 on the framework for the deployment of Intelligent Transport Systems in the field of road transport and for interfaces with other modes of transport] (OJ L [...]).

- (r) 'intelligent transport system' (ITS) means a system as defined in Article 4(1) of Directive (EU) 2010/40/EU of the European Parliament and of the Council of 7 July 2010 on the framework for the deployment of Intelligent Transport Systems in the field of road transport and for interfaces with other modes of transport²⁵;
- (s) 'Vessel Traffic Monitoring and Information Systems' (VTMIS) means systems deployed to monitor and manage traffic and maritime transport, using information from Automatic Identification Systems of Ships (AIS), Long-Range Identification and Tracking of Ships (LRIT) and coastal radar systems and radio communications as provided for in Directive 2002/59/EC of the European Parliament and of the Council²⁶, and includes the integration of the national maritime information systems through SafeSeaNet;
- (t) 'River Information Services' (RIS) means information and communication technologies on inland waterways as defined in Article 3, point (a) of Directive 2005/44/EC of the Parliament and of the Council²⁷;
- (u) 'European Maritime Single Window environment' (EMSWe) means the legal and technical framework for the electronic transmission of information in relation to reporting obligations for port calls in the Union, which consists of a network of maritime National Single Windows and other harmonised components as provided for in Regulation (EU) 2019/1239 of the European Parliament and of the Council²⁸;
- (v) 'Air Traffic Management / Air Navigation Service System' (ATM/ANS System) means systems and constituents used for the provision of air traffic management or air navigation services or both;
- (w) 'European Rail Traffic Management System' (ERTMS) means the system defined in the Annex, point 2.2, to the Commission Regulation (EU) 2016/919²⁹;
- (x) 'radio-based ERTMS' means ERTMS of level 2 or level 3 that uses radio to pass movement authorities to the train pursuant to Commission Regulation (EU) 2016/919³⁰;
- (y) 'class B systems' means train protection and voice radio legacy systems as defined in the Annex, point 2.2, to the Commission Regulation (EU) 2016/919;
- (z) 'maritime port' means an area of land and water made up of such infrastructure and equipment so as to permit, principally, the reception of waterborne vessels, their

²⁵ Directive 2010/40/EU of the European Parliament and of the Council of 7 July 2010 on the framework for the deployment of Intelligent Transport Systems in the field of road transport and for interfaces with other modes of transport (OJ L 207, 6.8.2010, p. 1).

²⁶ Directive 2002/59/EC of the European Parliament and of the Council of 27 June 2002 establishing a Community vessel traffic monitoring and information system and repealing Council Directive 93/75/EEC (OJ L 208, 5.8.2002, p. 10).

²⁷ Directive 2005/44/EC of the Parliament and of the Council of 7 September 2005 on harmonised river information services (RIS) on inland waterways in the Community (OJ L 255, 30.9.2005, p. 152).

²⁸ Regulation (EU) No 2019/1239 of the European Parliament and of the Council of 20 June 2019 establishing a European Maritime Single Window environment and repealing Directive 2010/65/EU (OJ L 198, 25.7.2019, p. 64).

²⁹ Commission Regulation (EU) 2016/919 of 27 May 2016 on the technical specification for interoperability relating to the 'control-command and signalling' subsystems of the rail system in the European Union (OJ L 158, 15.6.2016, p. 1).

³⁰ Commission Regulation (EU) 2016/919 of 27 May 2016 on the technical specification for interoperability relating to the 'control-command and signalling' subsystems of the rail system in the European Union (OJ L 158, 15.6.2016, p.1).

loading and unloading, the storage of goods, the receipt and delivery of those goods and the embarkation and disembarkation of passengers, crew and other persons and any other infrastructure necessary for transport operators within the port area;

- (aa) ‘short-sea shipping’ means the movement of cargo and passengers by sea between ports situated in geographical waters of Member States or between a port situated in waters of Member States and a port situated in waters of a neighbouring third country having a coastline on the enclosed seas bordering waters of the Union;
- (ab) ‘electronic freight transport information’ (eFTI) means the electronic communication of regulatory information between economic operators and competent authorities in accordance with Regulation (EU) 2020/1056 of the European Parliament and of the Council³¹;
- (ac) ‘Single European Sky’ (SES) means the procedures established under Regulation (EC) No 549/2004³², (EC) 550/2004³³, (EC) No 551/2004³⁴, and (EU) No 2018/1139³⁵ of the European Parliament and of the Council to reinforce air traffic safety standards, to contribute to the sustainable development of the air transport system and to improve the overall performance of air traffic management and air navigation services for general air traffic;
- (ad) ‘vertiport’ means an area used for the landing and take-off of vertical take-off and landing (VTOL) aircrafts;
- (ae) ‘spaceport’ means an installation for testing and launching space crafts;
- (af) ‘SESAR project’ means a project of the Single European Sky ATM Research programme, the technological pillar of Europe’s Single European Sky (SES) framework;
- (ag) ‘Europe’s Rail Project’ means a project of the Europe’s Rail Joint Undertaking, or its predecessor Shift2Rail;
- (ah) ‘European ATM Master Plan’ means the main planning tool for ATM modernisation defining the development and deployment priorities needed to deliver the SESAR, as endorsed by Council Decision 2009/320/EC³⁶;
- (ai) ‘rail freight governance’ means the governance bodies referred to in Article 8 of Regulation (EU) 913/2010;
- (aj) ‘maintenance’ means activities that have to be undertaken routinely, periodically or in emergency situations in order to be able to use the asset over its expected service life cycle with the same level of service and safety, in line with this Regulation;

³¹ Regulation (EU) No 2020/1056 of the European Parliament and of the Council of 15 July 2020 on electronic freight transport information (OJ L 249, 31.7.2020, p. 33).

³² Regulation (EC) No 549/2004 of the European Parliament and of the Council of 10 March 2004 laying down the framework for the creation of the single European sky (OJ L 96, 31.3.2004, p. 1).

³³ Regulation (EC) No 550/2004 of the European Parliament and of the Council of 10 March 2004 on the provision of air navigation services in the single European sky (OJ L 96, 31.3.2004, p. 10).

³⁴ Regulation (EU) No 551/2004 of the European Parliament and of the Council of 10 March 2004 on the organisation and use of the airspace in the single European Union (OJ L 96, 31.3.2004, p. 20).

³⁵ Regulation (EU) 2018/1139 of the European Parliament and of the Council of 4 July 2018 on common rules in the field of civil aviation and establishing a European Union Aviation Safety Agency (OJ L 212, 22.8.2018, p. 1).

³⁶ Council Decision 2009/320/EC of 30 March 2009 endorsing the European Air Traffic Management Master Plan of the Single European Sky ATM Research (SESAR) project (OJ L 95, 9.4.2009, p. 41).

- (ak) 'socio-economic cost-benefit analysis' means a quantified ex-ante evaluation, based on a recognised methodology, of the value of a project, taking into account all the relevant social, economic, climate-related and environmental benefits and costs. The analysis of climate-related and environmental costs and benefits shall be based on the environmental impact assessment carried out pursuant to Directive 2011/92/EU of the European Parliament and of the Council³⁷;
- (al) 'alternative fuels' means alternative fuels as defined in Article 2(3) of Regulation (EU) [...] [on the deployment of alternative fuels infrastructure];
- (am) 'safe and secure parking area' means a parking area accessible to drivers engaged in the carriage of goods or passengers, meeting the requirements of Article 8a (1) of Regulation (EC) No 561/2006 of the European Parliament and of the Council³⁸ and which has been certified in accordance with Union standards and procedures, pursuant to Article 8a (2) of that Regulation;
- (an) 'weigh in motion system' means an automatic system set up on the road infrastructure with the objective to identify vehicles or vehicle combinations in circulation that are likely to have exceeded the relevant weight limits, in accordance with Directive 96/53/EC of the European Parliament and of the Council³⁹.

Article 4

Objectives of the trans-European transport network

1. The overall objective of the development of the trans-European network is to establish one multimodal Union wide network of high quality standards.
2. The trans-European transport network shall strengthen the social, economic and territorial cohesion of the Union and contribute to the creation of a single European transport area which is sustainable, efficient and resilient and which increases the benefits for its users and supports inclusive growth. It shall demonstrate European added value by contributing to the objectives laid down in the following four categories:
 - (a) sustainability through:
 - (i) promotion of zero-emission mobility in line with the relevant Union CO₂ reduction targets;
 - (ii) enabling greater use of more sustainable modes of transport, including by further developing a long-distance rail passenger network at high speed and a fully interoperable rail freight network, a reliable inland waterway and short-sea shipping network across the Union;
 - (iii) increased environmental protection;

³⁷ Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment (OJ L 26, 28.1.2002, p. 1).

³⁸ Regulation (EC) No 561/2006 of the European Parliament and of the Council of 15 March 2006 on the harmonisation of certain social legislation relating to road transport (OJ L 102, 11.4.2006, p. 1).

³⁹ Council directive 96/53/EC of 25 July 1996 laying down for certain road vehicles circulating within the Community the maximum authorized dimensions in national and international traffic and the maximum authorized weights in international traffic (OJ L 235, 17.9.1996, p. 59).

- (iv) reduction of external costs including those related to environment, health, congestion and accidents;
 - (v) greater energy security;
- (b) cohesion through:
 - (i) accessibility and connectivity of all regions of the Union, including outermost regions and other remote, insular, peripheral and mountainous regions as well as sparsely populated areas;
 - (ii) reduction of infrastructure quality gaps between Member States;
 - (iii) for both passenger and freight traffic, efficient coordination and interconnection between transport infrastructure for, on the one hand, long-distance traffic and, on the other, regional and local traffic and transport services in urban nodes;
 - (iv) a transport infrastructure that reflects the specific situations in different parts of the Union and provides for a balanced coverage of all European regions;
- (c) efficiency through:
 - (i) the removal of infrastructure bottlenecks and the bridging of missing links, both within the transport infrastructures and at connecting points between these, within Member States' territories and between them;
 - (ii) the removal of functional, administrative, technical and operational interoperability bottlenecks, including gaps in digitalisation,
 - (iii) the interoperability of national, regional and local transport networks;
 - (iv) optimal integration and interconnection of all transport modes, including in urban nodes;
 - (v) the promotion of economically efficient, high-quality transport contributing to further economic growth and competitiveness;
 - (vi) more efficient use of new and existing infrastructure in operation;
 - (vii) cost-efficient application of innovative technological and operational concepts;
- (d) increasing the benefits for its users through:
 - (i) ensuring the accessibility for and meeting the mobility and transport needs of users, taking into account in particular the needs of people in situations of vulnerability, including persons with disabilities or reduced mobility and people living in remote regions, including the outermost regions and islands;
 - (ii) ensuring safe, secure and high-quality standards, including quality of services to the users, for both passenger and freight transport;
 - (iii) the establishment of infrastructure requirements, in particular in the field of interoperability, safety and security, which ensure quality, efficiency and sustainability of transport services which are accessible and affordable;

- (iv) supporting mobility that is fit for the changing climate and resilient to natural hazards and human-made disasters, and ensures efficient and fast deployment of emergency and rescue services, including for persons with disabilities or reduced mobility;
- (v) ensuring the resilience of infrastructure, in particular on cross-border sections;
- (vi) offering alternative transport solutions, including on other modes, in case of network disturbances.

Article 5

Resource-efficient network and environmental protection

1. The trans-European transport network shall be planned, developed and operated in a resource-efficient way, complying with the applicable Union and national environmental requirements, through:
 - (a) the development of new infrastructure, the improvement and maintenance of existing transport infrastructure, notably by including maintenance over the life-time of the infrastructure in the planning phase of construction or improvement of the infrastructure and by keeping the infrastructure operational;
 - (b) the optimisation of infrastructure integration and interconnection;
 - (c) the deployment of alternative fuels recharging and refuelling infrastructure;
 - (d) the deployment of new technologies and ICT systems for transport to preserve or improve the infrastructure performance;
 - (e) the optimisation of infrastructure use, in particular through efficient capacity and traffic management;
 - (f) the taking into account of possible synergies with other networks, in particular the trans-European energy or telecommunication networks;
 - (g) the development of green, sustainable and climate resilient infrastructure designed to minimise the negative impact on the health of citizens living around the network, the environment and degradation of ecosystems;
 - (h) the adequate consideration of the resilience of the transport network and its infrastructure with regard to a changing climate as well as natural hazards and human-made disasters, as well as intentional disruptions with a view to addressing those challenges;
 - (i) the resilience of infrastructure, especially at cross-border sections, assuring to respond and recover rapidly from traffic disruptions.
2. In planning and developing the trans-European transport network, Member States may adapt the detailed route alignment of sections within the limits indicated in Article 56(1), point (e), taking into account the particular circumstances in the various parts of the Union, such as topographical features of the regions concerned and environmental considerations while ensuring compliance with this Regulation.

3. The environmental assessment of plans and projects shall be carried out in accordance with Council Directive 92/43/EEC⁴⁰, Directives 2000/60/EC⁴¹, 2001/42/EC⁴², 2002/49/EC⁴³, 2009/147/EC⁴⁴ and 2011/92/EU of the European Parliament and of the Council⁴⁵. For the projects of common interest for which the environmental assessment has not yet been carried out at the date of entry into force of this Regulation, it should also include the assessment of the compliance with the “do no significant harm” principle.

Article 6

Gradual development of the trans-European transport network

1. The trans-European transport network shall be gradually developed in three steps: the completion of a core network by 31 December 2030, of an extended core network by 31 December 2040 and the comprehensive network by 31 December 2050. This shall be achieved, in particular, by implementing a structure for that network with a coherent and transparent methodological approach, comprising a comprehensive network and a core and extended core network, with transport and urban nodes as connecting points between long distance traffic and the regional and local transport networks.
2. The comprehensive network shall consist of all existing and planned transport infrastructures of the trans-European transport network as well as measures promoting the efficient and socially and environmentally sustainable use of such infrastructure.
3. The core and extended core network shall consist of those parts of the trans-European transport network which shall be developed as a matter of priority for achieving the objectives for the development of the trans-European transport network.

