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Development of the Indicative TEN-T Extensions of the Comprehensive and Core Network in Georgia, the Republic of Moldova, and Ukraine

2025

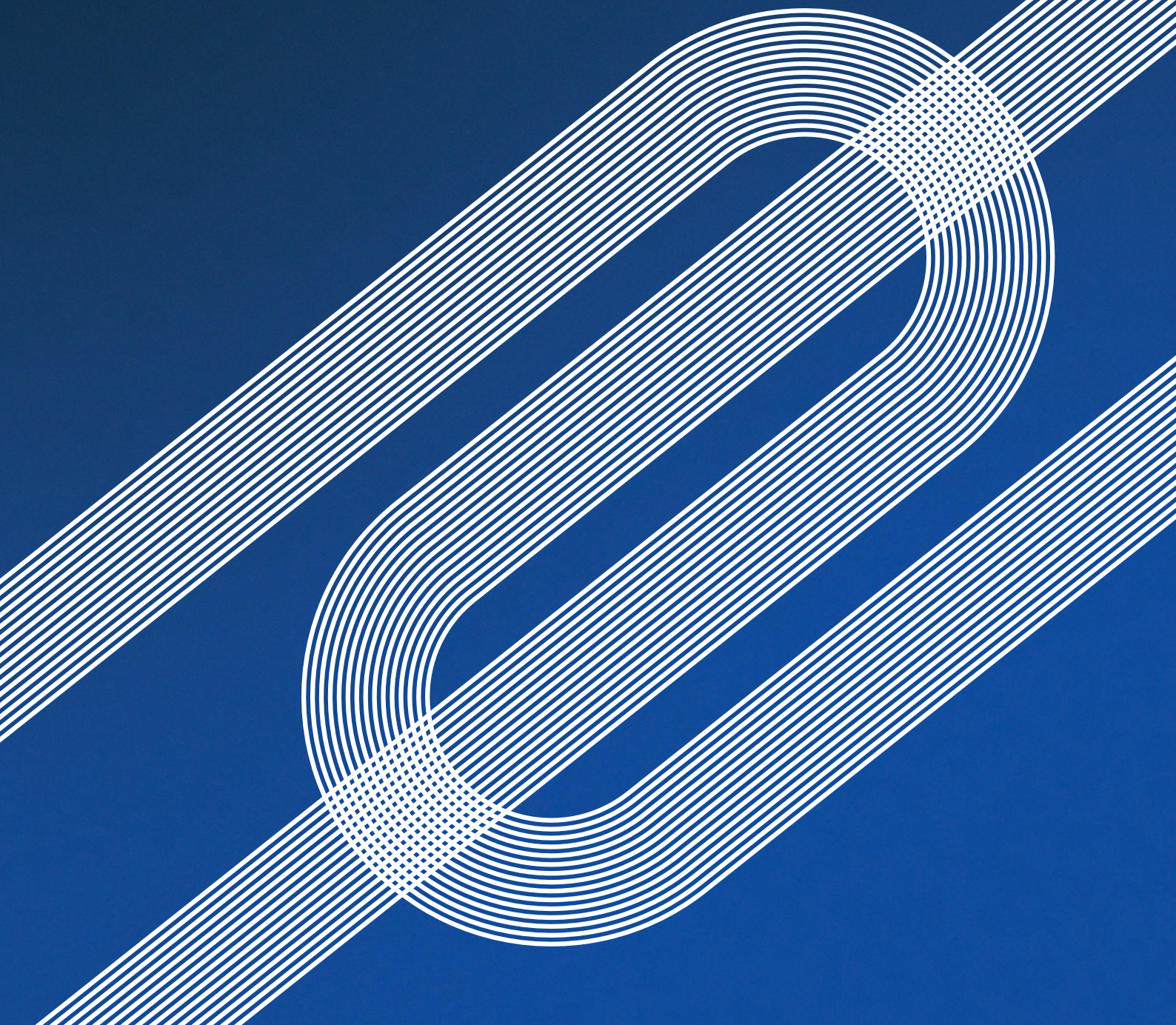

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Table of Contents

List of Figures

List of Tables

I Introduction

Under the institutional mechanisms established by the Transport Community Treaty, the devel-opment status and performance of the indicative extension of the TEN-T network are monitored through annual reporting exercises. The same methodology is now being applied to these ob-serving participants, Georgia, the Republic of Moldova, and Ukraine within the framework of the Transport Community[1].

The 2025 Development of Indicative TEN-T Extensions of the Comprehensive and Core Network in Georgia, the Republic of Moldova and Ukraine provide a comprehensive assessment of the current level of compliance with the requirements of the Regulation (EU) 2024/1679 and builds upon the previous assessments of performance and compliance carried out for the indicative TEN-T network extensions in 2023 and 2024. It serves as a valuable reference for understanding the status and existing gaps in meeting EU transport infrastructure standards, while also highlighting ongoing development trends and their potential implications for future compliance.

The report is based on the newly adopted Regulation (EU) 2024/1679, which replaces the previously applicable Regulation (EU) No 1315/2013. The report reflects the updated network layout and indicators introduced by the new TEN-T regulation.

The data collection process remains to be challenging. Overall, the completeness and reliability of the collected data vary across participants: while information provided by the Republic of Moldova and Georgia may be considered relatively comprehensive, data received from Ukraine remains limited.

II Executive Summary

Progress from last year's report is marginal. Changes in compliance rates are largely due to adjustments in the TEN-T maps rather than tangible improvements on the ground. Compliance rates vary significantly across sectors and specific indicators. In general, the linear road and rail infrastructure is in suboptimal physical condition due to prolonged underinvestment and maintenance backlogs.

Rail network: Significant disparities persist across key TEN-T rail performance indicators among Georgia, Moldova and Ukraine. Georgia's network is fully electrified, Moldova has yet to begin electrification, and Ukraine shows a high level of electrification. Passenger and freight speeds in Ukraine are higher than in Georgia and Moldova, where maximum speeds reach only up to 80 km/h on limited sections. Moldova fully meets the 740-metre train length requirement, Ukraine is close to full compliance, and Georgia meets the standard only on a small share of its Core Network. Ukraine has started adapting its lines to the European standard track gauge, whereas Moldova and Georgia have not yet initiated such efforts. ERTMS deployment remains outstanding across all three countries, highlighting the need for major investment to achieve interoperability and compliance with Regulation (EU) 2024/1679.

Road network: Overall, the assessment highlights progress in aligning road infrastructure with EU standards, but also underscores gaps, particularly in operational ITS systems, alternative fuel deployment, and comprehensive monitoring of road safety, which will require continued investment and development to meet the staged implementation deadlines for the core (2030), extended core (2040), and comprehensive (2050) networks.

[1] Financed under the Action „Participation of Georgia, Republic of Moldova and Ukraine in the Transport Community", NDICI-GEO-NEAR/2023/452-688"

Georgia's assessment comprises multiple indicators, including road design, safe and secure rest areas, ITS deployment, and alternative fuel infrastructure (although not all), while data for Moldova and Ukraine are currently limited to road design and rest area compliance.

The road network faces maintenance challenges across all three observing participants.

Waterborne Transport (Maritime & Inland Waterways): Georgia, Moldova, and Ukraine have made progress in developing waterborne transport infrastructure, particularly in port digitalisation and multimodal connectivity.

Georgia advanced with the new PotiTrans Terminal and near-full digital system deployment, though alternative fuel facilities remain limited. Moldova's Giurgiulești Port Complex shows ongoing expansion but lacks full TEN-T compliance and modern systems such as RIS and VTMIS. Despite the Russian war of aggresion, Ukraine's major ports continue operating and largely meet TEN-T criteria, but inland waterways and alternative fuel infrastructure remain underdeveloped.

Air transport: Regarding airports, Tbilisi International (Core) and Kutaisi International (Comprehensive) are fully connected to road and rail networks and have sufficient terminal capacity for international traffic, but neither currently provides aviation biofuel or alternative fuels for airport services, highlighting a gap in compliance with Regulation (EU) 2024/1679 requirements.

III Methodological Notes

Scope of the Report

In line with the objectives of the Transport Community and the updated framework provided by Regulation (EU) 2024/1679, the report presents an overview of the progress achieved by Georgia, the Republic of Moldova and Ukraine in aligning their transport infrastructure with the standards of the Trans-European Transport Network (TEN-T).

Infrastructure development is guided by the Treaty establishing the Transport Community, particularly Articles 8, 9, and 10, which outline obligations for implementing the TEN-T extension, monitoring progress through annual reporting, and developing traffic management systems. These provisions ensure that infrastructure planning and modernisation efforts are consistent with EU standards and timelines.

Similar to the last year but taking into account the new TEN-T Guidelines, the main focus of this year's report is following key areas:

- *Progress assessment* – a comparative analysis of how each country has advanced in meeting TEN-T requirements, based on the technical and operational criteria defined in Regulation (EU) 2024/1679.
- *Project Landscape* – a summary of current infrastructure projects contributing to TEN-T compliance, including investment efforts and implementation timelines.
- *Outlook to 2030* – a forecast of expected compliance levels by 2030 based on scheduled project completion dates and national development plans.

The structured approach supports the integration of the Eastern Partnership countries (i.e. TCT Observers– the Republic of Moldova and Ukraine) into the European transport network, promoting connectivity, sustainability, and regional cooperation.

The adoption of Regulation (EU) 2024/1679 marks a significant evolution in the EU's approach to developing the Trans-European Transport Network (TEN-T). This regulation introduces a more ambitious and integrated framework, aligning transport infrastructure policy with the goals of the European Green Deal and the Smart and Sustainable Mobility Strategy.

A central innovation of the new regulation is its reinforced emphasis on sustainability, digitalisation, and resilience. It mandates the deployment of alternative fuel infrastructure, promotes low- and zero-emission mobility, and prioritises the integration of intelligent transport systems. These measures aim to accelerate the decarbonisation of transport and enhance the network's adaptability to future challenges.

The regulation also updates the TEN-T network structure, introducing a new extended core layer that bridges the gap between the core and comprehensive networks. This layer includes sections of the comprehensive network that are part of the strategically important European Transport Corridors.

Of particular relevance to the Transport Community, the regulation extends several European Transport Corridors beyond EU borders, strengthening connectivity with neighbouring countries. In addition to the Western Balkans Corridor, four corridors now reach into Ukraine and the Republic of Moldova, enhancing their integration into the European transport system:

- **North Sea-Baltic Corridor:** Links the Ukrainian port of Mariupol via Kyiv and Lviv to the Baltic states, Poland, and North Sea ports in Belgium, the Netherlands, and Germany.
- **Baltic Sea-Black Sea-Aegean Sea Corridor:** Connects Moldova and the Ukrainian port of Odesa to a north-south axis running through Poland, Slovakia, Hungary, Romania, Bulgaria, and Greece.
- **Mediterranean Corridor:** Extends from the Baltic and North Sea to the Black Sea, with a branch reaching Lviv, Ukraine.
- **Rhine-Danube Corridor:** Includes Moldova and Ukraine via their Danube access, reinforcing inland waterway connectivity.

These extensions reflect the EU's strategic response to evolving geopolitical realities and its commitment to fostering regional cohesion and sustainable mobility. The inclusion of Moldova and Ukraine in the TEN-T corridor network underscores their growing role in the European transport landscape and opens new opportunities for investment, interoperability, and cross-border cooperation.

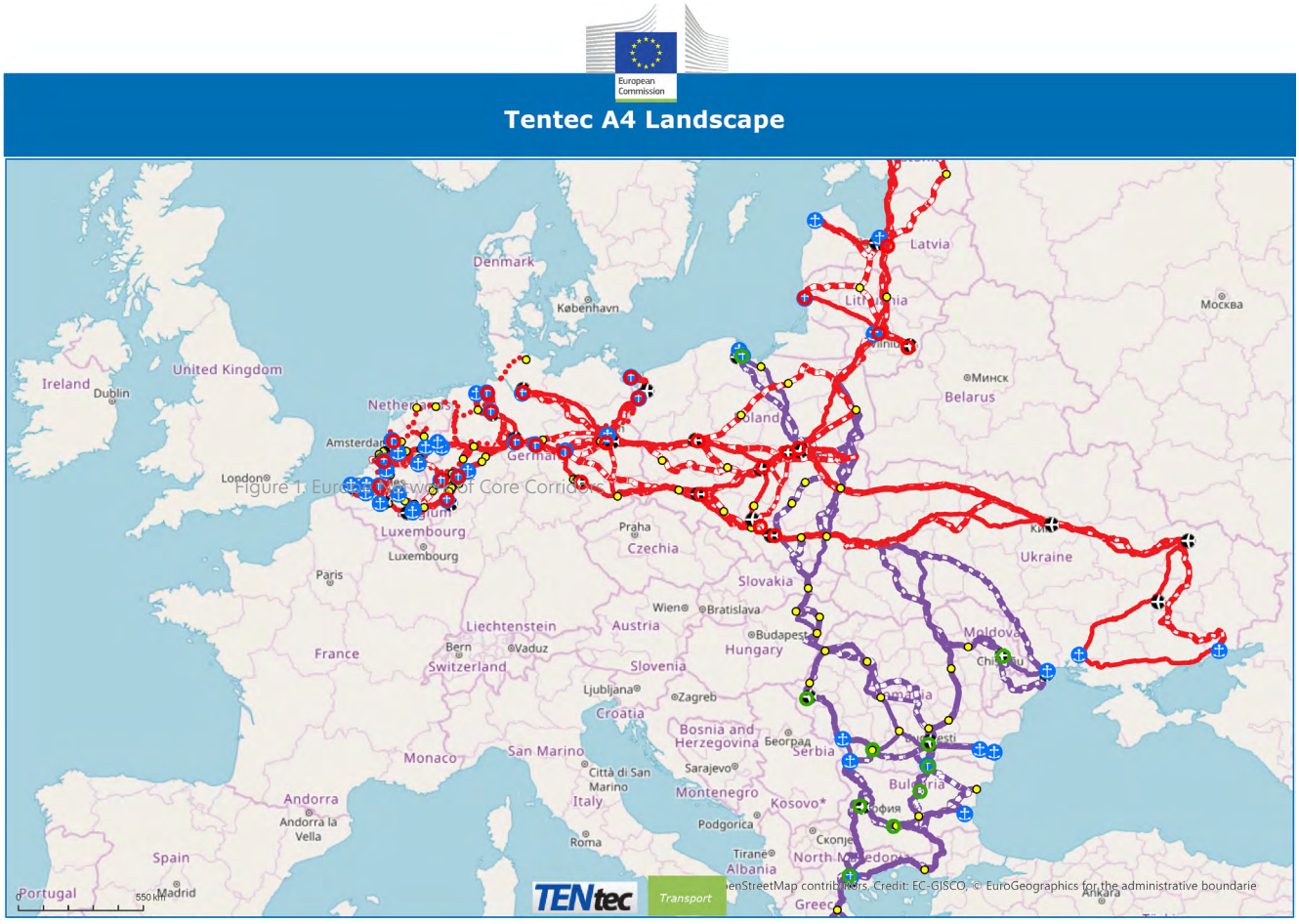

Figure 1. European Transport Corridors extended to the Republic of Moldova and Ukraine

These extensions reflect the EU's strategic commitment to regional cohesion and sustainable mobility. Importantly, no transitional approach is being applied, meaning that the compliance requirements of Regulation 2024/1679 are already in effect. This underscores the urgency for all stakeholders to align infrastructure planning and implementation with the updated standards, without delay or phased adaptation. The inclusion of Moldova and Ukraine in the extended corridor network highlights their growing role in the European transport landscape and opens new opportunities for investment, interoperability, and cross-border cooperation.