Article 7

European Transport Corridors

The European Transport Corridors shall consist of the parts of the trans-European transport network which are of the highest strategic importance for the development of sustainable and

⁴⁰ Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (OJ L 206, 22.7.1992, p. 7).

⁴¹ Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy (OJ L 327, 22.12.2000, p. 1).

⁴² Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment (OJ L 197, 21.7.2001, p. 30).

⁴³ Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise (OJ L 189 18.7.2002, p. 12).

⁴⁴ Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (OJ L 20, 26.1.2010, O. 7).

⁴⁵ Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment (OJ L 26, 28.1.2012, p. 1).

multimodal freight and passenger transport flows in Europe and for the development of interoperable high quality infrastructure and operational performance.

Article 8

Projects of common interest

1. Projects of common interest shall contribute to the development of the trans-European transport network through the creation of new transport infrastructure, through the upgrading of the existing transport infrastructure or through measures promoting the resource-efficient use of the network.
2. A project of common interest shall:
 - (a) contribute to the objectives falling within at least two of the four categories set out in Article 4;
 - (b) be economically viable on the basis of a socio-economic cost-benefit analysis;
 - (c) demonstrate European added value.
3. A project of common interest encompasses its entire cycle, including feasibility studies and permission procedures, construction, operation and evaluation.
4. Member States shall take all necessary measures to ensure that the projects are carried out in compliance with relevant Union and national law, in particular with Union legal acts on the environment, climate protection, safety, security, competition, state aid, public procurement, public health and accessibility as well as legislation on non-discrimination.
5. The Commission may require Member States by means of an implementing act to establish a single entity for the construction and management of cross-border infrastructure projects of common interest. The relevant European Coordinator shall have the status of observer in the management or supervisory board or in both of that single entity.

Article 9

Cooperation with third countries

1. The Union may cooperate with neighbouring countries in order to connect the trans-European transport network with their infrastructure networks with a view to enhancing economic growth and competitiveness, and in particular to:
 - (a) promote the extension of the trans-European transport network policy into third countries;
 - (b) ensure the connection between the trans-European transport network and the transport networks of the third countries at border crossing points, in order to guarantee seamless traffic flows, border checks, border surveillance and other border control procedures;
 - (c) complete the transport infrastructure in third countries which serve as links between parts of the trans-European transport network in the Union;
 - (d) promote the interoperability between the trans-European transport network and networks of third countries;

- (e) facilitate maritime transport and promote short-sea shipping routes with third countries;
 - (f) facilitate inland waterway transport with third countries;
 - (g) facilitate air transport with third countries, in order to promote efficient and sustainable economic growth and competitiveness, including the extension of the Single European Sky and improved air traffic management cooperation;
 - (h) connect and implement ICT systems for transport in those countries.
2. Annex IV sets out indicative maps of the trans-European transport network extended to specific neighbouring countries, specifying where applicable a core and comprehensive network according to the criteria of this Regulation.

CHAPTER II

GENERAL PROVISIONS

Article 10

General provisions for the core network, the extended core network and the comprehensive network

1. The core network, the extended core network and the comprehensive network shall:
 - (a) be as specified in the maps in Annex I and in the lists in Annex II;
 - (b) be further specified through the description of the infrastructure components;
 - (c) meet the requirements for the transport infrastructures set out in this Chapter and Chapters III and IV;
 - (d) constitute the basis for the identification of projects of common interest.
2. The core network and extended core network shall consist of those parts of the comprehensive network which shall be developed as a matter of priority for achieving the objectives of the trans-European transport network policy. References to ‘core network’ in Regulation (EU) 2021/1153 shall be construed as including ‘extended core network’ as defined in this Regulation. References to ‘core network’ in Regulation (EU) [...] [on the deployment of alternative fuels infrastructure] shall be construed as references to ‘core network’ as defined in this Regulation. References to ‘comprehensive network’ in Regulation (EU) [...] [on the deployment of alternative fuels infrastructure] shall be construed as references to ‘extended core network’ and ‘comprehensive network’ as defined in this Regulation.
3. The nodes of the network are set out in Annex II and include urban nodes, airports, maritime ports and inland ports, and rail road terminals.
4. Member States shall take the appropriate measures for the core network, the extended core network and the comprehensive network to be developed in order to comply with the relevant provisions of this Regulation by the dates specified in Article 6(1), unless specified otherwise in this Regulation.

Article 11

General provisions for the European Transport Corridors

1. The European Transport Corridors are as specified in the maps in Annex III.
2. Member States shall take the appropriate measures for the European Transport Corridors to be developed in order to comply with the provisions of this Regulation, by 31 December 2030 for their infrastructure which is part of the core network, unless specified otherwise, and by 31 December 2040 for their infrastructure which is part of the extended core network, unless specified otherwise.
3. The Commission is empowered to adopt delegated acts in accordance with Article 60 of this Regulation to amend the alignment of the European Transport Corridors in Annex III to this Regulation, in order to take into account, in particular, the development of major trade flows and traffic or substantial changes to the network.

Article 12

General priorities for the core, the extended core and the comprehensive network

1. In the development of the core, the extended core and the comprehensive network, general priority shall be given to measures that are necessary for:
 - (a) increasing freight and passenger transport activity of more sustainable modes of transport in view of a reduction of GHG emissions from transport;
 - (b) ensuring enhanced accessibility and connectivity for all regions of the Union while taking into consideration territorial and social cohesion as well as the specific case of the outermost regions and other remote, insular, peripheral and mountainous regions as well as sparsely populated areas;
 - (c) ensuring optimal integration of the transport modes and interoperability between transport modes;
 - (d) bridging missing links and removing bottlenecks, particularly in cross-border sections;
 - (e) deploying the necessary infrastructure which ensures a seamless circulation of zero-emission vehicles;
 - (f) promoting the efficient and sustainable use of the infrastructure and, where necessary, increasing capacity;
 - (g) keeping existing infrastructure operational and improving or maintaining its quality in terms of safety, security, efficiency of the transport system and transport operations, climate and disaster resilience, environmental performance, and the continuity of traffic flows;
 - (h) improving the quality of services and social conditions for transport workers, accessibility for all users, including persons with disabilities or reduced mobility and other people in situations of vulnerability;
 - (i) implementing and deploying ICT systems for transport.
2. In order to complement the measures set out in paragraph 1, particular consideration shall be given to measures that are necessary for:
 - (a) contributing to transport emission reduction and increased energy security by promoting the use of zero-emission vehicles and vessels and renewable and

- low-carbon fuels, through the deployment of corresponding alternative fuels infrastructure;
- (b) mitigating exposure of urban areas to negative effects of transiting rail and road transport;
- (c) removing administrative, technical and operational barriers, in particular to the interoperability of the trans-European transport network;
- (d) optimising the use of infrastructure, in particular through efficient capacity management, traffic management and increased operational performance.

Article 13

General priorities for the European Transport Corridors

In the development of the European Transport Corridors, general priority shall be given to measures that are necessary for:

- (a) the development of a high performance and fully interoperable rail freight network across the Union;
- (b) the development of a high performance rail passenger network, fully interoperable and at high speed, connecting urban nodes across the Union;
- (c) the development of a seamless inland waterways, aviation and maritime infrastructure system;
- (d) the development of a safe and secure road network, with sufficient alternative fuel infrastructures;
- (e) the development of improved multimodal and interoperable transport solutions;
- (f) the intermodal integration of the entire logistic chain, interconnecting efficiently in the transport and urban nodes;
- (g) the deployment of the necessary infrastructure which ensures a seamless circulation of zero-emission vehicles.

CHAPTER III

SPECIFIC PROVISIONS

SECTION 1

Railway transport infrastructure

Article 14

Infrastructure components

1. Railway transport infrastructure shall comprise, in particular:
 - (a) railway lines, including:

- (i) tracks;
 - (ii) points;
 - (iii) level crossings;
 - (iv) sidings;
 - (v) tunnels;
 - (vi) bridges;
 - (vii) infrastructure mitigating impact on environment;
 - (b) stations along the lines indicated in Annex I for the transfer of passengers within the rail mode and between rail and other transport modes;
 - (c) rail service facilities other than passenger stations as defined in Article 3(11) of Directive 2012/34/EU of the European Parliament and of the Council⁴⁶, in particular marshalling yards, train formation facilities, shunting facilities, storage sidings, maintenance facilities, other technical facilities like cleaning and washing facilities, relief facilities and refuelling facilities; it also includes automatic gauge-changing facilities for rail;
 - (d) the 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;
 - (e) trackside control-command signalling;
 - (f) trackside energy infrastructure;
 - (g) associated equipment;
 - (h) ICT systems for transport.
2. The technical equipment associated with railway lines may include electrification systems, equipment for the boarding and alighting of passengers and the loading and unloading of cargo in stations and terminals, as well as innovative technologies in their deployment phase.

Article 15

Transport infrastructure requirements for the comprehensive network

1. Member States shall ensure that the railway infrastructure of the comprehensive network:
- (a) complies with Directive (EU) 2016/797 of the European Parliament and of the Council⁴⁷ and its implementing measures in order to achieve the interoperability of the comprehensive network;
 - (b) complies with the requirements of the technical specifications for interoperability (TSIs) adopted pursuant to Articles 4 and 5 of Directive (EU)

⁴⁶ Directive 2012/34/EU of the European Parliament and of the Council of 21 November 2012 establishing a single European railway area (OJ L 343 14.12.2012, p. 32).

⁴⁷ Directive (EU) 2016/797 of the European Parliament and of the Council of 11 May 2016 on the interoperability of the rail system within the European Union (OJ L 138, 26.5.2016, p. 44).

2016/797, under the procedure provided for in Article 7(1), points (b), (c), (d) and (e) of that Directive;

- (c) complies with the requirements laid down in as defined in Regulation (EU) [...] [on the deployment of alternative fuels infrastructure].

2. Member States shall ensure that the railway infrastructure of the comprehensive network, including connections referred to in Article 14(1), point (d), by 31 December 2050:

- (a) is fully electrified as regards line tracks and, to the extent necessary for electric train operations, as regards sidings;
- (b) provides for a nominal track gauge for new railway lines of 1435 mm, except where the new line is an extension on a network the track gauge of which is different and detached from the main rail lines in the Union;
- (c) enables, without special permission, an axle load of at least 22.5 tons;
- (d) enables, without special permission, the operation of freight trains with a train length of at least 740 m (including the locomotive(s)). This requirement is met if at least the following conditions are complied with:
 - (i) on double track lines, at least 50% of the train paths for freight trains, and not less than two train paths per hour and direction, can be allocated to freight trains with a length of at least 740 m;
 - (ii) on single track lines, at least one train path per two hours and direction can be allocated to freight trains with a length of at least 740 m;
- (e) provides a standard of at least P400 in accordance with item 1.1.1.1.3.5 of Table 1 in the Annex to Commission Implementing Regulation (EU) 2019/777⁴⁸, without any additional requirement for special permission to operate services.

3. The following exemptions apply:

- (a) isolated networks are exempted from the requirements under paragraph 2, points (a), (c), (d) and (e);
- (b) at the request of a Member State, in duly justified cases, other exemptions may be granted by the Commission by means of implementing acts in respect of the requirements referred to in paragraph 2. Any request for exemption shall be based on a socio-economic cost-benefit analysis and an assessment of the impact on interoperability. An exemption shall comply with the requirements of Directive (EU) 2016/797 of the European Parliament and of the Council⁴⁹, be coordinated and agreed with the neighbouring Member State(s) where applicable.

⁴⁸ Commission Implementing Regulation (EU) 2019/777 of 16 May 2019 on the common specifications for the register of railway infrastructure and repealing Implementing Decision 2014/880/EU (OJ L 139I, 27.5.2019, p. 312).

⁴⁹ Directive (EU) 2016/797 of the European Parliament and of the Council of 11 May 2016 on the interoperability of the rail system within the European Union (OJ L 138, 26.5.2016, p. 44).

Transport infrastructure requirements for the core network and the extended core network

1. Member States shall ensure that the railway infrastructure of the core network and the extended core network complies with Article 15(1).
2. Member States shall ensure that the railway infrastructure of the extended core network, including connections referred to in Article 14(1), point (d), by 31 December 2040:
 - (a) meets the requirements set out in Article 15(2), points (a) to (e), and of a prevailing minimum operational line speed of 100 km/h for freight trains on the freight lines of the extended core network;
 - (b) meets the requirements set out in Article 15(2), points (a) and (b), on the passenger lines of the extended core network;
 - (c) allows for a prevailing minimum line speed of 160 km/h for passenger trains on the passenger lines of the extended core network;

When constructing or upgrading a passenger line of the extended core network or sections thereof, Member States shall perform a study to analyse the feasibility and economic relevance of higher speeds, and build or upgrade the line to such higher speed where its feasibility and economic relevance are demonstrated.
3. Member States shall ensure that the railway infrastructure of the core network, including connections referred to in Article 14(1), point (d), by 31 December 2030:
 - (a) meets the requirements set out in Article 15(2), points (a) to (d), and of a prevailing minimum operational line speed of 100 km/h for freight trains on the freight lines of the core network;
 - (b) meets the requirements set out in Article 15(2), points (a) and (b), on the passenger lines of the core network;
4. Member States shall ensure that the railway infrastructure of the core network, including connections referred to in Article 14(1), point (d), by 31 December 2040:
 - (a) meets the requirement of Article 15(2), point (e), on the freight lines on the core network;
 - (b) meets the requirement of paragraph 2, point (c), on the passenger lines of the core network.
5. The following exemptions apply:
 - (a) isolated networks are exempted from the requirements under paragraph 2, 3 and 4;
 - (b) at the request of a Member State, in duly justified cases, other exemptions may be granted by the Commission by means of implementing acts in respect of the requirements referred to in paragraphs 2 to 4. Any exemption shall be based on a socio-economic cost-benefit analysis and an assessment of the impact on interoperability. An exemption shall comply with the requirements of Directive (EU) 2016/797, be coordinated and agreed with the neighbouring Member State(s) where applicable.

Article 17

The European Rail Traffic Management System

1. Member States shall ensure that on the railway infrastructure of the extended core network and the comprehensive network, including connections referred to in Article 14(1), point (d), by 31 December 2040:
 - (a) ERTMS is equipped;
 - (b) class B systems are decommissioned.
2. Member States shall ensure that the railway infrastructure of the core network, including connections referred to in Article 14(1), point (d), by 31 December 2030 meets the requirements of paragraph 1, point (a).
3. Member States shall ensure that the railway infrastructure of the core network, including connections referred to in Article 14(1), point (d), by 31 December 2040 meets the requirement of paragraph 1, point (b).
4. Member States shall ensure that the railway infrastructure of the core network, the extended core network and the comprehensive network, including connections referred to in Article 14(1), point (d), is equipped with radio-based ERTMS by 31 December 2050.
5. Member States shall ensure that on the railway infrastructure of the core network, the extended core network and the comprehensive network, including connections referred to in Article 14(1), point (d), as of 31 December 2025, in case of construction of a new line or upgrade of the signalling system, radio-based ERTMS is being deployed.
6. At the request of a Member State, in duly justified cases, exemptions may be granted by the Commission by means of implementing acts in respect of requirements referred to in paragraphs 1 to 5. Any request for exemption shall be based on a socio-economic cost-benefit analysis and an assessment of the impact on interoperability. An exemption shall comply with the requirements of Directive (EU) 2016/797 of the European Parliament and of the Council⁵⁰, be coordinated and agreed with the neighbouring Member State(s) where applicable.

Article 18

Operational requirements for the European Transport Corridors

1. Member States shall ensure that, by 31 December 2030, the quality of services provided by infrastructure managers to railway undertakings, technical and operational requirements for infrastructure use and procedures related to border controls do not prevent the operational performance of rail freight services along the rail freight lines of the European Transport Corridors from meeting the following target values:
 - (a) for each internal Union cross-border section, the dwelling time of all freight trains crossing the border does not exceed 15 minutes on average. Dwelling

⁵⁰ Directive (EU) 2016/797 of the European Parliament and of the Council of 11 May 2016 on the interoperability of the rail system within the European Union (OJ L 138, 26.5.2016, p. 44).

time of a train on a cross-border section means the total additional transit time that can be attributed to the existence of the border crossing, irrespective of the underlying causes, such as police border controls and procedures or considerations of infrastructural, operational, technical and administrative nature, without taking into account the time that cannot be attributed to the border crossing, such as operational procedures carried out in facilities located in the proximity of the border crossing but not intrinsically related to it;

- (b) 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.
2. Member States shall modify, as appropriate, contractual agreements referred to in Article 30 of Directive 2012/34/EU and take appropriate measures in accordance with Regulation (EU) No 913/2010 to meet the target values set out in points (a) and (b) of the first paragraph.

Article 19

Additional priorities for railway infrastructure development

In the promotion of projects of common interest related to railway infrastructure, and in addition to the general priorities set out in Articles 12 and 13, attention shall be given to the following:

- (a) mitigating the impact of noise and vibration caused by rail transport, in particular through measures for rolling stock and for infrastructure, including noise protection barriers;
- (b) improving the safety of level crossings;
- (c) where appropriate, connecting railway transport infrastructure with inland waterway port infrastructure;
- (d) subject to socio-economic costs and benefits analysis, developing of infrastructure for train length above 740 m and up to 1500 m and 25.0 t axle load when constructing and modernising railway lines relevant for freight traffic;
- (e) 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;
- (f) when building or upgrading railway infrastructure, ensure the continuity and accessibility of pedestrian and cycling paths in order to promote the active modes of transport;
- (g) developing innovative alternative fuels technologies for railways, such as hydrogen for sections that are exempted from the electrification requirement.

SECTION 2

INLAND WATERWAYS TRANSPORT INFRASTRUCTURE

Article 20

Infrastructure components

1. Inland waterways infrastructure shall comprise, in particular:
 - (a) rivers;
 - (b) canals;
 - (c) lakes;
 - (d) related infrastructure such as locks, elevators, bridges, reservoirs and associated flood and drought prevention and mitigation measures which may bring positive effects to inland waterway navigation;
 - (e) access waterways and last mile connections to multimodal freight terminals connected by inland waterways, in particular in inland and maritime ports;
 - (f) mooring and rest places;
 - (g) inland ports, including basic port infrastructure in the form of internal basins, quay walls, berths, jetties, docks, dykes, backfills, land reclamation and the infrastructure necessary for transport operations within the port area and outside the port area;
 - (h) associated equipment;
 - (i) ICT systems for transport, including RIS;
 - (j) the connections of the inland ports to the other modes in the trans-European transport network;
 - (k) infrastructure related to facilities for alternative fuels as defined in Regulation (EU) [...] [on the deployment of alternative fuels infrastructure];
 - (l) infrastructure necessary for zero waste operations and circular economy measures.
2. Equipment associated with inland waterways may include equipment for the loading and unloading of cargos and storage of goods in inland ports. Associated equipment may include, in particular, propulsion and operating systems which reduce pollution, such as water and air pollution, energy consumption and carbon intensity. It may also include waste reception facilities, shore-side electricity power supply and other alternative fuels infrastructure for supply and generation and used oil collection facilities, as well as equipment for ice-breaking, hydrological services and dredging of the fairway, port and port approaches to ensure year-round navigability.
3. An inland port shall be part of the comprehensive network where it meets the following conditions:
 - (a) it has an annual freight transshipment volume exceeding 500,000 tonnes. The total annual freight transshipment volume shall be based on the latest available three-year average, based on the statistics published by Eurostat;

- (b) it is located on the inland waterway network of the trans-European transport network.

Article 21

Transport infrastructure requirements for the comprehensive network

1. Member States shall ensure that inland ports on the comprehensive network, by 31 December 2050:
 - (a) will be connected with the road or rail infrastructure;
 - (b) offer at least one multimodal freight terminal open to all operators and users in a non-discriminatory way and which shall apply transparent and non-discriminatory charges;
 - (c) are equipped with facilities to improve the environmental performance of vessels in ports, including reception facilities, degassing facilities, noise reduction measures, measures to reduce air and water pollution.
2. Member States shall ensure that alternative fuels infrastructure is deployed in inland ports in compliance with the requirements of Regulation (EU) [...] [on the deployment of alternative fuels infrastructure].

Article 22

Transport infrastructure requirements for the core network

1. Member States shall ensure that the inland ports of the core network meet the requirements set out in Article 21(1), points (a) and (b), by 31 December 2030 and in Article 21(1), points (c), by 31 December 2040.
2. Member States shall ensure that the inland waterway network, including connections referred to in Article 20(1), point (e), is maintained to enable efficient, reliable and safe navigation for users by ensuring minimum waterway requirements and levels of service and by preventing the deterioration of these minimum requirements or any of its defined underlying criteria (Good Navigation Status).
3. Member States shall in particular ensure that:
 - (a) Rivers, canals, lakes, inland ports and their access routes provide a navigable channel depth of at least 2.5 m and a minimum height under non-openable bridges of at least 5.25 m at defined reference water levels, which are exceeded at a defined number of days per year on a statistical average.

The reference water levels shall be established on the basis of the number of days per year on which the actual water level exceeded the specified reference water level. The Commission shall adopt implementing acts specifying the reference water levels referred to in the previous subparagraph per river basin. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 59(3).

When specifying the reference water levels the Commission shall take into account the requirements which are set out in international conventions and in agreements concluded between Member States.

- (b) Member States shall publish on a website accessible to the public the number of days per year as referred to under point (a) during which the actual water

- level exceeds or does not achieve the specified reference water level for navigation channel depth as well as the average waiting times at each lock;
- (c) operators of locks shall ensure that locks are operated and maintained in such a way that waiting times are minimised;
 - (d) rivers, canals and lakes are equipped with RIS for all services according to Directive 2005/44/EC⁵¹, so as to guarantee real-time information to users across borders.
4. At the request of a Member State, in duly justified cases, exemptions from the minimum requirements referred to in paragraph (3), point (a), may be granted by the Commission by means of implementing acts. Any request for exemption shall be based on a socio-economic cost-benefit analysis, the assessment of specific geographic or significant physical constraints and/or of potential negative impacts on environment and biodiversity.
- Deterioration of the minimum requirements caused by direct human action or by lack of diligence in the maintenance of the inland waterway network shall not be considered as a case justifying the granting of an exemption.
- Member States may be granted an exemption in case of force majeure. Member States shall rehabilitate the navigability conditions to the previous status as soon as the situation allows for it.
- Any request for exemption shall be coordinated and agreed with the neighbouring Member State(s) where applicable.
5. The Commission shall adopt implementing acts setting out requirements complementing the minimum requirements established in accordance with paragraph (3), point (a), second subparagraph, per river basin. These requirements may be related in particular to:
- (a) complementary parameters for waterways specific for free flowing rivers;
 - (b) specifications for inland waterway infrastructure;
 - (c) specifications for infrastructure of inland ports;
 - (d) appropriate mooring places and services for commercial users;
 - (e) deployment of alternative energy infrastructure to ensure corridor-wide access to alternative fuels;
 - (f) requirements for digital applications of the network and automation processes;
 - (g) resilience of the infrastructure to climate change, natural hazards and human-made disasters or intentional disruptions;
 - (h) introduction and promotion of new technologies and innovation for zero-carbon energy fuels and propulsion systems.

The implementing act referred to in the first subparagraph shall be adopted in accordance with the examination procedure referred to in Article 59(3).

⁵¹ Directive 2005/44/EC of the European Parliament and of the Council of 7 September 2005 on harmonised river information services (RIS) on inland waterways in the Community (OJ L 255, 30.9.2005, p.152).

6. The Commission shall ensure a coherent approach on the application of the good navigation status in the Union and may adopt guidelines thereto. When establishing minimum requirements for paragraphs (e) and (f), the Commission shall ensure that the interoperability between river basins is not compromised.

Article 23

Additional priorities for inland waterway infrastructure development

In the promotion of projects of common interest related to inland waterway infrastructures, and in addition to the general priorities set out in Articles 12 and 13, attention shall be given to the following:

- (a) where appropriate, achieving higher standards for modernising existing waterways and for creating new waterways, in order to meet market demands;
- (b) prevention and mitigation measures against flooding and droughts;
- (c) the promotion of sustainable, safe and secure inland waterway transport, including within urban nodes;
- (d) modernisation and expansion of the capacity of the infrastructure necessary for transport operations within as well as outside the port area;
- (e) promoting and developing measures to improve the environmental performance of inland waterway transport and transport infrastructure, including zero and low emission vessels and measures to mitigate impacts on water bodies and water-dependent biodiversity, in accordance with the applicable requirements under Union law or relevant international agreements.

SECTION 3

MARITIME TRANSPORT INFRASTRUCTURE AND THE EUROPEAN MARITIME SPACE

Article 24

Infrastructure components

1. The European Maritime Space connects and integrates the maritime components described in paragraph 2 with the landside network through the creation or upgrading of short-sea shipping routes between two or more maritime ports on the Union territory or between one or more port(s) on the Union territory and a port on the territory of a neighbouring third country having a coastline on the enclosed seas bordering waters of the Union, and through the development of maritime ports on the Union territory and their hinterland connections to provide an efficient, viable and sustainable integration with other modes of transport.
2. The European Maritime Space consists of:
 - (a) the maritime transport infrastructure within the port area of the core and comprehensive network;
 - (b) wider benefit actions that are not linked to specific ports and that benefit the European Maritime Space and the maritime industry widely, such as support to

activities ensuring year-round navigability (icebreaking), ICT systems for transport and hydrographic surveys.

3. Maritime transport infrastructure referred to in point (a) of paragraph 2 shall comprise, in particular:
 - (a) maritime ports, including the infrastructure necessary for transport operations within the port area;
 - (b) basic port infrastructure such as internal basins, quay walls, berths, jetties, docks, dykes, backfills and land reclamation;
 - (c) sea canals;
 - (d) navigational aids;
 - (e) port approaches, fairways and locks;
 - (f) breakwaters;
 - (g) the connections of the ports to the trans-European transport network of the other modes of transport;
 - (h) ICT systems for transport, including EMSWe and VTMISS;
 - (i) infrastructure related to facilities for alternative fuels as defined in Regulation (EU) [...] [on the deployment of alternative fuels infrastructure];
 - (j) associated equipment, which may include, in particular, equipment for traffic and cargo management, for the reduction of negative effects on the environment, for improving energy efficiency, for the reduction of noise, and for the use of alternative fuels, as well as equipment to ensure year-round navigability, including ice-breaking, hydrological surveys, and for capital dredging and protection of the port and port approaches;
 - (k) infrastructure necessary for zero waste operations and circular economy measures.
4. A maritime port shall be part of the comprehensive network where at least one of the following conditions is met:
 - (a) its total annual passenger traffic volume exceeds 0.1% of the total annual passenger traffic volume of all maritime ports of the Union. The reference amount for this total volume is the latest available three-year average, based on the statistics published by Eurostat;
 - (b) its total annual cargo volume – either for bulk or for non-bulk cargo handling – exceeds 0.1% of the corresponding total annual cargo volume handled in all maritime ports of the Union. The reference amount for this total volume is the latest available three-year average, based on the statistics published by Eurostat;
 - (c) it is located on an island and provides the sole point of access to a NUTS 3 region in the comprehensive network;
 - (d) it is located in an outermost region or a peripheral area, outside a radius of 200 km from the nearest other port in the comprehensive network.