TEN-T Compliance Standards

In terms of compliance with the TEN-T standards, this report is based on the updated requirements set out in Regulation (EU) 2024/1679. These standards define the technical and operational criteria for infrastructure across the Core, Comprehensive and newly introduced Extended Core layers of the TEN-T Network.

To support consistent evaluation, the Regulation outlines mode-specific indicators for road, rail, inland waterways, maritime, air, and multimodal transport. These include parameters such as minimum infrastructure quality, interoperability, digitalisation, sustainability, and connectivity targets. The indicators have been consolidated into a structured assessment framework, with detailed breakdowns provided in the respective sections of the report for each transport mode.

TEN-T Network Layout

Annex IV of Regulation (EU) 2024/1679 outlines the current indicative extension of the TEN-T Core and Comprehensive Networks in Georgia, the Republic of Moldova, and Ukraine. This regulation sets the updated Union guidelines for the development of the trans-European transport network, amends Regulations (EU) 2021/1153 and (EU) No 913/2010, and repeals Regulation (EU) No 1315/2013.

To support the compliance assessment process, the linear TEN-T network has been segmented into homogeneous sections, reflecting the institutional frameworks and infrastructure management practices specific to each participating country.

Collecting relevant data

Data for assessing compliance with the TEN-T Network was collected via questionnaires sent by email to the Observing Participants, focusing on the relevant compliance indicators. Throughout the process, the Permanent Secretariat of the Transport Community provided continuous support and feedback through meetings and individual consultations.

Despite these efforts, not all participants submitted complete and up-to-date information. Where data was missing, it was supplemented using figures from the previous reporting year and desk research.

IV TEN-T compliance indicators

IV.1 Railways

The new Regulation (EU) 2024/1679 replaced the Regulation (EU) No 1315/2013 which laid down Union guidelines for the development of the trans-European transport network (TEN-T) and introduced several additional requirements to ensure TEN-T compliance.

Building on the previous compliance indicators for railway infrastructure, Regulation (EU) 2024/1679 adds new indicators (requirements). These include criteria related to design speed for passenger services, loading gauge specifications, waiting times at border crossings, identification of current or potential future capacity bottlenecks, and the requirement for a migration plan to construct new railway lines using the European standard track gauge of 1,435 mm.

These compliance indicators establish a structured framework for monitoring progress and promoting alignment across Member States and neighbouring partners. The regulation sets out a long-term vision for the development of an integrated TEN-T, covering all modes of transport, with a particular focus on the rail sector as the backbone of a sustainable and efficient mobility system.

In line with Section III above, this report primarily adheres to the compliance requirements set out in Articles 15 and 16 of Regulation (EU) 2024/1679. The key compliance requirements remain basically unchanged, covering aspects such as interoperability, electrification, European Rail Traffic Management System (ERTMS), track gauge, train length, axle load, and freight line design speed. Key updates in Regulation (EU) 2024/1679 include the introduction of an extended core network layer with corresponding deadlines, along with new requirements for passenger line design speeds and

Regulation (EU) 2024/1679 sets ambitious goals for a unified, high-quality TEN-T rail network, while allowing Member States to request exceptions based on specific national conditions. It marks both a strategic and technical enhancement of the TEN-T framework, influencing future infrastructure planning, investment, and compliance.

<table>
<tr><th colspan="2">Railways</th><th>Core</th><th>Extended core</th><th>Comprehensive</th></tr>
<tr><td rowspan="3">Passenger and Freight</td><td>Electrification</td><td>2030</td><td>2040</td><td>2050</td></tr>
<tr><td>Track gauge 1435 mm</td><td>2030</td><td>2040</td><td>2050</td></tr>
<tr><td>ERTMS</td><td>2030</td><td>2040</td><td>2050</td></tr>
<tr><td>Passenger</td><td>160km/h design speed</td><td>2040</td><td>2040</td><td>/</td></tr>
<tr><td rowspan="7">Freight</td><td>22.5 t axle load</td><td>2030</td><td>2040</td><td>2050</td></tr>
<tr><td colspan="4">740 m train length (including the locomotive or locomotives)</td></tr>
<tr><td rowspan="2">Single Track</td><td>2030</td><td>2040</td><td rowspan="2">/</td></tr>
<tr><td colspan="2">at least one train path per three hours and direction and not less than 12 train paths on daily basis</td></tr>
<tr><td rowspan="2">Double Track</td><td>2030</td><td>2040</td><td>2050</td></tr>
<tr><td colspan="2">at least one train path per two hours and direction and not less than 24 train paths on daily basis</td><td>at least one train path per hour and direction on average on a daily basis</td></tr>
<tr><td>100 km/h design speed</td><td>2030</td><td>2040</td><td>/</td></tr>
<tr><td>Loading gauge for standard semi-trailers up to 4 m high, loaded at a height of at least 27 cm above the top of the rail track on ETC</td><td>2040</td><td>2040</td><td>/</td></tr>
</table>

Table 1. Overview of TEN-T Requirements for Railways

Based on the requirements set out in Regulation (EU) 2024/1679, this report assesses compliance against a defined set compliance indicators covering infrastructure parameters. The specific indicators are as follows:

Infrastructure indicators (target years indicated in brackets):

- **Electrification** – Full electrification of the rail network, including sidings where required.
- **Axle load** – Freight lines to support a 22.5 t axle load.
- **Freight lines speed** – Freight lines must allow a minimum speed of 100 km/h.
- **Passenger lines speed** – Passenger lines to support speeds of at least 160 km/h.
- **Train length** – Freight lines to accommodate trains of at least 740 m (including the locomotive or locomotives), including locomotives under certain conditions.
- **Track gauge** – New railway lines to be built to a normal gauge of 1,435 mm.
- **ERTMS/signalling** – Rail Network to be fully equipped with the European Rail Traffic Management System (ERTMS).
- **Loading gauge** – The rail infrastructure should allow for the circulation of freight trains carrying standard semitrailers up to 4 m high loaded at a height of at least 27 cm above the top of the rail track.

Operational indicators:

- **Dwelling time** – Maximum dwelling time of 25 minutes at borders.
- **Delay at borders** – Measured time lost during cross-border operations.
- **Removing bottlenecks** – migration plan for constructing new railway lines with the European standard track gauge of 1,435 mm.

European Rail Traffic Management System (ERTMS) Deployment:

According to Regulation (EU) 2024/1679, ERTMS is to be deployed on the Core, Extended Core, and Comprehensive Network railway lines to ensure seamless interoperability across the EU. Class B national signalling systems are to be gradually replaced, with new or upgraded lines equipped with radio-based ERTMS.

ERTMS	Core	Extended core	Comprehensive
Equipped with ERTMS	2030	2040	2050
Decommissioning of class B systems	2040	2045	2050
Equipped with radio-based ERTMS	2050	2050	2050
Radio-based ERTMS[2], in case of: **-construction of a new line** **-upgrade of the signalling system**	from 2030 from 2040	from 2030 from 2040	from 2030 from 2040

Table 2. Overview of TEN-T Requirements for ERTMS

[2] "radio-based ERTMS" means the European Train Control System (ETCS) application level 2 that does not require lineside signals and uses a Class A radio system for the safety and non-safety related data exchange between track and train pursuant to Commission Implementing Regulation (EU) 2023/1695

"Train length – minimum 740 m" requirement

Pursuant to Regulation (EU) 2024/1679, minimum train length requirements are specified to enhance rail freight capacity across the TEN-T network, without special permission, including "last mile" access sections. The minimum train length of 740 metres (including locomotives) applies network wide.

- **Core Network (target year 2030) and Extended Core Network (target year 2040):**

  -On double-track lines, at least one train path every two hours per direction, with a minimum of 24 train paths daily, shall be available for 740-metre freight trains, if requested.

  -On single-track lines, at least one train path every three hours per direction, with a minimum of 12 train paths daily, shall be available for 740-metre freight trains, if requested.

- **Comprehensive Network (target year 2050):**

  -On double-track lines, at least one train path per hour per direction, averaged over a daily basis, shall be available for freight trains of 740 metres or longer, upon request by a railway undertaking.

These provisions ensure a harmonised and efficient freight transport capacity on the TEN-T rail corridors in accordance with the objectives set by the Regulation.

Loading Gauge Requirements

Member States must ensure that freight lines forming part of the core or extended core railway networks, including relevant connections, can accommodate freight trains carrying standard semi-trailers up to 4 m in height, loaded at a minimum of 27 cm above the top of the rail, so-called P400 loading gauge. This applies to all European Transport Corridors within their territory.

This requirement is considered met if, on each corridor within a Member State there is:

- at least one direct line that meets the standard, allowing uninterrupted freight movement domestically and across each neighbouring border.
- at least one direct line to a rail-road or multimodal freight terminal located in or near a maritime port that is part of the corridor.
- at least one direct line meeting that requirement to at least one of these end points if one or more end points of a corridor are located on the territory of a Member State.

For cross-border sections, the lines must be agreed jointly with the neighbouring Member States concerned.

Operational priorities

On the European Transport Corridors (ETCs), the following operational targets should apply by 2030:

- **Border dwelling time:** The average dwelling time of freight trains crossing the border between two Member States should not exceed 25 minutes - except at sections where a change of track gauge occurs or where border controls have not yet been lifted.
- **Punctuality:** At least 75% of freight trains crossing at least one border along an ETC must arrive at their destination (or at the external Union border) on time or with a delay of less than 30 minutes, attributable to the infrastructure manager(s). Delays occurring in, and attributable to, third countries crossed by freight trains shall not be taken into account.

Allocation of 740 m train slots for freight

Also, as operational priorities in accordance with Article 19 of Regulation (EU) 2024/1679, the following conditions apply to the Core Network (by 2030), the Extended Core Network (by 2040), and the Comprehensive Network (by 2050):

- On **double-track lines**, at least two train paths per hour and per direction must be available for freight trains measuring at least 740 m in length (including the locomotive or locomotives).
- On **single-track lines**, at least one train path every two hours per direction must be available for freight trains measuring at least 740 m in length (including the locomotive or locomotives).

Rail Infrastructure Requirements – Exemptions

In accordance with Regulation (EU) 2024/1679, certain exemptions to the infrastructure requirements are permitted where:

- Specific geographical conditions or major physical constraints make compliance unfeasible.
- A negative outcome of a socio-economic cost-benefit analysis.
- Significant negative impacts on environment or biodiversity.

An **isolated network**, under Regulation (EU) 2024/1679, refers to the rail network of a Member State, or part of it, that operates on a track gauge different from the European standard nominal gauge of 1,435 mm. These networks are exempt from certain infrastructure requirements, as they are not integrated into the interoperable EU rail system and therefore do not support cross-border rail operations.

Railway Connections of Other Transport Nodes

TEN-T Maritime Ports:

- On the **Comprehensive Network**, maritime ports handling more than 2 million t of cargo annually should be connected to the rail and road infrastructure (by 2050), and, where feasible, to inland waterways.

TEN-T Airports:

- Airports with annual passenger traffic exceeding 12 million must be connected to the TEN-T railway network, including the high-speed network where possible, enabling long-distance rail services by 2040.
- Airports with annual passenger traffic between four and 12 million must be connected either to the TEN-T railway network or to the corresponding urban node by rail, metro, light rail, tramway, cable car, or, in exceptional cases, by another zero-emission public transport mode by 2050.

TEN-T Multimodal Freight Terminals:

Under Regulation (EU) 2024/1679, Member States must make all reasonable efforts to ensure that TEN-T multimodal freight terminals on their territory comply with the following requirements:

- By 2030, terminals that are connected to the rail network and perform vertical transshipment must have sufficient transshipment capacity and be capable of handling craneable intermodal loading units, including containers, swap bodies, and semi-trailers.
- By 2040, terminals connected to the core or extended core rail network must be able to accommodate freight trains of 740 m in length without the need for splitting or manipulation. Where this is not economically viable, appropriate measures must be taken to improve the operational efficiency of handling 740 m trains.

In accordance with Article 20 of Regulation (EU) 2024/1679 on 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 of the same Regulation, the additional priorities for railway infrastructure development are as follows:

-**Track Gauge Migration** – Shift to the European standard nominal track gauge of 1,435 mm where relevant.

-**ERTMS Deployment** – Implement the European Rail Traffic Management System (ERTMS).

-**Noise and Vibration Mitigation** – Reduce rail-related noise and vibration through measures on rolling stock and infrastructure, including noise protection barriers.

-**Level Crossing Safety** – Improve the safety of level crossings.

-**Multimodal Connectivity** – Connect railway infrastructure with inland waterway ports, where appropriate.

-**Freight Capacity Upgrades** – Develop infrastructure for longer freight trains (above 740 m up to 1,500 m) and heavier (25.0 t axle load) freight trains, when constructing and modernising railway lines relevant for freight traffic, subject to a cost-benefit analysis.

-**Innovation & Technology** – Develop and implement advanced technologies (e.g. automatic train operation, traffic management, ERTMS-based digital connectivity, digital couplings, 5G, satellite and inertial positioning), building on Shift2Rail and Europe's Rail.

-**Active Mobility Integration** – Ensure pedestrian and cycling access and bicycle parking near stations during construction or upgrades railway infrastructure.

-**Alternative Fuels** – developing innovative alternative fuels technologies for railways, such as hydrogen or battery powered trains for sections and rail access routes that are exempted from the electrification requirement.

-**Freight Clearance Standards** – Ensure infrastructure accommodates standard semi-trailers (up to 4 m high at 33 cm loading height) without special permits.

-**Double-Tracking** – Upgrade bottlenecks suffering from capacity limitations to double-track rail.

Regulation (EU) 2024/1679 sets ambitious goals for a unified, high-quality TEN-T rail network, while allowing Member States to request exceptions based on specific national conditions. It marks both a strategic and technical enhancement of the TEN-T framework, influencing future infrastructure planning, investment, and compliance.

Based on the provided data, the report assesses the compliance of TEN-T railway infrastructure in Georgia, the Republic of Moldova, and Ukraine to the extent that the data were made available, according to the following indicators:

-**Electrification:** Rail network must be electrified (including sidings where necessary).

-**Axle load:** Freight lines should support an axle load of 22.5 t.

-**Freight lines speed:** Freight lines must allow a minimum speed of 100 km/h.