Article 25

Transport infrastructure requirements for the comprehensive network

1. Member States shall ensure that:
 - (a) alternative fuels infrastructure is deployed in maritime ports of the comprehensive network in full compliance with the requirements of Regulation (EU) [...] [on the deployment of alternative fuels infrastructure];
 - (b) maritime ports of the comprehensive network are equipped with the necessary infrastructure to improve the environmental performance of ships in ports, among others reception facilities for the delivery of waste from ships in accordance with Directive (EU) 2019/883 of the European Parliament and of the Council⁵²;
 - (c) VTMISS and SafeSeaNet are implemented in accordance with Directive 2002/59/EC;
 - (d) maritime national single windows are implemented in accordance with the Regulation (EU) 2019/1239.
2. Member States shall ensure that, by 31 December 2050:
 - (a) maritime ports of the comprehensive network will be connected with the rail and road infrastructure and, where possible, inland waterways, except where specific geographic or significant physical constraints prevent such connection;
 - (b) any maritime port of the comprehensive network that serves freight traffic offers at least one multimodal freight terminal which is open to all operators and users in a non-discriminatory way and which applies transparent and non-discriminatory charges;
 - (c) sea canals, port fairways and estuaries connect two seas, or provide access from the sea to maritime ports and correspond at least to inland waterways that meet the requirements of Article 22;
 - (d) maritime ports of the comprehensive network connected to inland waterways are equipped with dedicated handling capacity for inland waterway vessels.
3. At the request of a Member State, in duly justified cases, exemptions from the minimum requirements referred to in paragraph (2), may be granted by the Commission by means of implementing acts. Any request for exemption shall be based on a socio-economic cost-benefit analysis, the assessment of specific geographic or significant physical constraints and/or of potential negative impacts on environment and biodiversity.

Article 26

Transport infrastructure requirements for the core network

⁵² Directive (EU) 2019/883 of the European Parliament and of the Council of 17 April 2019 on port reception facilities for the delivery of waste from ships, amending Directive 2010/65/EU and repealing Directive 2000/59/EC (OJ L 151, 7.6.2019, p. 116).

1. Member States shall ensure that the maritime transport infrastructure of the core network complies with Article 25(1).
2. Member States shall ensure that the maritime transport infrastructure of the core network meets the requirements set out in Article 25(2) by 31 December 2030.
3. At the request of a Member State, in duly justified cases, exemptions from the minimum requirements referred to in paragraph (2), may be granted by the Commission by means of implementing acts. Any request for exemption shall be based on a socio-economic cost-benefit analysis, the assessment of specific geographic or significant physical constraints and/or of potential negative impacts on environment and biodiversity.

Article 27

Additional priorities for maritime infrastructure development

In the promotion of projects of common interest related to maritime infrastructure, and in addition to the priorities set out in Articles 12 and 13, attention shall be given to the following:

- (a) upgrading maritime access, such as breakwaters, sea channels, fairways, locks, capital dredging and navigational aids;
- (b) construction or upgrading basic port infrastructure, such as internal basins, quay walls, berths, jetties, docks, dykes, backfills and land reclamation;
- (c) improvement of digitalisation and automation processes, in particular in view of an increased safety, security and sustainability;
- (d) introduction and promotion of new technologies and innovation for zero and low carbon energy fuels and propulsion systems;
- (e) improve the resilience of the logistic chains and international maritime trade, including in relation to climate adaptation;
- (f) noise reduction and energy efficiency measures;
- (g) promoting zero and low emission vessels serving and operating short-sea shipping links, and developing measures to improve the environmental performance of maritime transport for port call or supply chain optimisation in accordance with the applicable requirements under Union law or relevant international agreements.

SECTION 4

ROAD TRANSPORT INFRASTRUCTURE

Article 28

Infrastructure components

1. Road transport infrastructure shall comprise, in particular:

- (a) roads including:
 - (i) bridges;
 - (ii) tunnels;
 - (iii) junctions;
 - (iv) crossings;
 - (v) interchanges;
 - (vi) hard shoulders;
 - (vii) parking and rest areas, including safe and secure parking areas for commercial vehicles;
 - (viii) weigh in motion systems;
 - (ix) infrastructure related to facilities for alternative fuels in full compliance with the requirements of Regulation (EU) [...] [on the deployment of alternative fuels infrastructure];
 - (x) infrastructure mitigating impact on environment;
 - (b) associated equipment;
 - (c) ICT systems for transport;
 - (d) access routes and last mile connection to multimodal freight terminals;
 - (e) connections of the freight terminals and logistic platforms to the other modes in the trans-European transport network;
 - (f) bus terminals.
2. The roads referred to in point (a) of paragraph 1 are those which play an important role in long-distance freight and passenger traffic, integrate the main urban and economic centres and interconnect with other transport modes.
 3. Equipment associated with roads may include, in particular, equipment for traffic management, information and route guidance, for the levying of tolls or user charges, for safety, for reducing negative environmental effects, for refuelling or recharging of vehicles with alternative propulsion, and for safe and secure parking areas for commercial vehicles.

Article 29

Transport infrastructure requirements for the comprehensive network

1. Member States shall ensure that:
 - (a) the safety of road transport infrastructure is ensured, monitored and, when necessary, improved in accordance with Directive 2008/96/EC of the European Parliament and of the Council⁵³;

⁵³ Directive 2008/96/EC of the European Parliament and of the Council of 19 November 2008 on road infrastructure safety management (OJ L 319, 29.11.2008, p. 59).

- (b) the roads are designed, built or upgraded and maintained with the highest level of safety of traffic through, in particular, the implementation of the latest technologies;
 - (c) the roads are designed, built or upgraded and maintained with the highest level of environmental protection, including as appropriate through low noise road surfaces and the collection, treatment and release of water run-off;
 - (d) road tunnels over 500 m in length comply with Directive 2004/54/EC of the European Parliament and of the Council⁵⁴;
 - (e) where applicable, the interoperability of toll collection systems is ensured in accordance with Directive (EU) 2019/520 of the European Parliament and of the Council⁵⁵ and with Commission Implementing Regulation C/2019/9080⁵⁶ and Commission Delegated Regulation C/2019/8369⁵⁷;
 - (f) where applicable, the tolls or user charges are levied in accordance with Directive 1999/62/EC of the European Parliament and of the Council⁵⁸;
 - (g) any intelligent transport system on road transport infrastructure complies with Directive (EU) [...] on the framework for the deployment of Intelligent Transport Systems and is deployed in a manner consistent with delegated acts adopted under that Directive⁵⁹;
 - (h) alternative fuels infrastructure is deployed on the road network in full compliance with the requirements of Regulation (EU) [...] [on the deployment of alternative fuels infrastructure].
2. Member States shall ensure that by 31 December 2050 the road infrastructure of the comprehensive network meets the following requirements:
- (a) the road is specially designed, built or upgraded for motor traffic and:
 - (i) provides, except at special points or temporarily, separate carriageways for the two directions of traffic, separated from each other by a dividing strip not intended for traffic or, exceptionally, by other means;
 - (ii) does not cross at grade with any road, railway or tramway track, bicycle path or footpath; and
 - (iii) does not serve properties bordering on it.

⁵⁴ Directive 2004/54/EC of the European Parliament and of the Council of 29 April 2004 on minimum safety requirements for tunnels in the trans-European road network (OJ L 167, 30.4.2004, p. 39).

⁵⁵ Directive (EU) 2019/520 of the European Parliament and of the Council of 19 March 2019 on the interoperability of electronic road toll systems and facilitating cross-border exchange of information on the failure to pay road fees in the Union (OJ L 91, 29.3.2019, p. 45).

⁵⁶ Commission Implementing Regulation (EU) 2020/204 of 28 November 2019 on detailed obligations of European Electronic Toll Service providers, minimum content of the European Electronic Toll Service domain statement, electronic interfaces, requirements for interoperability constituents and repealing Decision 2009/750/EC (OJ L 43, 17.2.2020, p. 49).

⁵⁷ Commission Delegated Regulation (EU) 2020/203 of 28 November 2019 on classification of vehicles, obligations of European Electronic Toll Service users, requirements for interoperability constituents and minimum eligibility criteria for notified bodies (OJ L 43, 17.2.2020, p. 41).

⁵⁸ Directive 1999/62/EC of the European Parliament and of the Council of 17 June 1999 on the charging of heavy goods vehicles for the use of certain infrastructures (OJ L 187, 20.7.1999, p. 42).

⁵⁹ Directive 2021/... revising Directive 2010/40/EU of the European Parliament and of the Council of 7 July 2010 on the framework for the deployment of Intelligent Transport Systems in the field of road transport and for interfaces with other modes of transport] (OJ L [...]).

- (b) rest areas are available at a maximum distance of 60 km from each other, providing sufficient parking space, safety and security equipment, and appropriate facilities, including sanitary facilities, that meet the needs of a diverse workforce;
 - (c) safe and secure parking areas are available at a maximum distance of 100 km from each other, providing a sufficient parking space for commercial vehicles and complying with the requirements set out in Article 8(1), point (a), of Regulation (EU) 2020/1054⁶⁰;
 - (d) weigh in motion systems are installed at a maximum distance of 300 km from each other. Weigh in motion systems shall allow the identification of vehicles and vehicle combinations that are likely to have exceeded the maximum authorised weights set out in Directive 96/53/EC.
3. Member States shall ensure, by 31 December 2030, the deployment or use of the means to detect safety-related events or conditions, and collection of the relevant road traffic data, for the purpose of providing road safety-related minimum universal traffic information as defined in Commission Delegated Regulation 886/2013⁶¹.
 4. At the request of a Member State, in duly justified cases, exemptions from the requirement set out in paragraph 2, point (a), may be granted by the Commission by means of implementing acts, in particular where the traffic density does not exceed 10,000 vehicles per day in both directions, or when there are specific geographic or significant physical constraints, as long as an appropriate level of safety is ensured. Any request for exemption shall be based on a socio-economic cost-benefit analysis, the assessment of specific geographic or significant physical constraints and/or of potential negative impacts on environment and biodiversity of the investments.

Article 30

Transport infrastructure requirements for the core network and extended core network

1. Member States shall ensure that the road infrastructure of the core network and extended core network complies with Article 29(1).
2. Member States shall ensure that the road infrastructure of the core network and extended core network meets the requirements set out in Article 29(2), points (a), (c) and (d), by 31 December 2040.
3. Member States shall ensure that the road infrastructure of the core network and extended core network meets the requirements set out in Article 29(2), point (b), by 31 December 2030.

⁶⁰ Regulation (EU) 2020/1054 of the European Parliament and of the Council of 15 July 2020 amending Regulation (EC) No 561/2006 as regards minimum requirements on maximum daily and weekly driving times, minimum breaks and daily and weekly rest periods and Regulation (EU) No 165/2014 as regards positioning by means of tachographs (OJ L 249, 31.7.2020, p. 1).

⁶¹ Commission delegated Regulation (EU) No 886/2013 of 15 May 2013 supplementing Directive 2010/40/EU of the European Parliament and of the Council with regard to data and procedures for the provision, where possible, of road safety-related minimum universal traffic information free of charge to users (OJ L 247, 18.9.2013, p. 6).

4. Member States shall ensure that the road infrastructure of the core network meets the requirements set out in Article 29(3) by 31 December 2025.
5. At the request of a Member State, in duly justified cases, exemptions from the requirement set out in Article 29 (2), point (a), may be granted by the Commission by means of implementing acts, in particular where the traffic density does not exceed 10,000 vehicles per day in both directions, or when there are specific geographic or significant physical constraints, as long as an appropriate level of safety is ensured. Any request for exemption shall be based on a socio-economic cost-benefit analysis, the assessment of specific geographic or significant physical constraints and/or of potential negative impacts on environment and biodiversity of the investments.

Article 31

Additional priorities for road infrastructure development

In the promotion of projects of common interest related to road infrastructure, and in addition to the general priorities set out in Articles 12 and 13, attention shall be given to the following:

- (a) improvement and promotion of road safety, taking into account the needs of vulnerable users and road users in all their diversity, in particular persons with reduced mobility;
- (b) mitigation of congestion on existing roads, in particular through intelligent traffic management, including dynamic congestion charges or tolls varied based on the time of day, week or season;
- (c) introduction of innovative technologies to improve the control of compliance with the Union road transport legal framework, including smart and automated enforcement tools and 5G communication infrastructure;
- (d) when building or upgrading road infrastructure, ensure the continuity and accessibility of pedestrian and cycling paths in order to promote the active modes of transport.

SECTION 5

AIR TRANSPORT INFRASTRUCTURE

Article 32

Infrastructure components

1. Air transport infrastructure shall comprise, in particular:
 - (a) air space, routes and airways;
 - (b) airports, including the infrastructure and equipment necessary for ground and transport operations within the airport area, vertiports and spaceports;
 - (c) the connections of the airports to the other modes in the trans-European transport network;

- (d) ATM/ANS Systems and associated equipment, including space-based equipment;
 - (e) infrastructure related to alternative fuels, and electricity supply to stationary aircraft as defined in Regulation (EU) [...] [on the deployment of alternative fuels infrastructure];
 - (f) infrastructure for the on-site production of alternative fuels and improving energy efficiency and reducing climate, environmental and noise emissions of airports or of associated airport operations such as ground-handling services, aircraft operations and passenger ground transport;
 - (g) infrastructure used for separate waste collection, waste prevention and activities in the area of circular economy.
2. An airport shall be part of the comprehensive network, where it meets at least one of the following conditions:
- (a) for cargo airports, the total annual cargo volume is at least 0.2% of the total annual cargo volume of all airports of the Union;
 - (b) for passenger airports, the total annual passenger traffic is at least 0.1% of the total annual passenger volume of all airports of the Union, unless the airport in question is situated outside a radius of 100 km from the nearest airport in the comprehensive network or outside a radius of 200 km where there is a high-speed railway line in the region in which it is situated.