-**Passenger lines speed:** Passenger lines to support speeds of at least 160 km/h.

-**Train length:** Freight lines should accommodate trains up to 740 m in length.

-**Track gauge:** The nominal track gauge for new railway lines should be 1,435 mm.

-**ERTMS/signalling system:** The core network should be equipped with ERTMS.

-**Loading gauge:** Freight trains carrying standard semitrailers up to 4 m high, loaded with their floor at least 27 cm above the top of the rail track.

In addition to the compliance indicators outlined above, the physical condition of the infrastructure was assessed, recognising it as a crucial prerequisite for a high-quality rail network. This assessment categorised conditions into five levels, based on the ratio between the current maximum operational speed and the network's maximum design speed. This method provides a clearer and more comprehensive picture of the railways' current state.

Condition of railways	Operational/Design speed
Very good	0.86 - 1
Good	0.71 - 0.85
Medium	0.61 - 0.70
Poor	0.51 - 0.60
Very Poor	0 - 0.50

Table 3. Assessment Methodology Criteria

IV.2 **Road transport**

Article 17 of Regulation 1315/2013 defines the core components of road infrastructure, while compliance requirements are outlined in Article 18. In Regulation (EU) 2024/1679, road infrastructure requirements for the TEN-T core and comprehensive network are addressed under Articles 30 and 31, respectively.

The previous criteria remain entirely valid, with the revised TEN-T Regulation (EU) 2024/1679 introducing additional requirements to support the overall policy goals of the Smart and Sustainable Mobility Strategy as part of the wider objective to deliver a safe, sustainable and interconnected transport system. Compared with the previous framework, the Regulation places greater emphasis on the quality of road infrastructure, harmonised service levels across EU Member States, and the removal of bottlenecks affecting cross-border traffic. It brings road infrastructure into closer alignment with EU policy priorities such as the European Green Deal, digitalisation of transport services and enhanced road safety standards. The newly defined compliance indicators are intended to measure progress against these objectives transparently and comparably.

In short, the TEN-T road network is deemed to incorporate high-quality roads, specially designed and constructed for motor traffic and ensuring adequate safety levels. Furthermore, Compliance with EU Directives on road tunnels, tolling interoperability, and Intelligent Transport Systems (ITS) is also a critical requirement.

In addition to the general conditions for the comprehensive network, the core and extended core network must comply with additional requirements presented through the newly defined compliance indicators:

- indicators on the availability and spacing of safe and secure rest areas,
- the installation of weigh-in-motion systems to prevent overloading and protect infrastructure, and
- the provision of minimum universal traffic information to improve safety and traffic management.

Together with indicators on the deployment of alternative fuel infrastructure, road safety management practices and toll interoperability, they provide a structured means to track compliance with the Regulation.

The purpose of the compliance indicators is not only to assess whether minimum standards are met, but also to support continuous improvement by highlighting trends, guiding investment, and ensuring that road infrastructure across the TEN-T contributes effectively to safer, cleaner and more efficient mobility.

The implementation deadlines within the Regulation (EU) 2024/1679 are set on differentiated manners to reflect both the ambition of the policy and the divergent levels of infrastructure development across the network. Concerning the core network, compliance with the main road infrastructure requirements is expected by 31 December 2030, with an intermediate deadline of 2025 for existing sections on certain safety and information obligations. The extended core network completion is required by 2040, while the comprehensive network is foreseen to be fully compliant by 2050. These staged deadlines apply across all key road indicators safe and secure rest areas (60 km spacing on the core, 100 km on the comprehensive), weigh-in-motion systems (every 300 km), and the provision of minimum universal traffic information. The phasing ensures that the most strategically important corridors are upgraded first, while giving the necessary time to extend compliance progressively to the wider network.

The revised Regulation introduced updates to the TEN-T Road Core and Comprehensive Network, which fall into two main categories: new requirements and compliance indicators for the TEN-T and changes to the network itself. The new requirements are further explained under the TEN-T Compliance Indicators below, while the network changes are explained beneath the indicators.

TEN-T Compliance Indicators

The revised TEN-T Regulation (EU) 2024/1679 defines specific road infrastructure requirements for the comprehensive and core networks, setting out the applicable standards and implementation deadlines. Some of the road requirements are already addressed and monitored through complementary priority documents, such as the Road Action Plan, the Road Safety Action Plan, and the Transport Community Treaty (TCT) Annexes. More specifically, road safety management and tunnel compliance are covered under the Road Safety Action Plan; tolling interoperability is addressed within the Road Action Plan and monitored against Annex I.3; while the environmental requirements are followed up through Annex I.6. The focus of this report are the compliance indicators for which observing participant s provided data.

The overview of the road compliance indicators and corresponding article references are outlined and detailed in the table below.

Indicator	TEN-T Network	Details
Road designed, built or upgraded for motor traffic with separate carriageways and without grade crossing	Core	As per the provisions of points (a) and (b) of Art. 17(3) of Regulation No 1315/2013 and Art. 31.2.(a) of Regulation (EU) 2024/1679. To be labelled as compliant, Core Network roads should meet following criteria: a) They must be designated as either motorway or express roads, unless the EC grants a specific exemption under Article 31.6 of Regulation (EU) 2024/1679 (Article 39(3) of Regulation No 1315/2013). b) They must be adequately maintained, with an **international Roughness Index (IRI) below** 2.84.
Road designed, built or upgraded for motor traffic	Core & Comprehensive	For a TEN-T road that is neither a motorway nor an express road to be considered compliant, it should: a) Be part of the Comprehensive Network. b) Serve an important role in long-distance freight and passenger traffic; integrate main urban and economic centres; interconnect with other transport modes; and provide connections between mountainous, remote, landlocked, and peripheral NUTS 2 regions and central regions. c) Be maintained to a standard that ensures safe and secure traffic. Ideally, compliance for a TEN-T road that is neither motorway nor express road should be confirmed through: -A feasibility assessment verifying that its current capacity meets demand. -An upgrading process to enhance safety and environmental protection, with the pavement condition maintained to an IRI below 2.84.
Availability of alternative fuels	Core & Comprehensive	Infrastructure for alternative fuels is deployed across the road network in line with requirements of Regulation (EU) 2023/1804.
Rest areas	Core & Comprehensive	Rest areas are to be located approximately every 60 km on the Core Network, and every 100 km on the Comprehensive Network in accordance with the newly established distance criteria established under Regulation (EU) 2024/1679).
Safe and secure parking	Core	To be deployed at an average maximum interval of 150 km or within 3 km driving distance from the nearest road exit.
ITS compliance	Core & Comprehensive	According to the provisions of Article 18(e) of Regulation 1315/2016, any intelligent transport system deployed by a public authority on road transport infrastructure should comply with Directive 2010/40/EU and be deployed in alignment with the delegated acts adopted under this Directive.
Tolling interoperability	Core & Comprehensive	Where applicable, toll collection systems must ensure interoperability in line with Directive 2004/52/EC and Commission Decision No. 2009/750/EC.

Indicator	TEN-T Network	Details
Tolls & users charges	Core & Comprehensive	Where applicable, tolls or user charges are imposed in accordance with Directive 1999/62/EC of the European Parliament and of the Council.
Safety compliance	Core & Comprehensive	The safety of TEN-T roads should be ensured, monitored and, when necessary, improved in accordance with the procedure set out in Directive 2008/96/EC.
Road tunnels compliance	Core & Comprehensive	Road tunnels exceeding 500 m in length should comply with the provisions of Directive 2004/54/EC.
Weight-in motion systems	Core & Comprehensive	To be deployed, on average, every 300 km across a Member State's network.
Deployment or use of the means to detect safety-related events or conditions	Core & Comprehensive	To be deployed in order to provide road safety-related minimum universal traffic information, as defined in Commission Delegated Regulation (EU) No 886/2013.

Table 4. Road Compliance Indicators

The limits of the current exercise were defined by data and logistic constraints. While it is expected that these constraints will be gradually overcome in the upcoming years, the current assessment focused exclusively on the first two compliance indicators listed above for the Republic of Moldova and Ukraine and for Georgia in addition the assessment was done on two more indicators on which data were provided.

IV.3 Waterborne Transport

Waterborne transport infrastructure under Regulation (EU) 2024/1679 comprises both inland waterway infrastructure components, including inland ports, and maritime infrastructure components, including maritime ports, and the European Maritime Space.

Requirements for inland waterway transport infrastructure are explicitly set out in Section 2, covering Articles 21 to 24. These articles define standards for physical infrastructure, transport services, and inland ports.

Additionally, Article 26 (urban nodes) and Article 27 (multimodal freight terminals) refer indirectly to inland waterway transport by imposing requirements that support potential connections to inland waterways.

Maritime transport infrastructure and European Maritime Space are directly touched upon Section 3, encompassing Articles 25, 26, 27 and 28 of Regulation (EU) 2024/1679.

These infrastructure requirements aim to promote high-quality, efficient, and environmentally sustainable inland and maritime transport systems, including port facilities, thereby strengthening seamless connectivity across the EU and with neighbouring third countries.

IV.3.1 Inland Waterways Transport

The transport infrastructure requirements concerning inland waterways part of the Core and Comprehensive network are presented in Articles 22 and 23 of the TEN-T Guidelines (Regulation (EU) 2024/1679 of the European Parliament and of the Council of 13 June 2024 on Union guidelines for the development of the trans-European transport network (TEN-T), amending Regulations (EU) 2021/1153 and (EU) No 913/2010, and repealing Regulation (EU) No 1315/2013).

In this regard, existing inland waterway infrastructure on the TEN-T Core Network, as specified in the Regulation shall ensure and provide by 31 December 2030:

- A navigable channel depth of at least 2,5 m.
- A minimum height under non-openable bridges (Vertical Bridge Clearance) of at least 5.25 m. at specified reference water levels, which are exceeded only a limited number of days per year on average.

– Operations of locks shall ensure that locks are operated and maintained in such a way that waiting times are kept to a minimum

– Information on the number of days per year when actual water levels exceed or fall below the reference values for navigation channel draught, and the average waiting times at locks, shall be made publicly available in electronic format via a website.

– River Information Services (RIS), as per Directive 2005/44/EC are implemented across rivers, canals, lakes, and lagoons to provide users with seamless, real-time data access across national borders.

Core inland waterway ports shall also have access to the road and rail infrastructure to ensure uninterrupted connectivity, and availability of at least one multimodal freight terminal shall be provided to all operators and users under non-discriminatory conditions, by applying transparent and impartial pricing structures.

Core Inland ports shall also ensure deployment of alternative fuels infrastructure, as per the provisions of Regulation (EU) 2023/1804.

Deployment of facilities for improvement of inland ports environmental performance, including waste reception, degassing, applying noise, air and water pollution reduction measures shall be completed by 31 December 2040.

All the abovementioned infrastructure requirements for the inland waterway infrastructure, including TEN-T Comprehensive ports shall be fulfilled by 31 December 2050.

IV.3.2 **Maritime Transport Infrastructure and European Maritime Space**

The requirements for maritime transport infrastructure and the European Maritime Space are laid out in Section 3, Articles 25, 26, 27 and 28 of Regulation (EU) 2024/1679 on Union guidelines for the development of the Trans-European Transport Network.

Considering the transport infrastructure requirements of the TEN-T Core and Comprehensive Network, the following elements of maritime ports are deemed essential:

– Connection with the rail and road infrastructure, and where possible with inland waterways.

– Availability of at least one multimodal freight terminal, open to all operators on a non-discriminatory basis and applying transparent and non-discriminatory charges.

– Deployment of alternative fuels infrastructure, corresponding to the provisions of Regulation (EU) 2023/1804.

– Accessibility to infrastructure improving the environmental performance of ports, in particular Port Reception Facilities (PRF) for the delivery of waste from ships, as per Directive (EU) 2019/883.

– Implementation of Vessel Traffic Monitoring Information Systems (VTMIS) and SafeSeaNet, in compliance with Directive 2002/59/EC and national Maritime Single Window (NMSW) in accordance with Regulation (EU) 2019/1239.

– Sea canals, port fairways and estuaries, which connect two seas, or which provide access to maritime ports shall meet, as a minimum the criteria for inland waterways, according to the TEN-T Guidelines.

In addition, maritime ports connected to inland waterways, shall have the available capacity for handling inland waterway vessels.

The infrastructure requirements for the Core maritime ports shall be achieved up to 31 December 2030, while the timeframe for the Comprehensive ones shall be 31 December 2050. Those maritime on the extended Core Network shall fulfil the targets set by 31 December 2040.

In addition, in view of the European Maritime Space as a horizontal priority:

- Short-sea shipping routes shall be established and promoted within the EU territory, as well as between the EU ports and adjacent third countries ports.

- Improving hinterland connectivity to leverage the effect of modal shift (road, rail and inland waterways).

- Increasing multimodal freight terminals capacity.

Wider benefits sought by promoting European Maritime Space are not linked to specific ports but are aimed at strengthening synergies between transport, energy and ICT systems in view of achieving climate resilience, modal shift and enhanced connectivity.

IV.4 **Airports**

Under Regulation (EU) 2024/1679, the compliance indicators for TEN-T airports are defined through updated infrastructure requirements that build upon the provisions of Regulation (EU) No 1315/2013. Specifically, Article 34 of the new regulation retains the key criteria from Articles 25 and 39 of the earlier framework while introducing enhanced standards aimed at improving airport connectivity, sustainability, and performance. These new requirements will become fully applicable and subject to reporting from 2025 onward, marking a strengthened regulatory approach to TEN-T airport development and compliance. The current report assesses the compliance of TEN-T airports in Georgia, the Republic of Moldova, and Ukraine with the following indicators:

- Rail connection (Article 34 of Regulation (EU) 2024/1679).

- Clean fuels availability (initially applicable to core network airports only but extended under Regulation (EU) 2024/1679 to the entire comprehensive network).

- Terminal availability (at least one terminal should be open to all operators on a non-discriminatory basis, applying transparent, relevant, and fair charges) – an identical requirement under both Regulation 1315/2013 and 2024/1679.

V TEN-T Network Compliance Assessment

V.1 Georgia

V.1.1 Railways

V.1.1.1 Current Compliance Status

On the Georgian railway network, there are **714 km** of railway lines that belong to the **Comprehensive Network**, of which **585 km** are part of the **Core Network**. In total, Georgian Railway manages 1,992 km of track.

Georgian Railways maintains international rail connections primarily with Armenia, Azerbaijan, and Turkey. Georgia, Azerbaijan, and Turkey have signed a Memorandum of Understanding to enhance freight transport along the Baku-Tbilisi-Kars (BTK) railway corridor. The agreement aims to improve competitiveness through optimized delivery times, transparent tariffs, and a reliable operational regime, strengthening regional connectivity and facilitating trade between Europe and Asia.

Through various partnerships, JSC Georgian Railway facilitates container shipments from Georgian ports to Constanta, Romania, with onward distribution to Germany, Hungary, and other European countries. These connections form a crucial part of the Trans-Caspian International Transport Route (TITR), linking Europe and Asia. Also, the connection between Bulgaria and Georgia via the Black Sea enhances the efficiency of the Middle Corridor route and facilitates increased cargo flows between Asia and Europe.

Georgia's entire Comprehensive Network features a broader gauge than the European standard, is fully electrified, and allows an axle load of 23.5 t.

The official map of Georgia's indicative TEN-T rail network extension is presented below.

Figure 2. Indicative extension of the TEN-T rail network to Georgia

Below is a summary of Georgia's performance against the TEN-T railway compliance indicators outlined in Section IV.1.

Electrification:

The Comprehensive railway network in Georgia is fully electrified, achieving complete (100%) compliance. The electrical traction system operates on an overhead simple catenary with a nominal voltage of 3.3 kilovolts (kV) direct current (DC). The single narrow-gauge line functions at a nominal voltage of 1.5 kV DC.

Axle load:

The railway lines within Georgia's comprehensive network are designed to support an axle load of 23.5t, which exceeds the TEN-T requirement of 22.5t and ensures full (100%) compliance.

Freight lines speed:

Due to the country's terrain conditions, the maximum design speed for freight transport in Georgia is generally 80 km/h. However, there are also sections where the design speed is limited to 50 km/h or 60 km/h. This means that the network does not comply with the TEN-T requirement for freight lines, which specifies a design speed of 100 km/h.

Passenger line speed:

Since the Comprehensive Network in Georgia is used for both passenger and freight transport, the same design speed limitations apply to passenger services. Consequently, there is also non-compliance with the TEN-T requirement for passenger lines.

Train length:

Analysis indicates that only 37 km (6.32%) of the Core Network – specifically on the Gardabani (Azerbaijan border) – Tbilisi Marshalling section – currently meets the standard for accommodating freight trains of 740 meters or longer. Other parts of the Core and Comprehensive Networks are limited to train lengths between 420 and 658 me.

The mentioned line also fulfils the requirements for double-track lines, whereby at least one train path every two hours and per direction – and not less than 24 train paths per day – can be allocated to freight trains with a length of at least 740 m, if requested by a railway undertaking. This means that the same percentage (6.32%) fulfils the requirements for the Core Network, in accordance with Article 16 of Regulation (EU) 2024/1679.

Line Speed for Passenger and Freight Transport

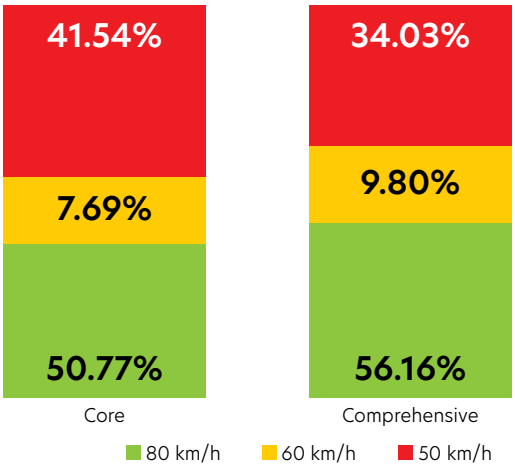

Figure 3. Georgia: Line Speed for Passenger and Freight Transport

Train Lenght (2025)

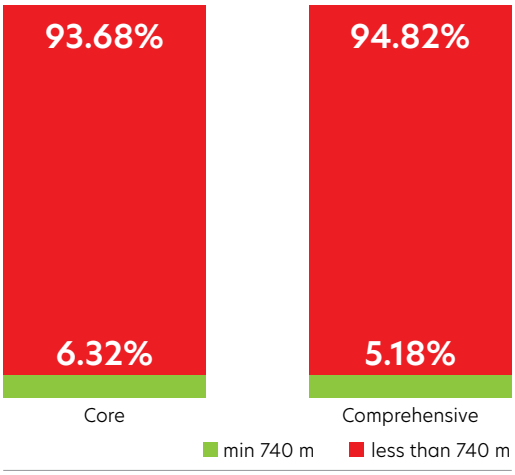

Figure 4. Georgia: Train length

Track gauge:

The Georgian railway network is predominantly constructed to a broad gauge of 1,520 mm, which does not comply with the TEN-T standard gauge requirement of 1,435 mm. A minor branch line is built to a narrow gauge of 912 mm. As a result, the network's compliance with the TEN-T track gauge criterion remains at 0%.

ERTMS:

Compliance with the European Rail Traffic Management System (ERTMS) requirement remains at 0%, as JSC Georgian Railway has not yet implemented the system. Train operations and safety are currently overseen through a centralised signaling system and block segments, which provide network-wide control and coordination.

Loading gauge:

The Core and Comprehensive Networks currently do not allow freight trains carrying standard semi-trailers up to 4 m in height, loaded at a height of at least 27 cm above the rail, to operate. Consequently, the loading gauge criterion is met at 0%.

Number of tracks:

In accordance with the provided information, JSC Georgian Railway has almost 50% of lines with double tracks on the Core Network and 40.90% on the Comprehensive Network.

Maximum gradient:

In accordance with the infrastructure parameters for main international railway lines, the maximum gradient for passenger and freight traffic must be ≤12.5 ‰. Also, according to the Infrastructure TSI, the maximum gradient permitted for main tracks at the design phase is 12.5 ‰, with several specific exemptions allowing steeper gradients in certain sections.

In accordance with the information provided by Georgia, 50.77% of the Core Network has a maximum gradient of less than 12.5‰, while for the Comprehensive Network, the corresponding figure is 58.20%.

Infrastructure Conditions

The assessment of the network's current condition, based on information provided by the JSC Georgian Railway, considered the ratio between designed and operational speeds. Due to the challenging terrain, operational speeds are capped at 80 km/h, which constrains the overall performance. Currently, 50.77 % of the Core Network and 56.16 % of the Comprehensive Network are in average condition, with around 82 % of the designed speed achievable.

Number of tracks

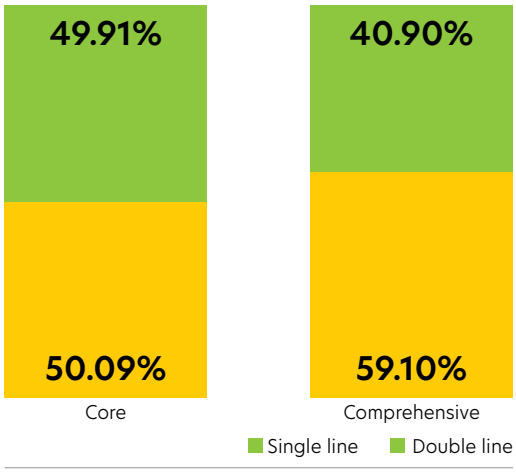

Figure 5. Georgia: Number of tracks

Maximum gradient

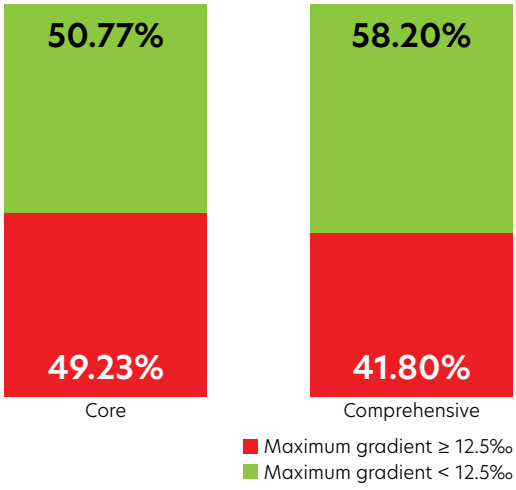

Figure 6. Georgia: Maximum gradient

Georgia - Condition of the Rail Network (2025)

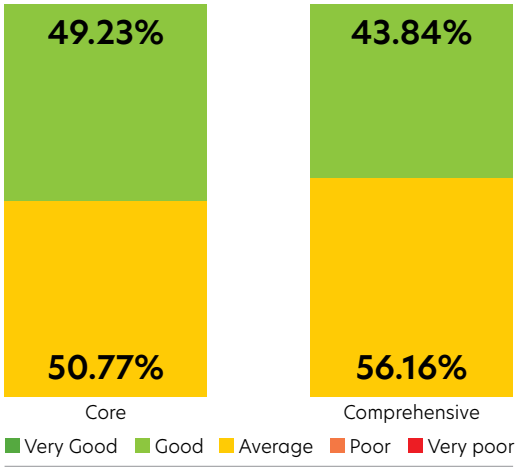

Figure 7. Georgia: Condition of the Rail Network

V.1.1.2 Progress from Last Year's Reporting

Compared with 2024, no progress has been made in meeting the specific requirements for train lengths across Georgia's railway network. The table below presents a comparison of train length compliance rates between 2023 and 2025, illustrating the current status and the absence of any notable progress in infrastructure development during this period.

Train lenght 2022-2025 comparison

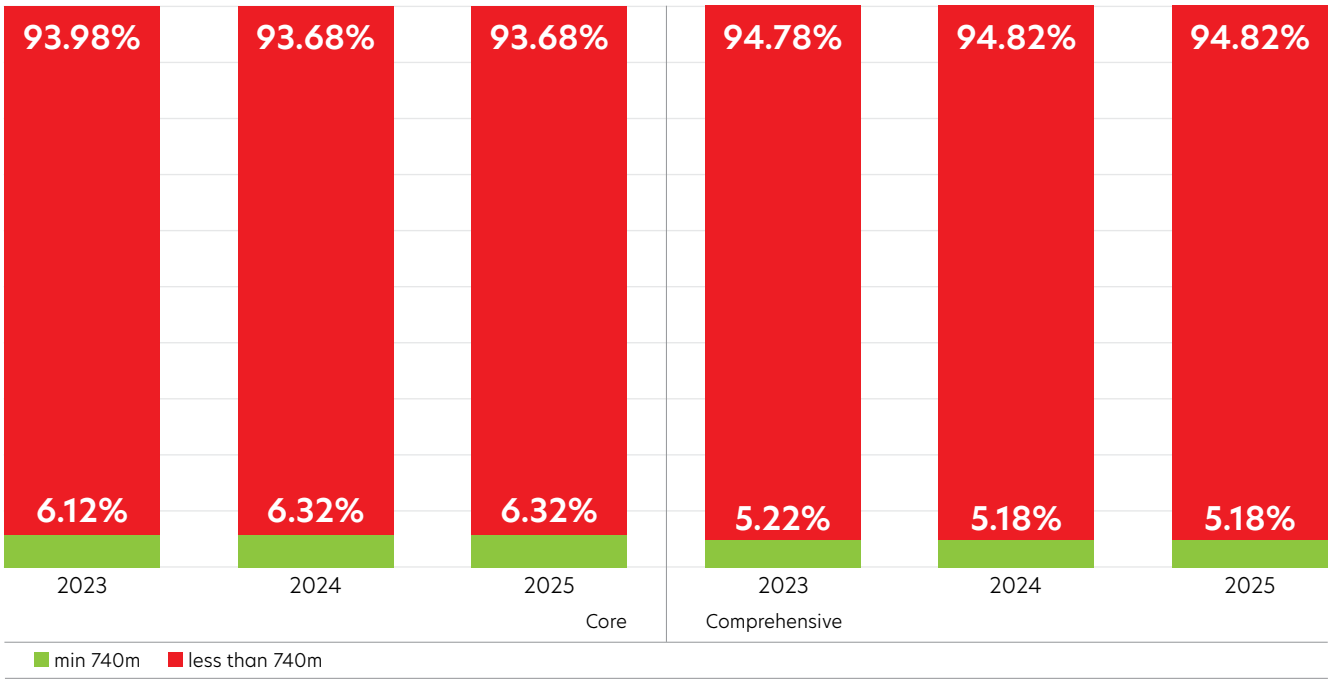

Figure 8. Georgia: Train length comparison (2023 - 2025)

Based on the information provided by JSC Georgian Railway and the track condition assessment methodology, there has been no progress on either the Core or Comprehensive Network compared with 2024.

The comparison is illustrated in the following graph.

Condition of the Rail Network 2023 - 2025 comparison

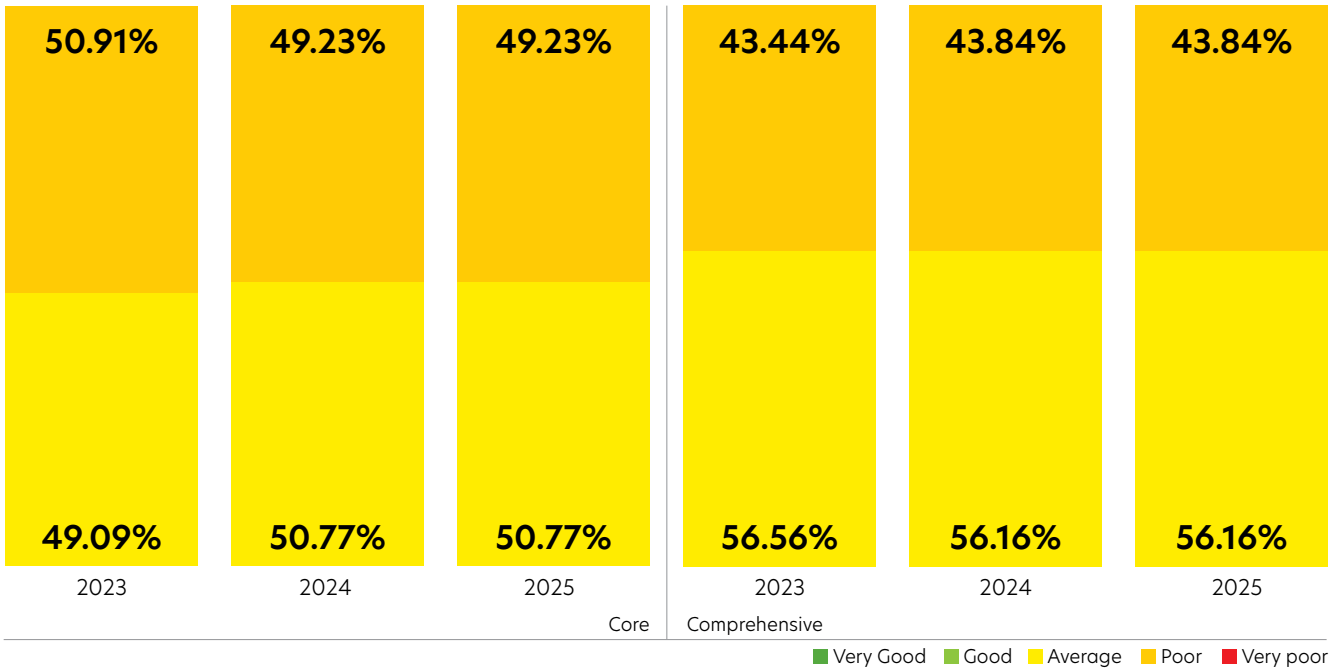

Figure 9. Georgia: Condition of the Rail Network comparison (2023-2025)

V.1.2 **Roads**

V.1.2.1 **Current Compliance Status**

Georgia holds a strategic position along the Europe-Asia transport corridor

The official map of the indicative extension of the TEN-T road network in Georgia is provided below.