The total annual passenger volume and the total annual cargo volume are based on the latest available three-year average, based on the statistics published by Eurostat.

Article 33

Transport infrastructure requirements for the core and comprehensive network

1. Member States shall ensure that:
- (a) the airports of the core network are connected with the long-distance rail network, including the high-speed rail network, and road transport infrastructure of the trans-European transport network by 31 December 2030, except where specific geographic or significant physical constraints prevent such connections;
 - (b) the airports of the comprehensive network with a total annual passenger traffic volume of more than four million passengers are connected with the long-distance railway network, including with the high-speed rail network, and road transport infrastructure of the trans-European transport network by 31 December 2050, except where specific geographic or significant physical constraints prevent such connections;
 - (c) any airport located on their territory offers at least one terminal which is open to all operators and users in a non-discriminatory way and which shall apply transparent, and non-discriminatory charges;
 - (d) common basic standards for safeguarding civil aviation against acts of unlawful interference, as adopted by the Union in accordance with Regulation

(EC) No 300/2008 of the European Parliament and of the Council⁶², apply to the air transport infrastructure;

- (e) infrastructure for air traffic management is such as to permit the implementation of the Single European Sky, in accordance with Regulation (EC) No 549/2004, (EC) No 550/2004, (EC) No 551/2004 and (EU) No 2018/1139, of air transport operations, in order to improve the performance and sustainability of the European aviation system, of implementing rules and of Union specifications;
- (f) alternative fuels infrastructure is deployed in airports in full compliance with the requirements as defined in Regulation (EU) [...] [on the deployment of alternative fuels infrastructure];
- (g) air transport infrastructure provides for pre-conditioned air supply to stationary aircraft.

2. At the request of a Member State, the Commission may, in duly justified cases, grant exemptions by means of implementing acts in respect of the requirements set out in paragraph 1, points (a), (b), (c) and (g). Any request for exemption shall be based on a socio-economic cost-benefit analysis or related to the specific geographic or significant physical constraints, including the non-existence of a railway system on the territory.

Article 34

Additional priorities for air transport infrastructure development

In the promotion of projects of common interest related to air transport infrastructure, and in addition to the priorities set out in Articles 12 and 13, attention shall be given to the following:

- (a) increasing airport energy and operational efficiency;
- (b) supporting the implementation of the Single European Sky and of interoperable systems, in particular those developed by the SESAR project in accordance with the European ATM Master Plan;
- (c) improvement of digitalisation and automation processes, in particular in view of an increased safety and security;
- (d) improving multimodal interconnections between airports and infrastructure of other transport modes, and between airports and urban nodes where appropriate;
- (e) improving sustainability and mitigating climate, environmental and noise impacts, in particular by introducing new technologies and innovation, alternative fuels, zero- and low emission aircraft and zero and low carbon infrastructure.

⁶² Regulation (EC) No 300/2008 of the European Parliament and of the Council of 11 March 2008 on common rules in the field of civil aviation security and repealing Regulation (EC) No 2320/2002 (OJ L 97, 9.4.2008, p. 72).

SECTION 6

INFRASTRUCTURE FOR MULTIMODAL FREIGHT TERMINALS

Article 35

Identification of the multimodal freight terminals

1. The multimodal freight terminals of the trans-European transport network are terminals that are:
 - (a) located in the maritime ports of the trans-European transport network, as listed in Annex II;
 - (b) located in the inland ports of the trans-European transport network, as listed in Annex II;
 - (c) located within or in the vicinity of an urban node;
 - (d) classified as rail road terminals of the trans-European transport network, as listed in Annex II.
2. Member States shall ensure that there is sufficient multimodal freight terminal capacity serving the trans-European transport network, meeting current and future traffic flows, in particular flows serving urban nodes, industrial centres, ports and logistics hubs.
3. Within two years after the entry into force of this Regulation, Member States shall conduct a market and prospective analysis on multimodal freight terminals on their territory. This analysis shall at least:
 - (a) examine the current and the future traffic flows of freight, including traffic flows of freight transported by road;
 - (b) identify the existing multimodal freight terminals of the trans-European transport network on their territory, and assess the need for new multimodal freight terminals or additional transshipment capacity in existing terminals;
 - (c) analyse how to ensure adequate distribution of multimodal freight terminals with adequate transshipment capacity in order to meet the needs identified in point (b). This shall take into account the terminals located in border areas of neighbouring Member States.

Member States shall consult shippers, transport and logistics operators which operate on their territory. They shall take into account the results of the consultation in their analysis.

4. On the basis of the analysis under paragraph 3, Member States shall elaborate an action plan for the development of a multimodal freight terminal network. The results of the analysis and the action plan shall be submitted to the Commission no later than six months after finalising the analysis, together with a list of rail road terminals which the Member State proposes to add in Annexes I and II.
5. A rail road terminal shall be part of the trans-European transport network and listed in Annexes I and II where at least one of the following conditions is met:
 - (a) its annual transshipment of freight exceeds, for non-bulk cargo, 800,000 tonnes or, for bulk cargo, 0.1% of the corresponding total annual cargo volume handled in all maritime ports of the Union;

- (b) it is the main rail road terminal designated by the Member State for a NUTS 2 region, where there is no rail road terminal complying with point (a) in that NUTS 2 region,
- (c) it is proposed by the Member State in accordance with paragraph 4.

Article 36

Infrastructure components

Multimodal freight terminals shall comprise, in particular:

- (a) infrastructure interconnecting the different modes of transport within a terminal area and its vicinity;
- (b) equipment such as cranes, conveyors or other transshipment devices to move freight between different transport modes and for the positioning and storage of freight;
- (c) dedicated areas such as gate area, intermediate buffer and waiting area, transshipment area and driving or loading lanes;
- (d) ICT systems relevant for efficient terminal operations such as those that facilitate infrastructure capacity planning, transport operations, connections between the modes, and transshipment;
- (e) infrastructure related to facilities for alternative fuels.

Article 37

Transport infrastructure requirements

1. Member States shall ensure in a fair and non-discriminatory manner that multimodal freight terminals referred to in Article 35(1):
 - (a) are connected to the modes of transport which are available in the area, where feasible, unless not justified in socio-economic cost-benefit terms;
 - (b) are equipped with at least one recharging station as defined in Article 2, point (43), of Regulation (EU) [...] [on the deployment of alternative fuels infrastructure] dedicated to serve heavy-duty vehicles, by 31 December 2030;
 - (c) are equipped with digital tools to ensure by 31 December 2030:
 - (i) efficient terminal operations such as photogates, terminal operation system, driver digital check-in/check-out, cameras or other sensors on transshipment equipment as well as raiiside camera systems;
 - (ii) the provision of information flows within a terminal and between the transport modes along the logistic chain and the terminal.
2. Member States shall ensure in a fair and non-discriminatory manner that multimodal freight terminals referred to in Article 35(1) and which are connected to the rail network, by 31 December 2030, are able to handle all types of intermodal loading units if they are classified as intermodal terminals and if they carry out vertical transshipment.
3. Member States shall ensure in a fair and non-discriminatory manner that multimodal freight terminals referred to in Article 35(1) and which are connected to the rail

network, by 31 December 2040, are able to accommodate 740 m long trains without manipulation or, if this is not economically viable, that adequate measures are taken to improve the operational efficiency of accommodating 740 m long trains, such as extension and electrification of departure and arrival sidings, adjustments to signalling systems and improvements to the track configuration.

4. Member States shall ensure in a fair and non-discriminatory manner that all multimodal freight terminals referred to in Article 35(1) and which are connected to the rail network, by 31 December 2050 are able to handle any 740 m long train without manipulation.
5. At the request of a Member State, in duly justified cases, exemptions from the obligations under paragraphs 1 to 4 may be granted by the Commission by means of implementing acts where investment in infrastructure cannot be justified in socio-economic cost-benefit terms, in particular when the terminal is located in a spatially restricted area.

Article 38

Additional priorities for multimodal transport infrastructure development

In the promotion of projects of common interest related to multimodal transport infrastructure, and in addition to the general priorities set out in Articles 12 and 13, attention shall be given to the following:

- (a) facilitating interconnections between different transport modes;
- (b) removing the main technical and administrative barriers to multimodal transport, including by the implementation of eFTI;
- (c) developing a smooth flow of information enabling transport services across the trans-European transport system;
- (d) facilitating the interoperability for data sharing, access to data and data re-use within and between the transport modes;
- (e) promoting, where appropriate, that private sidings on the trans-European transport network allow for the handling of 740 m trains without manipulation.

SECTION 7

URBAN NODES

Article 39

Urban nodes components

1. An urban node shall comprise, in particular:
 - (a) transport infrastructure in the urban node that is part of the trans-European transport network, including bypasses, and that increases the performance of the trans-European transport network;

- (b) access points to the trans-European transport network, notably multimodal railway stations, multimodal freight terminals, ports or airports;
 - (c) first and last mile connections between and to these access points.
2. The urban nodes of the trans-European transport network are listed in Annex II.

Article 40

Urban nodes requirements

When developing the trans-European transport network in urban nodes, in order to ensure the effective functioning of the entire network without bottlenecks, Member States shall ensure:

- (a) availability of alternative fuels recharging and refuelling infrastructure, including in logistics platforms and for public transport in full compliance with the requirements of Regulation (EU) [...] [on the deployment of alternative fuels infrastructure];
- (b) by 31 December 2025:
 - (i) adoption of a sustainable urban mobility plan (SUMP) in line with Annex V that includes notably measures to integrate the different modes of transport, to promote efficient zero-emission mobility including sustainable and zero-emission urban logistics, to reduce air and noise pollution and that takes long-distance trans-European transport flows into consideration;
 - (ii) collection and submission to the Commission of urban mobility data per urban node covering at minimum greenhouse gas emissions, congestion, accidents and injuries, modal share and access to mobility service, as well as data on air and noise pollution. Thereafter these data shall be submitted every year;
- (c) by 31 December 2030:
 - (i) for passenger transport: sustainable, seamless and safe interconnection between rail, road, air, the active modes of transport and, as appropriate, inland waterway and maritime infrastructure;
 - (ii) for passenger transport: ability for passengers to access information, book, pay their journeys and retrieve their tickets through multimodal digital mobility services;
 - (iii) for freight transport: sustainable, seamless and safe interconnection between rail, road, and, as appropriate, inland waterway, air and maritime infrastructure as well as appropriate connections with logistics platforms and facilities;
 - (iv) the development of multimodal passenger hubs to facilitate first and last mile connections which are equipped with at least one recharging station as defined in Article 2, point (43), of Regulation (EU) [...] [on the deployment of alternative fuels infrastructure] dedicated to serve heavy-duty vehicles;
- (d) by 31 December 2040: the development of at least one multimodal freight terminal allowing for sufficient transshipment capacity within or in the vicinity of the urban node.

The Commission shall adopt, no later than one year after the entry into force of this Regulation an implementing act establishing a methodology for the data to be collected by the Member States referred to under point (ii) of paragraph (b). That implementing act shall be adopted in accordance with the examination procedure referred to in Article 59(3).

Article 41

Additional priorities for urban nodes

In the promotion of projects of common interest related to urban nodes, and in addition to the general priorities set out in Articles 12 and 13, attention shall be given to the following:

- (a) seamless interconnection between the infrastructure of the trans-European transport network and the infrastructure for regional and local transport;
- (b) mitigation of the exposure of urban areas to negative effects of transiting rail and road transport, which may include bypasses;
- (c) promotion of efficient and low-noise zero emission transport and mobility, including greening urban fleets;
- (d) increase of the modal share of public transport and of active modes;
- (e) digital exchange of transport and traffic information between urban and non-urban traffic management centres and with entities providing information services, in line with ISO/CEN standards.

CHAPTER IV

PROVISIONS FOR SMART AND RESILIENT TRANSPORT

Article 42

ICT systems for transport

1. ICT systems for transport shall be such as to enable capacity and traffic management and the exchange of information within and between transport modes for multimodal transport operations and value-added transport-related services, improvements in resilience, safety, security, congestion and operational and environmental performance, and simplified administrative procedures. ICT systems for transport shall also facilitate seamless connection between infrastructure and mobile assets.
2. ICT systems for transport shall be deployed across the Union, in order to ensure the presence of a set of interoperable basic capabilities in all Member States.
3. The ICT systems for transport referred to in this Article shall include:
 - (a) for railways: ERTMS, telematics applications for freight and passenger services as referred to in the Technical Specification for Interoperability, and other digitalisation improvements, in particular outputs from Shift2Rail and Europe's Rail Joint Undertaking;
 - (b) for inland waterways: RIS;

- (c) for road transport: ITS;
- (d) for maritime transport: for vessel traffic management VT-MIS services and for information exchange the European Maritime Single Window environment (EMSW_e);
- (e) for air transport: ATM/ANS systems, in particular those resulting from the SESAR project;
- (f) for multimodal transport: eFTI, the EU Mobility Data Space and frameworks facilitating business to business data exchange for supply chain transparency and optimisation.

Article 43

Sustainable freight transport services

1. Member States shall promote projects of common interest which both provide efficient freight transport services that use the infrastructure of the trans-European transport network and contribute to reducing carbon dioxide emissions and other negative environmental impacts, and which aim to:
 - (a) improve sustainable use of transport infrastructure, including its efficient management;
 - (b) promote the deployment of innovative transport services, including short-sea shipping links, ICT systems for transport and the development of the ancillary infrastructure necessary to achieve mainly environmental and safety-related goals of those services, as well as the establishment of relevant governance structures;
 - (c) facilitate multimodal transport service operations, including the necessary accompanying information flows, and improve cooperation of the participants of the logistic chain, including shippers, operators, service providers and their customers;
 - (d) stimulate resource efficiency and zero- and low-emission operation, in particular in the fields of technologies, operations, vehicle traction, driving/steaming, systems and operations planning;
 - (e) improve links to the most vulnerable and isolated parts of the Union, in particular the outermost regions, and other remote, insular, peripheral and mountainous regions as well as sparsely populated areas.
2. Member States shall promote the deployment of innovative transport services, including through the European Maritime Space, ICT systems and the development of the ancillary infrastructure necessary to achieve environmental and safety-related goals of those services as well as the establishment of relevant governance structures.