Figure 10. Indicative extension of the TEN-T road network to Georgia

The indicative extension of the TEN-T road network in Georgia spans over 855.1 km, of which 768.1 km lie on the core network. Of these, 241.6 km (all on the core network) has been upgraded to motorway standards and another 78.7 km fit an express road profile. Of the remaining 526.5 km, 534.8 km still adhere to conventional road standards, with 447.8 km on the core network.

Infrastructure Profile and Condition of the Core Road Network

Under the provisions of provisions of Article 31.2.(a) of Regulation (EU) 2024/1679 and points (a) and (b) of Article 17(3) of Regulation 1315/2013, roads on the TEN-T Core Network must meet the standards of either a motorway or an express road (despite these terms are no longer used under Regulation (EU) 2024/1679).

Both Regulations 1315/2013 and 2024/1679 allow the European Commission to grant exemptions from the motorway/express road criterion for conventional roads if they meet appropriate safety standards. However, no such exemption has been requested or granted in Georgia. Therefore, the compliance assessment of the Core Network has been based solely on the motorway/express road criterion, labelling conventional road sections within the TEN-T Core as non-compliant.

A comprehensive evaluation of safe and secure parking facilities across the TEN-T Network in Georgia is yet to be conducted. The significance of this issue extends beyond a mere infrastructure compliance criterion, having also a social impact. An assessment of the existing inventory and demand for safe and secure parking facilities should therefore be conducted, as part of the process of approximating Regulation 561/2006.

Regarding the rest areas, this report assumes that all road sections built to motorway/express road profile meet this criterion. This assumption will be revised in future, subject to the availability of additional data and a consistent ranking methodology. In this context and in accordance with the data submitted by Georgian authorities concerning the availability of Rest areas on the core network, the status is as follows:

-On eight road sections on motorway/express road profile on the core network rest areas exist,

-On seven road sections on motorway/express road profile on the core network rest areas are planned, and

-No road sections on motorway/express road profile on the core network with no rest areas.

Concerning the separation of road carriageways for the two directions of traffic by a dividing strip not intended for traffic (only applicable for the core and extended network) compliance indicator, according to the provided data, the status is the following:

-On thirteen road sections with overall length of 273.3 km on the core network separation of road carriageways for the two directions of traffic by a dividing strip not intended for traffic exist,

-On seven road sections with overall length of 161.5 km on the core network separation of road carriageways for the two directions of traffic by a dividing strip not intended for traffic is planned,

-On nine road sections with overall length of 333.3 km on the core network separation of road carriageways for the two directions of traffic by a dividing strip not intended for traffic does not exist.

In summary, within the framework of the current analysis, roads on the Core Network are considered compliant with infrastructure profile and condition criteria if they cumulatively meet the following conditions:

-Achieve motorway or express road standards.

-Receive adequate maintenance to uphold a road surface condition rated as either very good or good, ensuring smooth traffic flow and high safety standards.

Road condition has been rated under five distinct categories, using the International Roughness Index (IRI), as follows:

- Very good (IRI < 1.24)
- Good (IRI 1.24 - 2.84)
- Medium (IRI 2.84 - 5.09)
- Poor (IRI 5.09 - 8.94)
- Very poor (IRI > 8.94)

The outcomes of the compliance assessment exercise are given in the charts below.

Road profile	Kilometres (km)	%
Motorway	241.6	31.45 %
Express road	78.7	10.25 %
Conventional road	447.8	58.30 %

Table 5. Georgia: TEN-T core road network profile

The quality of road infrastructure in Georgia is generally satisfactory, with 51.88% of the core TEN-T network currently rated as either very good or good. This marks a decline of 6.55% compared to last year. There is still significant potential for further enhancements. Below is a detailed assessment, supported by additional data and figures:

Georgia - Core road network profile 2025

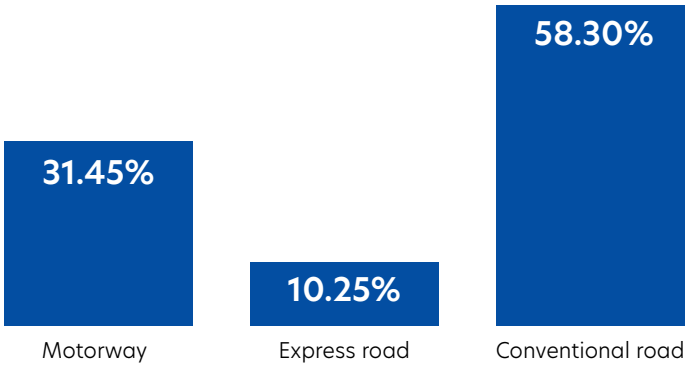

Figure 11. Georgia: road TEN-T core network infrastructure profile

Road condition	Kilometres (km)	%
Very good	11	1.43%
Good	387.5	50.45%
Medium	369.6	48.12%
Poor	0	0.00%
Very poor	0	0.00%

Table 6. Georgia: TEN-T core road Network (infrastructure condition)

Georgia - Core road network condition 2025

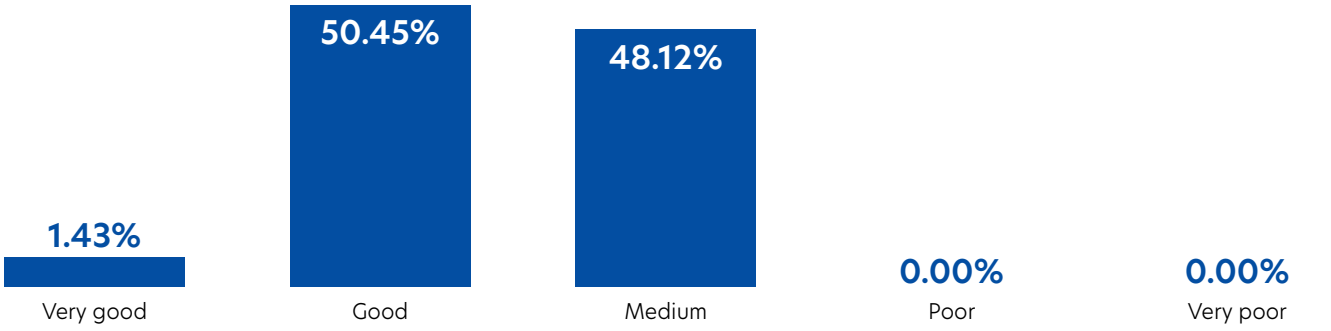

Figure 12. Georgia: road TEN-T Core network condition

Road profile	Road condition	KM	%
Motorway	Very Good	11	1.43%
	Good	130.6	17.00%
	Medium/Poor/Very Poor	100	13.02%
Express road	Very Good	0	0.00%
	Good	78.7	10.25%
	Medium/Poor/Very Poor	0	0.00%
Conventional road	Very Good	0	0.00%
	Good	178.2	23.20%
	Medium/Poor/Very Poor	269.6	35.10%

Table 7. Georgia: TEN-T core road Network Compliance (infrastructure profile and condition)

Beyond the core network, the extensive network comprises only 87 km of comprehensive network in a moderately maintained condition, making it non-compliant with TEN-T standards.

Infrastructure Profile and Conditions of the Comprehensive Network

Article 18 of Regulation 1315/2013, TEN-T outlines that roads should consist of motorways, express roads, or conventional strategic roads. Conventional strategic roads, as defined under Article 17(3)(c), are roads that are neither motorways nor express roads but still meet the following criteria:

a) Play an important role in long-distance freight and passenger traffic

b) Integrate the main urban and economic centres.

c) Interconnect with other transport modes

d) Link mountainous, remote, landlocked and peripheral NUTS 2 regions to central regions of the Union.

Such roads should be *"adequately maintained to allow safe and secure traffic."*

Regulation (EU) 2024/1679 no longer refers to conventional strategic roads. Instead, it stipulates that roads within the comprehensive network must be "designed, built, or upgraded for motor traffic." Unlike the core network, however, these roads are not required to meet the specific standards typically associated with motorways or express roads. Until a more robust methodology is established to assess compliance with safety and environmental protection standards, this report evaluates the comprehensive network's compliance (outside the core network) based on the current physical condition of the infrastructure.

For reporting purposes, it is assumed that a conventional road in very good or good condition generally meets basic safety requirements, although this assumption may not always correspond with the situation on ground. It is expected that Georgia's ongoing progress in transposing EU road safety legislation, along with routine road safety inspections on the TEN-T Network, will provide critical data to support a more detailed and refined methodological approach in future assessments.

The results of this analysis are presented in the tables and charts below.

Road profile	KM	%
Motorway	0	0.00%
Express road	0	0.00%
Conventional road	87	100.00%

Table 8. Georgia: TEN-T comprehensive road network profile

Road condition	Road condition	%
very good	0	0.00%
good	0	0.00%
medium	87	100.00%
poor	0	0.00%
very poor	0	0.00%

Table 9. Georgia: road TEN-T comprehensive network infrastructure condition

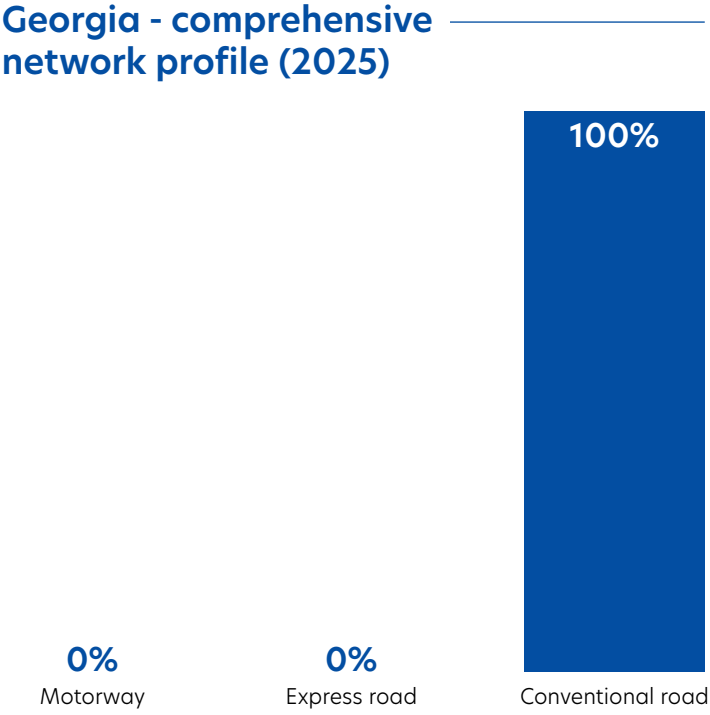

Figure 13. Georgia: road TEN-T Comprehensive network profile

Comprehensive network condition 2025

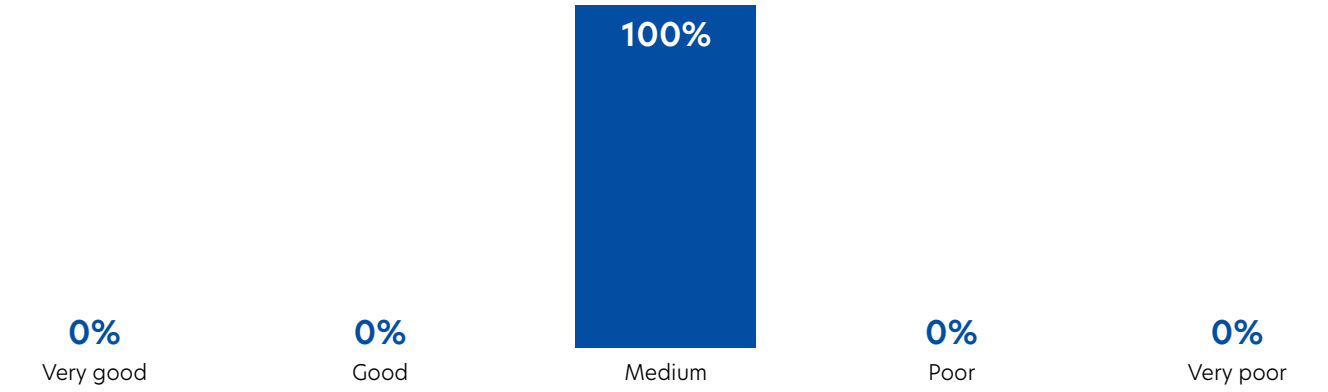

Figure 14. Georgia: TEN-T comprehensive road network (Infrastructure condition)

Road profile	Road condition	KM	%
Motorway	Very Good	0	0.00%
	Good	0	0.00%
	Medium/Poor/Very Poor	0	0.00%
Expressway	Very Good	0	0.00%
	Good	0	0.00%
	Medium/Poor/Very Poor	0	0.00%
Conventional road	Very Good	0	0.00%
	Good	0	0.00%
	Medium/Poor/Very Poor	87	100.00%

Table 10. Georgia: road TEN-T comprehensive network (infrastructure condition)"

TEN-T Network compliance 2025

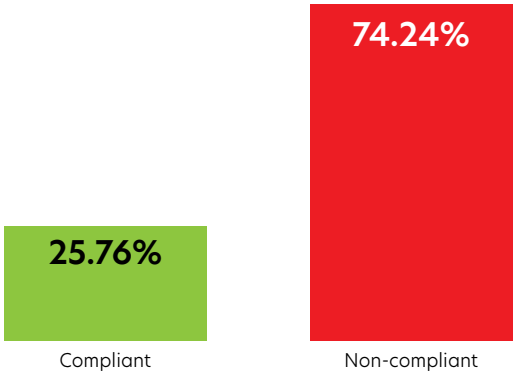

Figure 15. Georgia: TEN-T road network compliance

In total, 25.76% of Georgia's TEN-T road network currently observes the relevant standards. The chart below illustrates the overall compliance of Georgia's TEN-T road network with the infrastructure profile and condition criteria. Compared to the last year, this represents an improvement of 1,2% in favour of the overall TEN-T road network compliance in Georgia.

Since last year, Georgia has made some progress in aligning with the TEN-T road network standards. The percentage of compliant road segments has risen by 1,2 %, from 24.56% to 25.76%, as illustrated in the graph below.

This improvement reflects Georgia's ongoing commitment to infrastructure upgrades that align with TEN-T standards, which will be essential for deeper integration into the wider European transport network, fostering safety, efficiency, and regional connectivity.