Article 44

New technologies and innovation

In order for the trans-European transport network to keep up with innovative technological developments and deployments, Member States shall aim in particular to:

- (a) support and promote the decarbonisation of transport through transition to zero- and low-emission vehicles, vessels and aircraft and other innovative and sustainable transport and network technologies such as hyperloop;
- (b) make possible the decarbonisation of all transport modes by stimulating energy efficiency, introduce zero and low emission solutions, including hydrogen and electricity supply systems, as well as other new solutions such as sustainable fuels, and provide corresponding infrastructure. Such infrastructure may include grid access and other facilities necessary for the energy supply, may take account of the infrastructure-vehicle interface and may encompass ICT systems for transport. Transport infrastructure may serve as energy hub to serve different transport modes;
- (c) support the take-up and deployment of new digital technologies, in particular promote connectivity infrastructure with uninterrupted coverage across the European Transport Corridors to ensure the highest level and performance of digital infrastructure and reach higher levels of automation;
- (d) improve the safety and sustainability of the movement of persons and of the transport of goods;
- (e) improve the operation, management, accessibility, interoperability, multimodality and efficiency of the network, including through the development of multimodal digital mobility services and the development of infrastructure that allows for seamless multimodality, such as high-speed rail and city train/tram connection at airports;
- (f) promote efficient ways to provide accessible and comprehensible information to all users and providers of transport services regarding interconnections, interoperability and multimodality;
- (g) promote efficient ways to provide accessible and comprehensive information to all users and providers of transport services regarding the environmental impacts of their transport choices;
- (h) promote measures to reduce external costs, such as congestion, damage to health and pollution of any kind including noise and emissions;
- (i) introduce security technology and compatible identification standards on the networks;
- (j) improve transport infrastructure resilience against disruptions and climate change through infrastructure upgrades and design and digital, cyber secure solutions aimed at the protection of the network in the context of natural and human-made disasters;
- (k) further advance the development and deployment of ICT systems and new technologies for transport within and between modes of transport.

Article 45

Safe and secure infrastructure

Member States shall ensure that transport infrastructure provides for safe and secure passenger and freight movements.

Article 46

Resilience of infrastructure

1. When planning infrastructure, Member States shall improve the security and the resilience of the transport infrastructure to climate change, natural hazards, human-made disasters, as well as intentional disruptions affecting the functioning of the Union transport system. When implementing projects of common interest, Member States shall take into consideration:
 - (a) interdependencies, linkages and cascading effects with other networks such as telecommunication and electricity network;
 - (b) safety, security and performance in the presence of multiple hazards;
 - (c) structural infrastructure quality during its whole lifecycle, with particular attention to the future projected climate conditions;
 - (d) civil protection needs to react to disruptions;
 - (e) cyber-security and resilience of infrastructure, with particular attention to cross-border infrastructure.
2. Projects of common interest for which an environmental impact assessment must be carried out in compliance with Directive 2011/92/UE shall be subject to climate proofing. The climate proofing shall be undertaken based on the latest available best practice and guidance to ensure that transport infrastructures are resilient to the adverse impacts of climate change, through a climate vulnerability and risk assessment, including through relevant adaptation measures, and through integration of the costs of greenhouse gas emissions in the cost-benefit analysis. Such requirement does not apply to projects for which the environmental impact assessment has been completed before entry into force of this Regulation.

Article 47

Risks to security or public order

1. Member States shall notify the Commission of any project of common interest in their territory with the participation of or contribution of any kind by a natural person of a third country or an undertaking of a third country with a view to allow assessment of its impact on security or public order in the Union. This obligation shall not apply to foreign direct investments notified to the Commission and other Member States pursuant to Article 6(1) of Regulation (EU) 2019/452.
2. Member States shall ensure that the information notified pursuant to paragraph 1 is made available at least twelve months before the final decision on the implementation of the project of common interest. The information shall in particular include:
 - (a) the ownership structure of the undertaking of a third country and where applicable of the undertaking in which the participation or contribution is planned, including information on the ultimate beneficial owner and participation in the capital;
 - (b) the approximate value of the participation of or contribution by a natural person of a third country or an undertaking of a third country in the project of

common interest and the description of the form and conditions of such participation or contribution;

- (c) the products, services and business operations of the natural person of a third country or an undertaking of a third country and where applicable of the undertaking in which the participation or contribution is planned affecting the trans-European network;
- (d) the Member States in which the natural person of a third country or an undertaking of a third country and where applicable the undertaking in which the participation or contribution is planned conduct relevant business operations affecting the trans-European transport network;
- (e) the funding of the contribution or participation and its source, on the basis of the best information available to the Member State;
- (f) the date when the participation is planned to take effect or the contribution is planned to be completed.

In addition, Member States shall endeavour to provide any information, if available, relevant for the assessment undertaken by the Commission pursuant to points (a), (b) and (c) of the second subparagraph of paragraph 5.

3. No later than thirty calendar days following the receipt of information pursuant to paragraph 1, the Commission may request additional information from the Member State where the project of common interest is planned. Any request for additional information shall be duly justified, limited to information necessary to carry out the assessment pursuant to paragraph 5, proportionate to the purpose of the request and not unduly burdensome for the Member State where the project of common interest is planned.

The Member State where the project of common interest is planned shall ensure that the additional information requested by the Commission is made available to the Commission without undue delay.

The Member State where the project of common interest is planned may request the natural person of a third country or an undertaking of a third country to provide the information referred to in paragraph 2 and 3. The natural person of a third country or an undertaking of a third country concerned shall provide the information requested without undue delay.

4. Where the Commission considers that the participation of or contribution of any kind by a natural person of a third country or an undertaking of a third country is likely to affect critical infrastructure on the trans-European transport network on grounds of security or public order, or has relevant information in relation to that participation or contribution, or the project of common interest concerned, it may issue an opinion addressed to the Member State where the project of common interest is planned.

Critical infrastructure thereby means an asset, system or part thereof used for transport purposes and located in Member States which is essential for the maintenance of vital societal functions, health, safety, security, economic or social well-being of people, and the disruption or destruction of which would have a significant impact in a Member State as a result of the failure to maintain those functions.

5. In determining whether the participation of a natural person of a third country or an undertaking of a third country is likely to affect critical infrastructure on grounds of

security or public order, the Commission may consider its potential effects on, inter alia on:

- (a) critical infrastructure and facilities critical for the operation of such infrastructure, as well as land and real estate crucial for the use of such infrastructure;
- (b) technologies and dual use items as defined in point 1 of Article 2 of Regulation (EU) 2021/821⁶³ essential for the functioning of critical infrastructure;
- (c) supply of inputs essential for the building, operation and maintenance of critical infrastructure;
- (d) access to sensitive information, including personal data, or the ability to control such information in conjunction with the building, operation and maintenance of critical infrastructure.

In determining whether a foreign participation or contribution is likely to affect security or public order, the Commission may also take into account, in particular:

- (a) whether the third undertaking is directly or indirectly controlled by the government, including state bodies or armed forces, of a third country, including through ownership structure or significant funding;
- (b) whether the natural person of a third country or the third undertaking have already been involved in activities affecting security or public order in a Member State; or
- (c) whether there is a serious risk that the natural person of a third country or the third undertaking engage in illegal or criminal activities.

6. The Commission may provide an opinion pursuant to paragraph 4 no later than three months following the receipt of information pursuant to paragraph 3. The opinion of the Commission shall be addressed to the Member State where the project of common interest is planned and it shall be sent to the other Member States. In case the participation of or contribution of any kind by a natural person of a third country or an undertaking of a third country is a foreign direct investment as defined in point 1 of Article 2 of Regulation (EU) 2019/452 not undergoing screening by the Member State where the foreign direct investment is planned or completed, the Commission shall issue such opinion, where justified, pursuant to Article 8 of Regulation (EU) 2019/452.
7. The Member State in which the project of common interest is planned to be implemented by, or with the participation of or contribution of any kind by a natural person of a third country or an undertaking of a third country shall take utmost account of the Commission's opinion and provide an explanation to the Commission if its opinion is not followed, no later than three months following the issuance of the opinion.
8. Each Member State and the Commission shall establish a contact point for the implementation of this Article. Member States and the Commission shall involve those contact points on all issues relating to the implementation of this Article.

⁶³ Regulation (EU) 2021/821 of the European Parliament and of the Council of 20 May 2021 setting up a Union regime for the control of exports, brokering, technical assistance, transit and transfer of dual-use items (recast) (OJ L 206, 11.6.2021, p. 1).

9. A secure and encrypted system shall be provided by the Commission to support direct cooperation and exchange of information between the contact points.
10. Member States and the Commission shall ensure the protection of confidential information acquired in application of this article in accordance with Union and the respective national law.
11. Member States and the Commission shall ensure that classified information provided or exchanged under this article is not downgraded or declassified without the prior written consent of the originator.
12. Any processing of personal data pursuant to this Article shall be carried out in accordance with Regulation (EU) 2016/679⁶⁴ and Regulation (EU) 2018/1725⁶⁵ and only in so far as it is necessary for the screening of the participation in, or contribution to, the relevant project of common interest and for ensuring the effectiveness of the cooperation provided for in this Article. Personal data related to the implementation of this Article shall be kept only for the time necessary to achieve the purposes for which they were collected.

Article 48

Maintenance and project life cycle

Member States shall ensure that:

- (a) the infrastructure of the trans-European transport network is maintained in a way that it provides the same level of service and safety during its lifetime;
- (b) long term maintenance plans including information on financing resources required to cover long-term maintenance costs of the existing and planned infrastructure are set up;
- (c) maintenance needs and costs over the life-time of the infrastructure are taken into account in the planning phase of construction or upgrading;
- (d) in the case of railway infrastructure, consistency is ensured between the maintenance and renewal needs related to the development of the trans-European network for transport and reflected in the indicative rail infrastructure development strategy referred to in Article 8(1) of Directive 2012/34/EU, the business plan of the infrastructure managers concerned referred to in Article 8(3) of Directive 2012/34/EU and the contractual agreement between the competent authority and the infrastructure manager referred to in Article 30 of Directive 2012/34/EU.

⁶⁴ Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) (OJ L 119, 4.5.2016, p. 1).

⁶⁵ Regulation (EU) 2018/1725 of the European Parliament and of the Council of 23 October 2018 on the protection of natural persons with regard to the processing of personal data by the Union institutions, bodies, offices and agencies and on the free movement of such data, and repealing Regulation (EC) No 45/2001 and Decision No 1247/2002/EC (OJ L 295, 21.11.2018, p. 39).

Article 49

Accessibility for all users

Transport infrastructure shall allow seamless mobility and accessibility for all users, in particular people in situations of vulnerability including persons with disabilities or reduced mobility as well as persons living in outermost regions and other remote, rural, insular, peripheral and mountainous regions as well as sparsely populated areas.

CHAPTER V

IMPLEMENTATION OF THE INSTRUMENTS OF EUROPEAN TRANSPORT CORRIDORS AND HORIZONTAL PRIORITIES

Article 50

The instrument of European Transport Corridors and horizontal priorities

1. European Transport Corridors are an instrument to facilitate the coordinated implementation of parts of the trans-European transport network and are intended, in particular, to improve cross-border links and to remove bottlenecks within the Union.
2. In order to lead to resource-efficient multimodal transport and to contribute to cohesion through improved territorial cooperation, the European Transport Corridors shall be focused on:
 - (a) modal integration with a particular view to strengthen the most environmentally friendly transport modes, notably rail, inland waterways and short-sea shipping;
 - (b) interoperability;
 - (c) a coordinated development of infrastructure, in particular in cross-border sections, notably in view of developing a fully interoperable rail freight system as well as a long-distance rail passenger network at high speed across the Union;
 - (d) supporting the coordinated and integrated development and deployment of innovative solutions for the digitalisation of transport.
3. European Transport Corridors shall enable Member States to achieve a coordinated and synchronised approach with regard to investment in infrastructure.
4. The European Rail Traffic Management System (ERTMS) and the European Maritime Space are the horizontal priorities for the implementation of the trans-European transport network. They shall ensure the timely deployment of ERTMS on the entire network and the integration of maritime links into the trans-European transport network.

Article 51

Coordination of European Transport Corridors and horizontal priorities

1. In order to facilitate the coordinated implementation of the European Transport Corridors, of ERTMS and of the European Maritime Space, the Commission shall, in agreement with the Member States concerned, and after consulting the European Parliament and the Council, designate one European Coordinator for each Corridor and for each horizontal priority.
2. The European Coordinator shall be chosen, in particular, on the basis of his/her knowledge of matters relating to transport and/or to the financing and/or the socio-economic and environmental evaluation of major projects, as well as his/her experience with Union policy making. The European Coordinator shall be selected for a mandate of maximum of four years, renewable. The remit of the European Coordinator shall relate to the implementation of a single corridor or horizontal priority.
3. The Commission decision designating the European Coordinator shall specify how the tasks referred to in paragraphs 5, 6 and 7 are to be performed.
4. The European Coordinator shall act in the name and on behalf of the Commission, which shall provide the necessary secretarial assistance.
5. The European Coordinators shall:
 - (a) support the coordinated implementation of the European Transport Corridor or horizontal priority concerned;
 - (b) draw up a work plan together with the Member States concerned and monitor its implementation in accordance with Article 53;
 - (c) consult with the Corridor Forum or the consultative forum for the horizontal priorities respectively in relation to that work plan and its implementation and regularly inform the Forum on the implementation of the work plan;
 - (d) report to the Member States, to the Commission and, as appropriate, to all other entities directly involved in the development of the European Transport Corridor or horizontal priority on any difficulties encountered and, in particular when the development of a corridor or horizontal priority is being impeded, with a view to helping to find appropriate solutions;
 - (e) draw up an annual status report on the progress achieved in implementing the European Transport Corridors and horizontal priorities. This annual status report shall focus on the progress made on key priorities and investments, describe the nature of problems encountered in their implementation and propose solutions.
6. The European Coordinators of the European Transport Corridors shall:
 - (a) cooperate closely with the rail freight governance to identify and prioritise investment needs for rail freight on the rail freight lines of the European Transport Corridors;
 - (b) monitor administrative, operational and interoperability aspects of freight traffic on the rail freight lines of the European Transport Corridors, including monitoring the performance of rail freight services, in close cooperation with the rail freight governance.
7. The European Coordinators of the European Transport Corridors shall:

- (a) identify and prioritise investment needs for the rail passenger lines of the European Transport Corridors;
 - (b) monitor administrative, operational and interoperability aspects of passenger traffic on the rail passenger lines of the European Transport Corridors, including monitoring the performance of rail passenger services.
8. Pursuant Article 14(4) of Regulation (EU) No 2021/1153, the Commission shall request the opinion of the European Coordinator when examining applications for Union funding under the Connecting Europe Facility (CEF) for European Transport Corridors or horizontal priorities in the remit of the European Coordinator's mandate, in order to ensure the consistency and advancement of each corridor or horizontal priority. The European Coordinator shall verify whether projects proposed by the Member States for CEF co-funding are consistent with the priorities of the work plan.
9. If the European Coordinator is unable to carry out his or her mandate satisfactorily and in accordance with the requirements laid down in this Article, the Commission may at any time terminate that mandate and designate a new European Coordinator in accordance with the procedure set out in paragraph 1.

Article 52

Governance of European Transport Corridors and horizontal priorities

1. For each European Transport Corridor and horizontal priority, the respective European Coordinator shall be assisted in the performance of his/her tasks concerning the work plan and its implementation by a secretariat and by a consultative forum, respectively the "Corridor Forum" and the "consultative Forum for the horizontal priorities".
2. The "Corridor Forum" shall be formally established and chaired by the European Coordinator. The Member States concerned shall agree on the membership of the Corridor Forum for their part of the European Transport Corridor and ensure representation of the rail freight governance.
3. With the agreement of the Member States concerned, the European Coordinator may set up and chair corridor working groups which focus on:
 - (a) interoperability and deployment of new digital technologies and infrastructure;
 - (b) the coordinated development and implementation of infrastructure projects in cross-border sections;
 - (c) cross-border passenger rail services;
 - (d) operational bottlenecks;
 - (e) urban nodes;
 - (f) cooperation with third countries;
 - (g) other ad-hoc working groups deemed necessary.

When relevant, the European Coordinator shall cooperate and coordinate with the rail freight governance on the activities of the working groups to avoid any duplication of work.

4. The consultative Forum for the horizontal priorities shall be established and chaired by the European Coordinator. The Member States concerned and where appropriate representatives of the relevant sectors shall be able to participate. Member States shall designate a national coordinator for ERTMS to attend the consultative Forum for ERTMS. The European Coordinator may also set up ad-hoc working groups.
5. The Member States concerned shall cooperate with the European Coordinator, participate in the Corridor Forum and the consultative forum for the horizontal priorities and give the European Coordinator the information required in order to perform the tasks laid down in this Article, including information on the development of corridors in the relevant national infrastructure plans.
6. The European Coordinator may consult regional and local authorities, infrastructure managers, transport operators, in particular those which are members of the rail freight governance, the supply industry, transport users and representatives of civil society in relation to the work plan and its implementation. In addition, the European Coordinator responsible for ERTMS shall closely cooperate with the European Union Agency for Railways and Europe's Rail Joint Undertaking and the European Coordinator for the European Maritime Space with the European Maritime Safety Agency.

Article 53

Work plan of the European Coordinator

1. Each European Coordinator of the European Transport Corridors and the two horizontal priorities shall draw up, at the latest two years after the entry into force of this Regulation and thereafter every four years, a work plan that provides a detailed analysis of the state of implementation of the corridor or horizontal priority under his/her competence and its compliance with the requirements of this Regulation as well as the priorities for its future development.
2. The work plan shall be prepared in close cooperation with the Member States concerned and in consultation of the Corridor Forum and rail freight governance, or consultative forum of the horizontal priorities. The work plan of the European Transport Corridors shall be approved by the Member States concerned. The Commission shall submit the work plan to the European Parliament and the Council for information.

When drafting the work plan, the European Coordinator shall take into account the implementation plan as referred to in Article 9 of Regulation (EU) 913/2010.

3. The work plan for the European Transport Corridor shall provide a detailed analysis of the state of implementation of the corridor concerned, which includes in particular:
 - (a) a description of the characteristics of the corridor;
 - (b) an analysis of the state of compliance of the corridor with the transport infrastructure requirements of this Regulation and its related progress achieved;
 - (c) an identification of the missing links and bottlenecks hampering the development of the corridor;

- (d) an analysis of the investments required, including the different financing and funding sources committed and/or envisaged for the implementation of the projects needed for the development and completion of the corridor;
- (e) a description of possible solutions to address the investment needs and bottlenecks, in particular for the passenger and freight lines of the corridor;
- (f) a plan with intermediate targets for the removal of physical, technical, digital, operational and administrative barriers between and within transport modes and for the enhancement of efficient multimodal transport with particular attention to cross-border sections and national missing links.

For the analysis of the investments and the preparation of the plan with intermediate targets related to rail freight, the European Coordinator shall cooperate with the executive board and the management board of the corridor referred to in Article 11 of Regulation (EU) No 913/2010.

For the analysis of the investments and the preparation of the plan with intermediate targets related to multimodal freight terminals, the European Coordinator shall take into account the corridor relevant elements of the analysis, the action plans elaborated by the Member States pursuant to Article 35(4) and the list referred to in Article 19, point (b), of Regulation (EU) No 913/2010.

For the analysis of the investments and the preparation of the plan with intermediate targets related to passenger services, the European Coordinator shall take into account the results of the monitoring performed in accordance with article 51, paragraph 7, point (b).

- (g) the results of the performance monitoring of rail freight traffic undertaken by the rail freight governance in accordance with Article 19 of Regulation (EU) No 913/2010 and the list of corridor objectives, targets and measures defined in accordance to Article 9(1) of Regulation (EU) No 913/2010, as means to reach the operational requirements of Article 18 of this Regulation;
- (h) an identification of measures in urban nodes which are relevant for the effective functioning of the corridor and achievement of the objectives of the trans-European transport network;
- (i) an identification of priorities for the development of the corridor;
- (j) an analysis of the possible impacts of climate change on the infrastructure and, where appropriate, proposed measures to enhance resilience to climate change;
- (k) measures to be taken in order to mitigate greenhouse gas emissions, noise and, as appropriate, other negative environmental impacts.

4. The European Coordinator shall support Member States in implementing the work plan, in particular as regards:

- (a) the priority setting in national planning, through the identification of implementation problems and bottlenecks, including operational issues, on each corridor or for each horizontal priority;
- (b) the project and investment planning, the related costs and implementation timeline estimated to implement the European Transport Corridors or horizontal priority;

- (c) the establishment of a single entity for the construction and management of cross-border infrastructure projects.

Article 54

Implementing acts

1. Based on the first work plan of the European Coordinators, the Commission shall adopt an implementing act for each work plan of the European Transport Corridors and the two horizontal priorities. This implementing act shall set out the priorities for infrastructure and investment planning and for funding.
2. The Commission may adopt implementing acts for the implementation of specific sections of the European Transport Corridor, in particular for the implementation of complex cross-border sections or of specific transport infrastructure requirements of the European Transport Corridor or of the horizontal priorities.
3. The implementing acts referred to in paragraphs 1 and 2 shall be adopted in accordance with the examination procedure referred to in Article 59(3). The Commission shall amend the implementing acts in accordance with the same procedure every time the work plan is revised by the European Coordinator, or to take into account the progress made, delays encountered or updated national programmes.
4. Until full implementation of the measures provided for in the implementing act, the Member States concerned shall communicate to the Commission an annual report on the progress achieved, indicating in particular the financial commitments made in the national budget plan.

CHAPTER VI

COMMON PROVISIONS

Article 55

Reporting and monitoring

1. Member States shall inform the Commission on a regular, comprehensive and transparent basis about the progress made in implementing projects of common interest and the investments made for that purpose. This information shall include the yearly transmission of data through the interactive geographical and technical information system for the trans-European transport network (TENtec). It shall include technical and financial data concerning projects of common interest on the trans-European transport network as well as data on the completion of the trans-European transport network.
2. The Commission shall ensure that TENtec is publicly and easily accessible, allowing for an automated data exchange with national systems and other relevant Union applications and data sources. TENtec shall contain project-specific and updated information on the forms and amounts of Union co-funding as well as on the progress of each project.

The Commission shall also ensure that TENtec does not make publicly available any information which is commercially confidential or which could prejudice or unduly influence any process of public procurement in a Member State.

3. Member States shall ensure the quality, completeness and consistency of the data in the TENtec information system. The national systems and data sources shall allow for an automated data exchange with TENtec.

Article 56

Updating of the network

1. Subject to the second paragraph of Article 172 TFEU, the Commission shall be empowered to adopt delegated acts in accordance with Article 60 to amend Annexes I and II, notably to take account of possible changes resulting from the quantitative thresholds laid down in Articles 20, 24 and 32. When adapting those Annexes, the Commission shall:
 - (a) include inland ports, maritime ports and airports in the comprehensive network, if it is demonstrated that the latest three-year average of their traffic volume exceeds the relevant threshold;
 - (b) exclude maritime ports and airports from the comprehensive network, if it is demonstrated that the average of their traffic volume over the last six years is below 85% of the relevant threshold;
 - (c) include urban nodes in the trans-European transport network, if it is demonstrated that the number of inhabitants exceeds 100,000;
 - (d) include multimodal freight terminals identified by the Member State according to Article 35(4) in the trans-European transport network;
 - (e) adjust the maps for road, railway and inland waterway infrastructure in a strictly limited way so as to reflect progress in completing the network. In adjusting those maps, the Commission shall not admit any adjustment in route alignment beyond that which is allowed by the relevant project authorisation procedure.

The adaptations referred to in points (a) to (c) of the first subparagraph shall be based on the latest available statistics published by Eurostat or, if those statistics are not available, by the national statistics offices of the Member States. The adaptations referred to in point (d) of the first subparagraph shall be based on the action plan referred to in Article 35(4). The adaptations referred to in point (e) of the first subparagraph shall be based on the information provided by the Member States concerned in accordance with Article 55(1).

2. A project of common interest concerning infrastructure which is newly included through a delegated act adopted pursuant to paragraph 1 in the trans-European transport network shall be eligible for Union financial assistance under the instruments available for the trans-European transport network as from the date of entry into force of those delegated acts.

Projects of common interest concerning infrastructure which have been excluded from the trans-European transport network shall cease to be eligible as from the date of entry into force of the delegated acts adopted pursuant to paragraph 1 of this

Article. The cessation of eligibility shall not affect financing or grant decisions taken by the Commission before that date.

3. Subject to Article 172(2) TFEU, the Commission shall be empowered to adopt delegated acts in accordance with Article 60 to amend Annex IV in order to include or adapt indicative maps of transport infrastructure networks of neighbouring countries.

Article 57

Engagement with public and private stakeholders

National procedures regarding the involvement and consultation of regional and local authorities and civil society concerned by a project of common interest shall be complied with, where appropriate, in the planning and construction phase of a project. The Commission shall promote the exchange of good practice in this regard, notably as regards the consultation and inclusion of people in situations of vulnerability.

Article 58

Alignment of national plans with Union transport policy

1. Member States shall ensure that national transport and investment plans are coherent with Union transport policy, with the priorities and deadlines set out in this Regulation and with the priorities set out in the work plans for the relevant corridors and horizontal priorities for the concerned Member States and with the implementing acts adopted in accordance with Article 54(1).
2. National investment plans shall include all projects of common interest and related investments needed for the timely completion of the network.
3. Member States shall notify to the Commission the draft national plans and programmes, or any modification of those, with a view to developing the trans-European transport network, at least twelve months before their adoption. The Commission may issue an opinion no later than six months following the notification by the Member State on the coherence of the draft national plans and programmes with the priorities set out in this Regulation and with the priorities set out in the work plans for the corresponding corridor(s) and of the horizontal priorities and in the implementing acts adopted in accordance with Article 54(1). The Member States shall inform the Commission, no later than two months after notification of the opinion, on the measures adopted to address the recommendations set out in the opinion.

Article 59

Committee procedure

1. The Commission shall be assisted by a committee. That committee shall be a committee within the meaning of Regulation (EU) No 182/2011.

2. For the purpose of Article 22(3) and (5) the Commission shall be assisted by the Committee established pursuant to Article 7 of Council Directive 91/672/EEC⁶⁶.
3. Where reference is made to this paragraph, Article 5 of Regulation (EU) No 182/2011 shall apply. Where the committee delivers no opinion, the Commission shall not adopt the draft implementing act and the third paragraph of Article 5(4) of Regulation (EU) No 182/2011 shall apply.