Georgia: TEN-T road network compliance comparison (2024-2025)

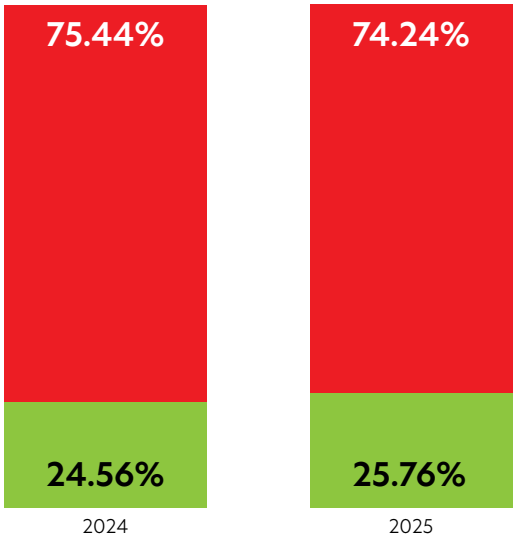

Figure 16. Georgia: TEN-T road network 2024-2025 compliance rate

V.1.3 **Waterborne Transport**

The indicative extension of the TEN-T to Georgia is currently specified in Annex IV "Indicative Maps of the Trans-European Transport Network extended to specific third countries" of Regulation (EU) 2024/1679 (TEN-T Guidelines). Within this framework, Georgia's waterborne transport infrastructure is limited exclusively to maritime ports, with no inland waterways or inland ports included in this designation. The key maritime ports of Georgia include:

- **Poti Port**, a versatile facility recognised as Georgia's sole core port within the TEN-T. It handles dry and liquid bulk, containers, Ro-Ro cargo, and passenger ferries across 15 berths with a quay length of 2,900 meters. It is Georgia's largest seaport.
- **Batumi Port**, also multipurpose, holds the status of a comprehensive TEN-T port under the classification outlined in Annex IV of the TEN-T Guidelines. It is positioned on Georgia's southeastern Black Sea coast near the Turkish border, has 11 berths and five specialised terminals for oil, dry cargo, containers, rail-ferry, and passenger services. Batumi Port handles over 1.8 million tons of dry cargo and nearly 200,000 TEU annually.
- **Anaklia Port**, identified as a comprehensive port in the TEN-T framework, in accordance with the same regulatory annex. Currently, it is under development phase, expected to be put into operation gradually between 2027 and 2029.

Below is a map illustrating the locations of Georgia's maritime ports included in the Trans-European Transport Network (TEN-T):

Figure 17. Indicative extension of TEN-T ports in Georgia

Port name	Poti	Batumi	Anaklia
Network layer	Core	Comprehensive	Comprehensive
Rail connection	Yes	Yes	No
Road connection	Yes	Yes	No
IWW connection	N/A	N/A	N/A
Port Reception Facilities	Yes	Yes	No
Aletrnative fuels avilability	No	No	No
Multimodal Terminal availability	Yes	Yes	No
VTMIS	Yes	Yes	No
SafeSeaNet	No	No	No
MNSW	Yes	Yes	No

Table 11. Maritime ports compliance assessment for Georgia

The core TEN-T Port of Poti and the comprehensive port in Batumi are both equipped **with active road and rail links.** By comparison, the comprehensive port of Anaklia does not yet have these connections in place, as it remains under construction and is not operational.

Inland Waterway (IWW). Georgian maritime ports on the Core and Comprehensive TEN-T Network are not connected to IWW. Currently, Georgia is exploring the development of internal water transportation for pas-senger mobility. However, due to the country's geographical and hydrological characteristics, these routes are generally not suitable for cargo transport and therefore are not reflected as in-land waterways within the extended Trans-European Transport Network (TEN-T) framework.

Port Reception Facilities: At the Ports of Poti and Batumi, waste from all types of vessels is collected and transferred to private service providers. Solid waste is sorted into designated containers, while liquid waste is stored in cisterns before being transported to contractors for recycling or disposal. The Port of Anaklia does not yet have established facilities for ship-generated waste, as the port remains in the development phase. As construction progresses, the inclusion of modern waste-reception and environmental management systems will be essential to ensure alignment with the EU and international standards. These practices are compliant with the requirements of Directive (EU) 2019/883 on port reception facilities for the delivery of waste from ships.

Alternative Fuels availability: Currently, no Georgian port is equipped with infrastructure for alternative clean fuels such as electric or hydrogen refueling stations. The Port of Poti has facilities for handling clean petroleum products but lacks dedicated infrastructure for alternative fuels. However, ongoing expansion efforts at Poti include investments in modern, environmentally friendly technologies that may support future clean fuel capacities. Similarly, the Port of Batumi operates an oil terminal that manages various petroleum products in accordance with cleanliness and safety standards. Yet, like Poti, Batumi does not presently offer infrastructure for alternative fuels such as electric or hydrogen refueling. As the Anaklia Deep Sea Port is under construction, no alternative clean fuels infrastructure has been established yet.

Multimodal Terminal Access:

The Core Port of Poti has a fully operational multimodal terminal - PotiTrans Terminal providing for seamless cargo transfers between sea, rail and road and supporting containerized cargo, bulk goods and repackaging.

The Comprehensive Port of Batumi does have access to multimodal transport. Batumi handles oil, container, and dry bulk cargo through separate terminals and is connected to rail and road networks. The port also has purpose-built facilities for intermodal cargo transfer, such as the Batumi Mineral Fertilizers Terminal, opened in 2021, which enables seamless operations between sea, rail, and road within the port area.

Considering that the Port of Anaklia is under construction , there is no operational multimodal terminal.

Deployment status of Telematic Applications in Georgian Maritime Ports:

The current status of telematic systems supporting maritime operations in Georgia includes several key platforms:

- **Vessel Traffic Monitoring and Information System (VTMIS)** – is fully operational at the Ports of Poti and Batumi, 24/7 navigational support, real-time vessel coordination, and strategic route planning. It assists ships in navigating safely under challenging weather and unforeseen conditions. At the Port of Anaklia, VTMIS is still not operational due to ongoing construction work
- **National Maritime Single Window (NMSW)** – operational in the Ports of Poti and Batumi since its launch in October 2024, NMSW streamlines ships clearance procedures by aligning with the IMO standards. It facilitates transparent and efficient communication among relevant stakeholders and institutions, reducing administrative complexity and paperwork. At present, nearly 600 users are actively utilising the MSW system, which has been seamlessly integrated into Georgia's maritime infrastructure enhancing the efficiency and transparency of maritime operations. To date, 50 shipping agencies have been officially recognized. Since the Anaklia Deep Sea Port is still under development, the National Maritime Single Window (NMSW) system is not yet operational at this location.
- **SafeSeaNet** – enables real-time vessel traffic monitoring and data exchange, enhancing maritime safety, port security, environmental protection, and operational efficiency. SafeSeaNet serves as critical communication link between maritime authorities and stakeholders. In March 2016, EMSA launched a project to extend Georgia's national AIS network, ensuring full coverage of its territorial sea and interoperability with the MAREΣ (SafeSeaNet regional server for the Mediterranean). Under the BCSEA project, Georgia was successfully connected to MAREΣ in January 2019 and began exchanging information. According to the Service Level Agreement (SLA) signed between EMSA, the Italian Coast Guard, and the Maritime Transport Agency of Georgia, the sharing of T-AIS data is facilitated through the SafeSeaNet regional server (MAREΣ). Currently, AIS data is available only from EU vessels, while direct access to the SafeSeaNet system remains restricted. As Georgia is in the final phase of completing the project, the system is not fully deployed.
- **Port Community System (PCS)** - to support the full digitalization of Georgia's maritime transport chain, a feasibility study for the implementation of a Port Community System (PCS) was successfully completed in 2021. This study was conducted with the support of the European Bank for Reconstruction and Development (EBRD). As a result, a strategic approach and guiding principles for PCS implementation in Georgia's ports were developed. The official launch of the PCS project took place on October 25, 2023, marking the commencement of its implementation phase. Following the launch, an initial project report was prepared in November 2023. Currently, the functional design of the PCS is undergoing validation by stakeholders, with particular attention given to ensuring the accuracy and efficiency of customs procedures. Simultaneously, efforts are underway to further refine the integration of the PCS with the National Maritime Single Window (NMSW) system, reinforcing the broader goal of maritime transport digitalization. The PCS is planned to become fully operational in real-time by the end of 2026, aligning with Georgia's commitment to enhancing its maritime infrastructure and regional connectivity.

Compared to the previous year's reporting, during 2025, Georgia has achieved progress in terms of multimodality of port operations, by putting into exploitation of the PotiTrans Terminal at the Core Port of Poti. Its activities were officially launched on 23 May 2025, and its official ground opening ceremony was held on 9 June 2025.

Georgia has continued to demonstrate consistent progress in digitalization of maritime transport, through full operation of the VTMIS, NMSW and almost full operability of the PCS.

Concrete efforts must be made regarding the deployment of alternative fuel infrastructure at all Georgia's maritime ports.

In developing the comprehensive port of Anaklia, full compliance with the TEN-T indicators in maritime transport and infrastructure shall be taken into account.

V.1.4 **Airports**

Georgia currently has two airports within the TEN-T comprehensive network. Among these, Tbilisi International Airport is part of the core network, while Kutaisi International Airport is included in the comprehensive network.

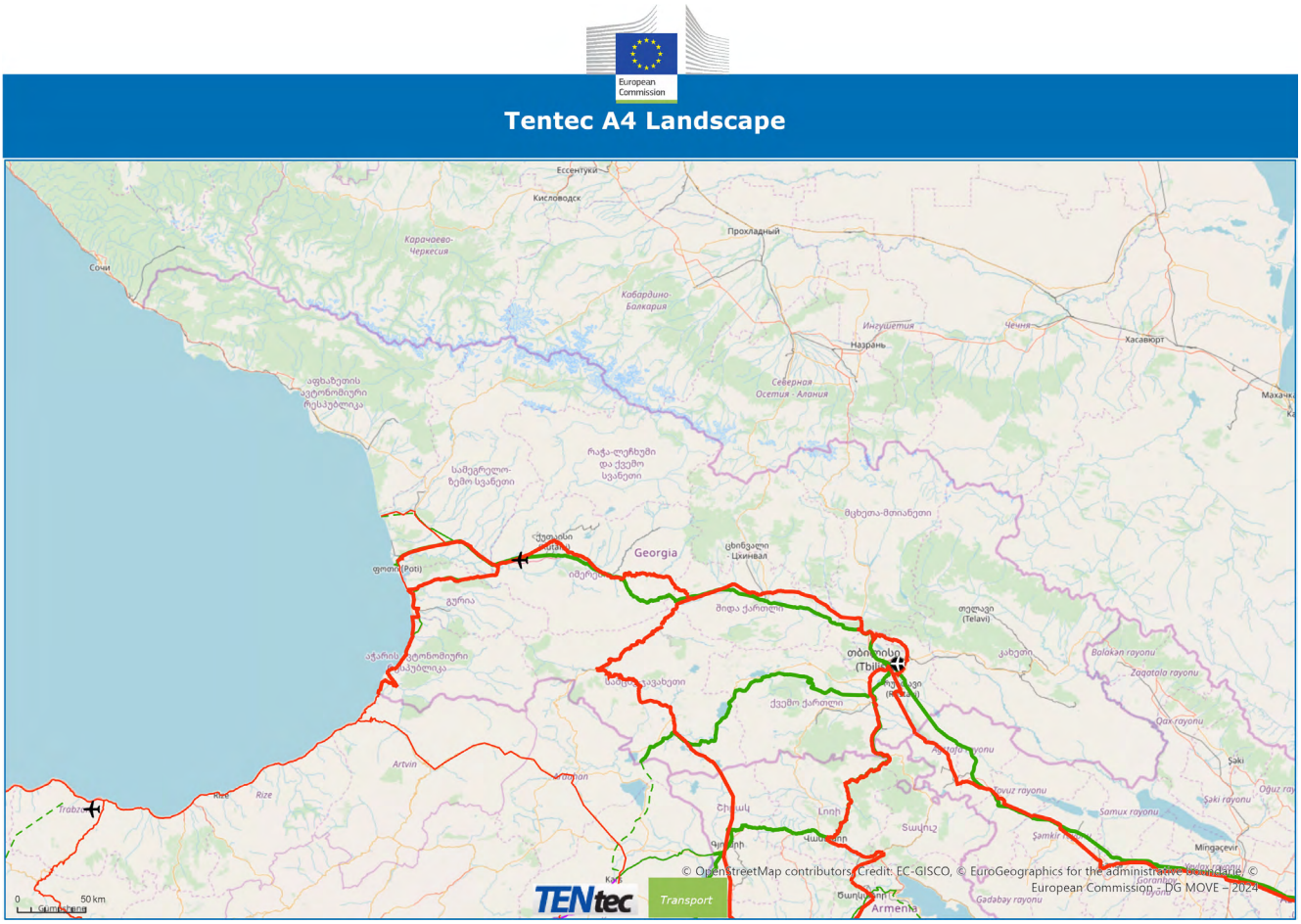

Figure 18. Indicative extension of TEN-T Comprehensive and Core Airports to Georgia

Below is an overview of the basic compliance data for Georgian TEN-T airports, assessed against the criteria outlined in Section IV.

a) Connection to other modes

A critical condition for ensuring interoperability of TEN-T Network airports is their connection to the railway network. Currently, both airports have direct rail and road connections, meeting this essential requirement for integrated transport accessibility.

Country code	Airport name	TEN-T (Core/Comprehensive) Network	Connection to other modes	
			Road connection	Rail connection
GE	Tbilisi International Airport	Core	Yes	Yes
GE	Kutaisi International Airport	Comprehensive	Yes	Yes

Table 12. Georgia: Airports road and rail connections

b) Availability of alternative fuels

Currently, no fixed storage tank facilities for aviation biofuel are reported at either airport. According to Regulation 1315/2013, this criterion applies only to core network airports, which are expected to be prepared to make alternative clean fuels available based on market demand. However, Regulation (EU) 2024/1679 has expanded these requirements to the entire comprehensive network, removing the dependency on market demand and emphasizing that all airports must proactively accommodate alternative clean fuels within the prescribed deadlines.

Country code	Airport name	TEN-T (Core/Comprehensive) Network	Clean fuels availability	
			Tank facilities for aviation biofuel	availability of alternative fuels for airport ground services
GE	Tbilisi International Airport	Core	No	No
GE	Kutaisi International Airport	Comprehensive	No	No

Table 13. Georgia: Availability of alternative fuels in airports

c)Terminal availability

All airports are open to international traffic, with foreign air carriers operating in and out, and have sufficient terminal capacity to meet the current traffic demands.

Country code	Airport name	TEN-T (Core/ Comprehensive) Network	Terminal availability	
			Terminal availability (open to all market players on non-discriminatory basis)	Terminal availability (sufficient capacity to operate)
GE	Tbilisi International Airport	Core	Yes	Yes
GE	Kutaisi International Airport	Comprehensive	Yes	Yes

Table 14. Georgia: Airports terminal availability

V.2 Republic of Moldova

V.2.1 Railways

V.2.1.1 Current Compliance Status

Moldova's operational railway network covers a total of 1,232 km of main lines, of which **875.8 km** belong to the **Comprehensive Network** and **207.8 km to the Core Network**. The lines are single-track, non-electrified, and constructed to the 1,520 mm broad-gauge standard.

A dual-gauge section of approximately 14 km at Giurgiulești International Free Port, incorporating both 1,520 mm and 1,435 mm tracks, allows goods to move to and from neighbouring countries without requiring bogie exchange or cargo trans-shipment.

The network is designed to accommodate trains with a standard axle load of 25 t, although operational limitations restrict some rolling stock to a maximum of 22.5 t.

Following the revised TEN-T regulation of July 2024, the Baltic Sea – Black Sea – Aegean Sea corridor now passes through Moldova, connecting Romania at Ungheni with the capital, Chisinau,

The following illustrates the indicative extension of the TEN-T rail network within the Republic of Moldova.

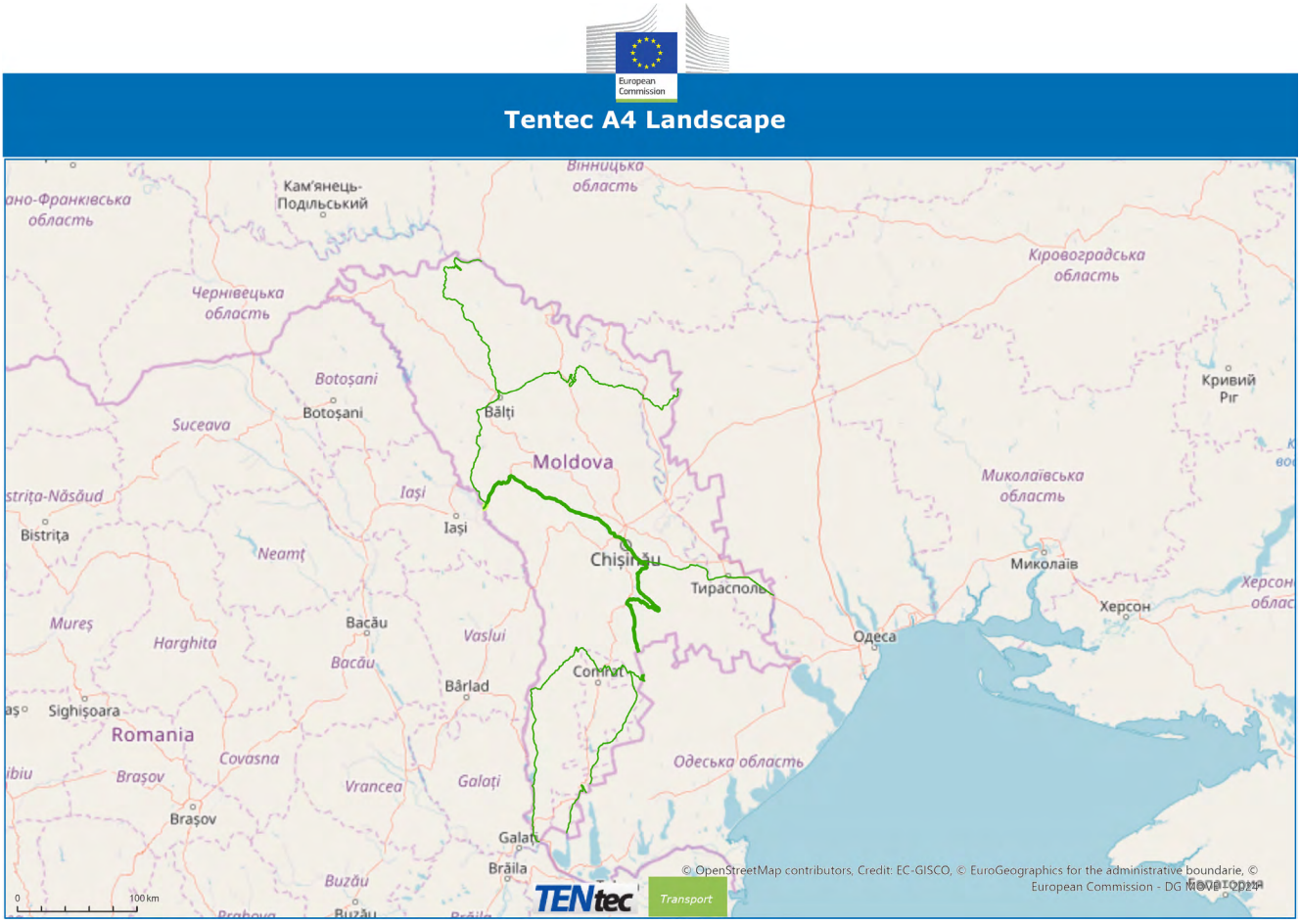

Figure 19. Indicative extension of the TEN-T rail network to Moldova

The compliance status of Moldova's railway infrastructure against key TEN-T indicators is as follows:

Electrification:

The entire Comprehensive Network in Moldova is non-electrified.

Axle load:

While the railway lines on the Comprehensive Network were originally designed for a 25-tonne axle load - exceeding the TEN-T requirement of 22.5 t - insufficient maintenance has limited the operational capacity to 22.5 t.

Freight line speeds:

Across the Comprehensive Network, the design speed for freight trains ranges between 45 and 80 km/h, which is well below the TEN-T requirement of 100 km/h for freight lines by 2030.

Passenger line speeds:

As the lines accommodate both passenger and freight traffic, the same design speed limitations apply to passenger services, leading to similarly reduced speeds.

Train length:

The entire Core Network, together with 69.86% of the Comprehensive Network, can accommodate freight trains up to 798 m in length, exceeding the 740 m required under the TEN-T Regulation.

Corresponding data is shown in the table below.

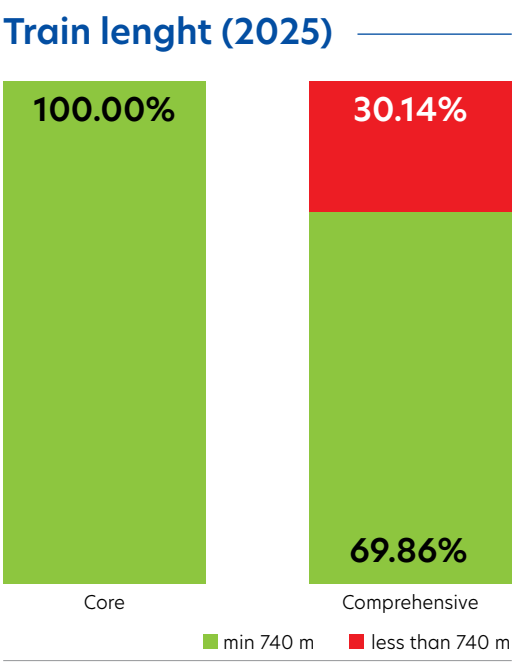

Figure 20. Moldova: Train length

Track gauge:

The Moldovan railway network operates on a 1,520 mm gauge, which does not conform to the TEN-T standard of 1,435 mm.

ERTMS:

Moldova's railway network currently does not feature the European Rail Traffic Management System (ERTMS).

Loading gauge:

In accordance with information provided by JSC Moldovan Railways, the entire Comprehensive Network allows the circulation of freight trains carrying standard semi-trailers up to 4 metres in height, loaded at a minimum height of 27 centimetres above the top of the rail.

Additional information

Number of tracks:

The entire Core and Comprehensive Network consist of single-track lines.

Maximum gradient:

Information on maximum gradient is not available.

Infrastructure Conditions

The condition of the railway network was evaluated using data supplied by JSC Moldovan Railways, applying the ratio between design and operational speeds as the primary performance indicator. According to the assessment, the entire Core Network is categorised as being in poor condition, while approximately 45 % of the Comprehensive Network is assessed as being in very poor condition. Overall, current operational performance corresponds to roughly 48 % of the design speed, with maximum speeds not exceeding 80 km/h.

Condition of the Rail Network - 2025

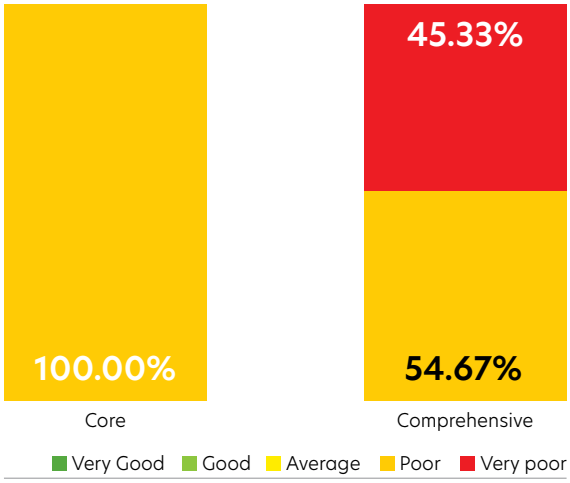

Figure 21. Moldova: Condition of the Rail Network

V.2.1.2 Progress from Last Year's Reporting

No progress has been recorded in meeting the TEN-T specific requirements compared with the 2025 forecast. The variations recorded between 2023 and 2024 regarding train length and the condition of the railway network primarily reflect updates to the configuration of the Core and Comprehensive Networks. As illustrated in the charts below, the overall compliance level has remained largely unchanged, indicating a period of network stabilisation rather than further improvement.

Train length 2023-2025 comparison

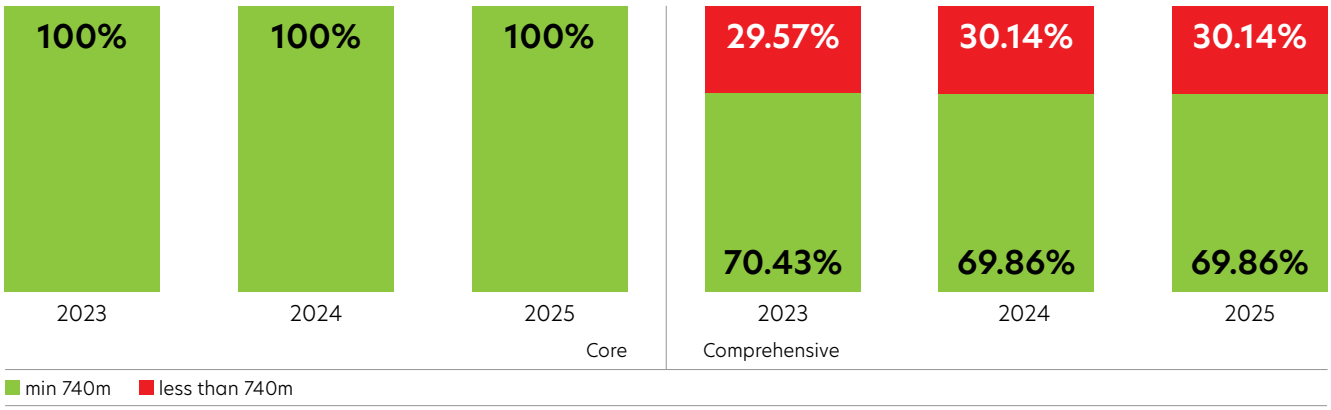

Figure 22. Moldova: Train length comparison (2023 - 2025)

Condition of the Rail Network 2023 - 2025 comparison

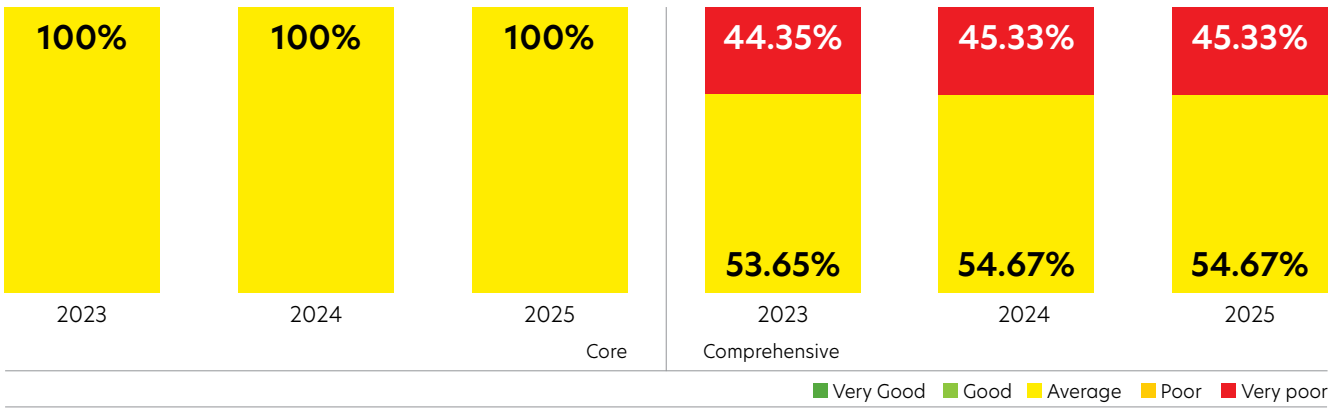

Figure 23. Moldova: Condition of the Rail Network comparison (2023 - 2025)

No further modifications or improvements have been recorded with respect to the other TEN-T compliance parameters.

V.2.2 **Roads**

V.2.2.1 **Current Compliance Status**

The road infrastructure in the Republic of Moldova varies in condition, with a significant portion facing major challenges in terms of maintenance and expansion needs. The indicative extensions of the TEN-T network in Moldova cover the country's main transport and trade corridors, comprising 898.242 km of roads, of which 350.263 km are on the Core network.

Figure 24. Indicative extension of the TEN-T road network to Moldova

Under Regulation (EU) 2024/1679, several notable changes to the network layout include:

- Strengthened connection with Ukraine through a new comprehensive network route (Rîșcani – Soroca – UA border).
- A new core network route connecting Chișinău to the port of Odesa, bypassing Transnistria.
- The inclusion of the Chișinău ring road within the core network.

Almost the entire network consists of conventional roads, with some small segments expanded to two lanes per direction. This year's report marks the opening of Moldova's first express road on the Chișinău bypass, meeting the TEN-T core network standards.

The lack of high-speed roads meeting motorway or express road standards has resulted in almost the entire core network being currently non-compliant with the relevant TEN-T requirements. Additionally, maintenance issues are a significant concern, as only 8.9% of the core network was in a good condition in 2024, as shown below. This represents a decline of over 5% from 2023, reflecting a broader downtrend . Similar deterioration has been observed across the network, with an increase in sections classified as being in medium or poor condition compared to the previous year.

Lack of data provided by the Moldovan authorities for 2025 on all TEN-T compliance indicators caused no presentation of the progress in Compliance Status on the core and comprehensive road network in 2025 compared to 2024 for Moldova.

V.2.2.2 Infrastructure Profile and Condition of the Core Road Network

According to Article 31.2(a) of Regulation (EU) 2024/1679 and Articles 17(3)(a) and (b) of Regulation 1315/2013, roads on the TEN-T Core Network must meet motorway or express road standards (despite these terms being no longer used under Regulation (EU) 2024/1679).