Article 60

Exercise of delegation

1. The power to adopt delegated acts is conferred on the Commission subject to the conditions laid down in this Article.
2. The power to adopt delegated acts referred to in Article 11(3), 56(1) and (3) shall be conferred on the Commission for a period of five years from [...]. The Commission shall draw up a report in respect of the delegation of power not later than nine months before the end of the five-year period. The delegation of power shall be tacitly extended for periods of an identical duration, unless the European Parliament or the Council opposes such extension not later than three months before the end of each period.
3. The delegation of powers referred to in Article 11(3), 56(1) and (3) may be revoked at any time by the European Parliament or by the Council. A decision to revoke shall put an end to the delegation of the power specified in that decision. It shall take effect the day following the publication of the decision in the *Official Journal of the European Union* or at a later date specified therein. It shall not affect the validity of any delegated acts already in force.
4. As soon as it adopts a delegated act, the Commission shall notify it simultaneously to the European Parliament and to the Council.
5. A delegated act adopted pursuant to Article 11(3), 56(1) and (3) shall enter into force only if no objection has been expressed either by the European Parliament or by the Council within a period of two months of the notification of that act to the European Parliament and the Council or if, before the expiry of that period, the European Parliament and the Council have both informed the Commission that they will not object. That period shall be extended by two months at the initiative of the European Parliament or of the Council.

Article 61

Review

1. By 31 December 2033, the Commission, having consulted with Member States as appropriate and with the assistance of the European Coordinators, shall carry out an assessment of the implementation of the core network, evaluating in particular its compliance with the requirements of this Regulation.

⁶⁶ Council Directive 91/672/EEC of 16 December 1991 on the reciprocal recognition of national boatmasters' certificates for the carriage of goods and passengers by inland waterway (OJ L 373, 31.12.1991, p. 29).

The assessment shall take into account the annual status report and the work plans drawn up by the European Coordinators pursuant to Article 51(5), point (e) and Article 53(1) respectively.

2. By 31 December 2033, the Commission, having consulted with Member States as appropriate and with the assistance of the European Coordinators, shall carry out a review of the implementation of the extended core and the comprehensive network, evaluating:
 - (a) compliance with this Regulation;
 - (b) progress in the implementation of this Regulation;
 - (c) changes in passenger and freight transport flows;
 - (d) developments in national transport infrastructure investment;
 - (e) the need for amendments to this Regulation.

The evaluation shall also consider the impact of evolving traffic patterns and relevant developments in infrastructure investment plans.

3. When carrying out that review, the Commission shall evaluate whether the extended core and the comprehensive network as provided for in this Regulation is likely to comply with the provisions of Chapters II, III and IV by the deadlines of 31 December 2040 and 31 December 2050, as applicable, while taking into account the economic and budgetary situation in the Union and in individual Member States. The Commission shall also evaluate, in consultation with the Member States, whether the extended core network and the comprehensive network should be modified to take into account developments in transport flows and national investment planning.

Article 62

Delay in completion of the core network, the extended core network and the comprehensive network

1. In the event of significant delay in starting or completing work on the core network, extended core network and on the comprehensive network compared to the initial timeline set in implementing acts in accordance with Article 54 or defined in national transport and investment plans or other relevant project documentation, the Commission may ask the Member State or Member States concerned to provide the reasons for the delay. Such reasons shall be provided by the Member State or Member States within three months of the request. On the basis of the reply given, the Commission shall consult the Member State or Member States concerned in order to resolve the problem that has caused the delay.
2. In case the delayed section concerns a European Transport Corridor, the European Coordinator shall be involved in view of resolving the problem.
3. The Commission may, after considering the reasons provided by the Member State or Member States concerned pursuant to the first subparagraph, adopt a decision addressed to the Member State or Member States concerned, finding that the significant delay in starting or completing the work on the core network, extended core network or on the comprehensive network is attributable to the Member State or Member States without an objective justification. The Commission shall give the Member State or Member States concerned 6 months to eliminate the significant delay.

In case the delayed section concerns a project supported with Union funds under direct management, a reduction of the amount of the grant and/or an amendment or termination of the grant agreement may be initiated in accordance with the applicable rules.

Article 63

Exemptions

The provisions relating to railways, and in particular any requirement to connect airports and ports to railways as well as the provisions related to safe and secure parking and multimodal freight terminals shall not apply to Cyprus, Malta and outermost regions for as long as no railway system is established within their territory.

Article 64

Amendments to Regulation (EU) 2021/1153

Annex to Regulation (EU) 2021/1153 is amended in accordance with Annex VI to this Regulation.

Article 65

Amendments to Regulation (EU) No 913/2010

Regulation (EU) No 913/2010 is amended as follows:

(1) in Article 1, paragraph 1 is replaced by the following:

‘1. This Regulation lays down rules for the organisation and management of international rail corridors for competitive rail freight with a view to the development of a European rail network for competitive freight. It sets out rules for the organisation, management and the indicative investment planning of freight corridors.’

(2) in Article 2, paragraph 2 is replaced by the following:

‘2. In addition to the definitions referred to in paragraph 1:

- (a) ‘freight corridor’ means the freight railway lines of the European Transport Corridor as defined in Article 11(1) of Regulation [... new TEN-T Regulation]* and of Annex III to that Regulation, including the railway infrastructure and its equipment and relevant rail services in accordance with Article 5 of Directive 2001/14/EC;
- (b) ‘implementation plan’ means the document presenting the means, the strategy and the measures that the parties concerned intend to implement which are necessary and sufficient to organise and manage the freight corridor;
- (c) ‘terminal’ means the installation provided along the freight corridor which has been specially arranged to allow either the loading and/or the unloading of goods onto/from freight trains, and the integration of rail freight services with road, maritime, river and air services, and either the forming or modification of the composition of freight trains; and, where necessary, performing border procedures at borders with European third countries;
- (d) ‘European Coordinator’ means the Coordinator referred to in Article 51 of Regulation [... new TEN-T Regulation].

* Regulation [...]

(3) the Title of Chapter II is replaced by the following:

‘ORGANISATION AND MANAGEMENT OF THE FREIGHT CORRIDORS’

(4) Article 3 is replaced by the following:

‘Article 3

Organisation and management of freight corridors

1. Organisation and management of freight corridors is subject to rules on governance, investment planning, allocation of railway infrastructure capacity and traffic management, in accordance with this Regulation.
2. From the date of entry into force of Regulation [... new TEN-T Regulation] or in the event of an amendment of the alignment of a European Transport Corridor pursuant to Article 11(3) of that Regulation, Member States and infrastructure managers responsible for the freight corridor part of that European Transport Corridor shall adjust the organisation and management of the freight corridor within 12 months of the date of the change.’

(5) Articles 4 to 7 are deleted.

(6) Article 8 is amended as follows:

(a) in paragraph 1, the following sentence is added:

‘The executive board shall regularly assess the consistency between the general objectives and the objectives defined by the management board in accordance with Article 9(1), point (c).’

(b) paragraph 7 is replaced by the following:

‘7. The management board shall set up an advisory group made up of managers and owners of the terminals of the freight corridor including, where necessary, sea and inland waterway ports. This advisory group may issue an opinion on any proposal by the management board which has direct consequences for investment and the management of terminals. It may also issue own-initiative opinions. The management board shall take any of these opinions into account. In the event of disagreement between the management board and the advisory group, the latter may refer the matter to the executive board and to the European Coordinator concerned by the freight corridor. The executive board and the European Coordinator concerned by the freight corridor shall act as an intermediary and provide its opinion in due time. The final decision however shall be taken by the management board.’

(c) in paragraph 8, the following sentence is added:

‘In the event of disagreement between the management board and the advisory group, the latter may refer the matter to the executive board and to the European Coordinator concerned by the freight corridor. The executive board or the European Coordinator concerned by the freight corridor shall act as an intermediary and provide its opinion in due time. The final decision shall be taken by the management board.’

(d) the following paragraph 10 is added:

‘10. The executive board and the management board shall cooperate with the European Coordinator concerned by the freight corridor to support the development of rail freight traffic along the corridor.’

(7) Article 9 is replaced by the following:

‘Article 9

Measures for developing the freight corridor

1. The management board shall draw up and publish an implementation plan at the latest six months before making the freight corridor operational. The management board shall consult the advisory groups referred to in Article 8(7) and 8(8) on the draft implementation plan. The management board shall submit the implementation plan for approval to the executive board.

This plan shall include:

- (a) a description of the characteristics of the freight corridor, including bottlenecks, and the programme of measures necessary to improve its organisation and management;
- (b) the essential elements of the study referred to in paragraph 3;
- (c) the objectives for the freight corridors, in particular in terms of performance of the freight corridor expressed as the quality of the service and the capacity of the freight corridor in accordance with the provisions of Article 19 of this Regulation, and, where relevant, quantitative or qualitative targets relating to these objectives. The objectives and the targets shall take into account the requirements set out in Article 18 of Regulation [... new TEN-T Regulation];
- (d) the measures to implement the provisions of Articles 12 to 19 and the measures to improve the performance of the freight corridor, based on the results of the assessment referred to in Article 19(3), with a view to achieve the objectives and targets referred to in point (c).
- (e) the views and assessment of the advisory groups referred to in Article 8(7) and 8(8) with respect to corridor development.
- (f) a summary of the cooperation and the results of the consultation referred to in Article 11, including the opinions of the advisory groups referred to in Articles 8(7) and 8(8) and a summary of the responses of other stakeholders.

When drawing up the implementation plan, the management board shall take into account the objectives and measures contained in the work plan of the European Coordinator, referred to in Article 53 of Regulation [... new TEN-T Regulation]. The implementation plan shall include a reference to the elements of the work plan which are relevant for rail freight traffic along the corridor.

The management board shall regularly review and adjust the targets referred to in point (c) and the measures referred to in point (d), based on the assessment referred to in Article 19(3) following the consultation of the advisory groups referred to in Article 8(7) and 8(8) and the European Coordinator.

2. The management board shall periodically, at least every four years, review the implementation plan taking into account progress made in its implementation, the rail freight market on the freight corridor and performance measured in accordance with the objectives referred to in point (c) of paragraph 1.
3. The management board shall carry out and periodically update a transport market study relating to the observed and expected changes in the traffic on the freight

corridor, covering the different types of traffic, both regarding the transport of freight and the transport of passengers. This study shall also review, where necessary, the socio-economic costs and benefits stemming from the development of the freight corridor.

4. The implementation plan shall take into account the development of terminals, including the market and prospective analysis on multimodal freight terminals as well as the action plans of the Member States of the freight corridor, referred to in Article 35(3) and (4) of Regulation [... new TEN-T Regulation].
 5. The management board shall, as appropriate, take measures to cooperate with regional and/or local administrations in respect of the implementation plan.'
- (8) Article 11 is replaced by the following:

'Article 11

Investment planning

1. The executive board and the management board of a freight corridor shall cooperate with the European Coordinator concerned by the freight corridor in relation to the infrastructure and investments needs resulting from the rail freight traffic to support the drawing up of the work plan referred to in Article 53 of Regulation (EU) [... new TEN-T Regulation].
 2. The management board shall consult the advisory groups referred to in Articles 8(7) and 8(8) on infrastructure development and investment needs. The consultation shall be based on an adequate, up-to-date documentation of the infrastructure planning at corridor and national level. The executive board shall ensure adequate coordination between these consultation activities and the coordination mechanisms at national level as defined in Article 7e of Directive 2012/34/EU.
 3. The cooperation and the consultation shall address in particular:
 - (a) capacity needs of rail freight transport relevant for infrastructure and investment planning taking into account the need for capacity pursuant to Article 14(2) and any infrastructure declared congested pursuant to Article 47 of Directive 2012/34/EU;
 - (b) TEN-T infrastructure requirements relevant for rail freight transport as defined in Chapters II and III of Regulation (EU) [... new TEN-T Regulation], in particular as regards the capacity needs for freight trains with a length of no less than 740 m;
 - (c) need for targeted investments to remove local bottlenecks, such as connecting loops, improvements to nodes and last-mile infrastructure or technical equipment enhancing operational performance.'
- (9) Article 19 is replaced by the following:

'Article 19

Quality of service on the freight corridor

1. The management board of the freight corridor shall promote compatibility between the performance schemes along the freight corridor, as referred to in Article 35 of Directive 2012/34/EU.

2. The management board shall monitor the performance of services provided by the infrastructure managers to applicants in fulfilment of their essential functions, as far as in the scope of Articles 12 to 18, and of rail freight services on the freight corridor. Performance monitoring shall be carried out in qualitative and quantitative terms, where appropriate based on performance indicators relating to the objectives and targets of the freight corridor defined in accordance with point (c) of Article 9(1). The management board shall consult the advisory groups referred to in Article 8(7) and 8(8) and the European Coordinator on relevant performance indicators.
 3. The management board shall assess the results of the performance monitoring with respect to the objectives and targets defined in accordance with point (c) of Article 9(1) and to the operational requirements referred to in Article 18 of Regulation [... new TEN-T Regulation]..
 4. The management board shall prepare and publish an annual report presenting the results of the activities carried out pursuant to this Article. It shall present the views and assessment of performance by the advisory groups referred to in Article 8(7) and 8(8) in a dedicated section of the report. The management board shall submit the annual report for approval to the executive board.'
- (10) Articles 22 and 23 are replaced by the following:

'Article 22

Monitoring implementation

Every four years from the time of the establishment of a freight corridor, the executive board referred to in Article 8(1) shall present to the Commission the results of the implementation plan for that corridor. The Commission shall analyse those results and notify the Committee referred to in Article 21 of its analysis.'

Article 23

Report

The Commission shall periodically examine the application of this Regulation. It shall submit a report to the European Parliament and the Council, at the latest two years after entry into force of this Regulation and every four years thereafter.'

- (11) the Annex to this Regulation is deleted.

Article 66

Repeal

Regulation (EU) No 1315/2013 is repealed with effect from [date of entry into force of this Regulation].

References to the repealed Regulation (EU) No 1315/2013 shall be construed as references to this Regulation and shall be read in accordance with the correlation table in Annex VII.

Article 67

Entry into force

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Strasbourg,

For the European Parliament
The President

For the Council
The President