Both Regulations 1315/2013 and 2024/1679 permit the European Commission to grant exemptions from the motorway/express road requirements for conventional roads if they meet appropriate safety standards. However, no such exemptions have been requested or granted in Georgia. Therefore, the compliance assessment of the Core Network relies solely on the motorway/express road criterion, resulting in conventional road sections within the TEN-T Core being classified as non-compliant.

A comprehensive evaluation of safe and secure parking facilities across the TEN-T Network in Georgia has not yet been conducted. This issue is important not only as an infrastructure compliance criterion but also for its social impact. An inventory assessment and demand analysis for developing safe and secure parking facilities should be carried out as part of the process of aligning with Regulation No. 561/2006.

Regarding rest areas, this report assumes that all motorways /express meet this criterion. This assumption will be revised as additional data and a consistent ranking methodology become available.

In summary, within this analysis framework, roads on the Core Network are considered compliant with infrastructure profile and condition criteria if they cumulatively meet the following conditions:

-Achieve motorway or express road standards.

-Receive adequate maintenance to uphold a road surface condition rated as very good or good, ensuring smooth traffic flow and high safety standards.

Road conditions are using the International Roughness Index (IRI), across five categories:

- Very good (IRI < 1.24)
- Good (IRI 1.24 - 2.84);
- Medium (IRI 2.84 - 5.09)
- Poor (IRI 5.09 - 8.94)
- Very poor (IRI > 8.94)

The outcomes of the compliance assessment exercise are given in the charts below.

Road profile	KM	%
Motorway	0	0.00%
Express road	6.68	1.91%
Conventional road	343.583	98.09%

Table 15. Moldova: TEN-T core road network profile

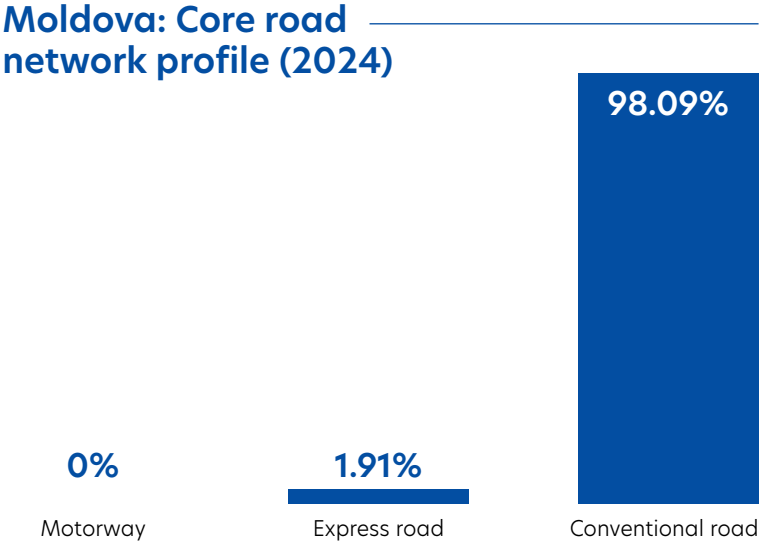

Figure 25. Moldova: road TEN-T core road network infrastructure profile

The quality of the road infrastructure is not satisfactory, with only 8.92% of the network in 2024 in good condition, as shown below. Compared with 2023, this was a slight decrease of 2.67 % in the proportion of the core road network in good condition. On the other hand, the proportion of the core road network in medium condition in 2024 has increased by almost 26% compared to 2023 figures. Additionally, the core road network in poor condition has decreased by 23.31%, reflecting a positive trend.

Road condition	KM	%
Very Good	0	0.00%
Good	31.26	8.92%
Medium	132.67	37.88%
Poor	186.33	53.20%
Very Poor	0	0.00%

Table 16. Moldova: TEN-T core road network condition

Despite some improvements, there remains significant room for further development. More detailed data and figures are shown below.

Lack of data provided by the Moldovan authorities for 2025 on all TEN-T compliance indicators caused no presentation of the progress in Compliance Status on the core road network in 2025 compared to 2024 for Moldova.

Core road network condition

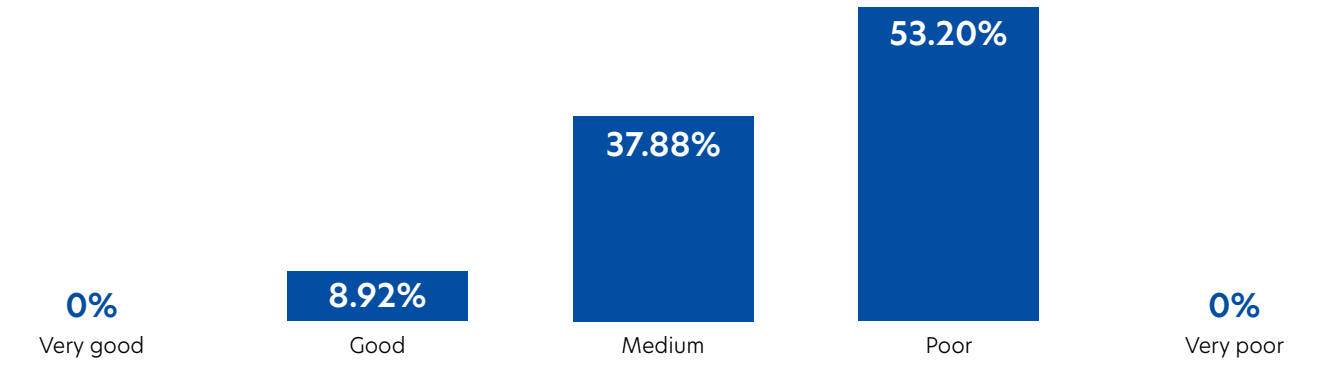

Figure 26. Moldova: Core Road network condition

Road profile	Road condition	KM	%
Motorway	Very Good	0	0.00%
	Good	0	0.00%
	Medium/Poor/Very Poor	0	0.00%
Express road	Very Good	6.68	1.91%
	Good	0	0.00%
	Medium/Poor/Very Poor	0	0.00%
Conventional road	Very Good	0	0.00%
	Good	24.58	7.02%
	Medium/Poor/Very Poor	319.003	91.08%

Table 17. Moldova: TEN-T core road Network Compliance (infrastructure profile and condition)

V.2.2.3 Infrastructure Profile and Conditions of the Comprehensive Road Network

Article 18 of Regulation No 1315/2013, TEN-T stipulates that roads should be motorways, express roads, or conventional strategic roads. Conventional strategic roads are further defined under Article 17(3)(c) as roads that are neither motorways nor express roads but still:

a) play an important role in long-distance freight and passenger traffic

b) integrate the main urban and economic centres

c) interconnect with other transport modes

d) link mountainous, remote, landlocked and peripheral NUTS 2 regions to central regions of the Union.

Such roads should be *"adequately maintained to allow safe and secure traffic."*

Regulation (EU) 2024/1679 no longer refers to conventional strategic roads, instead mandating that roads within the comprehensive network be "designed, built, or upgraded for motor traffic." Unlike the core network, however, these roads are not required to meet the specific standards typically associated with motorways or express roads. Until a more robust methodology is established to assess compliance with safety and environmental protection standards, this report evaluates the comprehensive network's compliance (outside the core network) based on the current physical condition of the infrastructure.

For reporting purposes, it is assumed that a conventional road in very good or good condition generally meets basic safety requirements, although this assumption may not always hold true in practice. It is expected that Moldova's progress in transposing EU road safety legislation, along with routine road safety inspections on the TEN-T Network, will provide critical data, supporting a more detailed and refined methodological approach in future assessments.

The results of this analysis are shown in the tables and charts below.

The Comprehensive Network comprises 547.98 km of roads. While slightly better than the Core Network, the infrastructure quality remains suboptimal, with only around 20% currently in very good or good condition.

Road condition	KM	%
Very Good	24.6	4.49%
Good	83.306	15.20%
Medium	95.65	17.46%
Poor	343.243	62.64%
Very Poor	1.18	0.22%

Table 18. Moldova: TEN-T comprehensive road network condition

Comprehensive road network condition

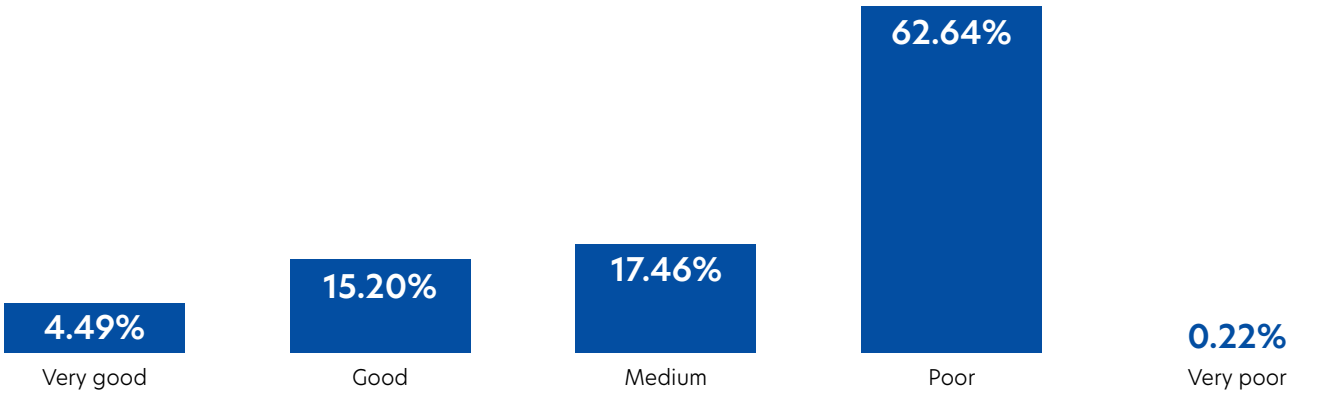

Figure 27. Moldova: Comprehensive Road network condition

Road profile	Road condition	KM	%
Motorway	Very Good	0	0.00%
	Good	0	0.00%
	Medium/Poor/Very Poor	0	0.00%
Expressway	Very Good	0	0.00%
	Good	0	0.00%
	Medium/Poor/Very Poor	0	0.00%
Conventional road	Very Good	24.6	4.49%
	Good	83.306	15.20%
	Medium/Poor/Very Poor	440.073	80.31%

Table 19. Moldova: TEN-T Comprehensive Road Network Compliance (infrastructure profile and condition)

Altogether, the TEN-T road network in Moldova suffers greatly in terms of quality, with 59% of it reported to be in a poor state. This represents a slight increase of 1.11% compared 2024 to 2023.

TEN-T road network conditions

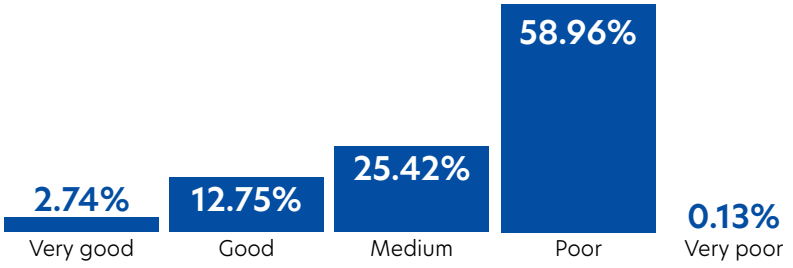

Figure 28. Moldova: TEN-T network conditions

Overall, around 12.76% of the network is currently compliant with TEN-T standards. Compared to last year, there has been minimal improvement, with a slight decrease in overall TEN-T road network compliance. For the Core network, compliance is less than 2%, which represents a small improvement compared to last year, when it was zero.

Moldova: TEN-T network compliance (2024)

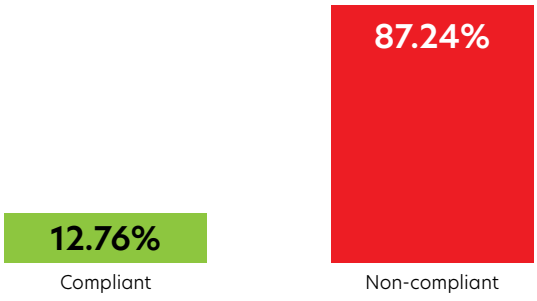

Figure 29. Moldova: TEN-T network compliance

Lack of data provided by the Moldovan authorities for 2025 on all TEN-T compliance indicators caused no presentation of the progress in Compliance Status on the comprehensive road network in 2025 compared to 2024 for Moldova.

Moldova: TEN-T road network compliance rate (2024)

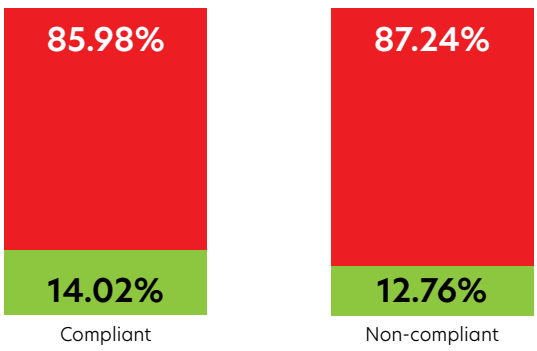

Figure 30. Moldova: TEN-T road 2023-2024 network compliance rate

V.2.2.2 Progress from Last Year's Reporting

Overall, 12.76% of the network is currently compliant with TEN-T standards. Compared to the last year, there has been a slight decrease in the overall compliance rate of the TEN-T road network in Moldova, as illustrated in the graph below.

Lack of data provided by the Moldovan authorities for 2025 on all TEN-T compliance indicators caused no presentation of the progress in TEN-T road network compliance rate in 2025 compared to 2024 for Moldova.

V.2.3 **Waterborne transport**

The Republic of Moldova has a single port included in the indicative extension of the TEN-T Comprehensive Network: the Giurgiulești Port Complex.

The **Port Complex Giurgiulești** comprises the following facilities:

- Giurgiulești International Free Port – situated on the maritime sector of the Danube River and partly on the Prut River. It is accessible to maritime and inland waterway vessels with a draft ranging from 4.5 to 7.5 meters, depending on the berth location – either on the Danube or on the Prut River. The Giurgiulesti International Free Port comprises specialized terminals for oil, grain, vegetable oil, liquid bulk, general cargo, containers, and Ro-Ro operations, each equipped to handle diverse cargo types including fuels, agricultural products, and industrial goods. The oil terminal features a jetty, tank farm with 63,600 cbm capacity, and facilities for ethanol, wine, and fertilizer transshipment, while the grain and vegetable oil terminals support bulk exports to EU markets. Additional infrastructure includes a mixed-gauge railway terminal for liquid bulk and container transfers, and a multi-purpose quay for maritime and river traffic.

- Passenger and Goods Giurgiulești Port (State Port) – located on the Prut River, the Giurgiulesti Passenger and Cargo Port feature a Passenger Terminal and a Container Facility. The port is equipped to accommodate maritime and inland waterway vessels with a maximum draft of 4.5 meters, enhancing Moldova's connectivity via the Danube.

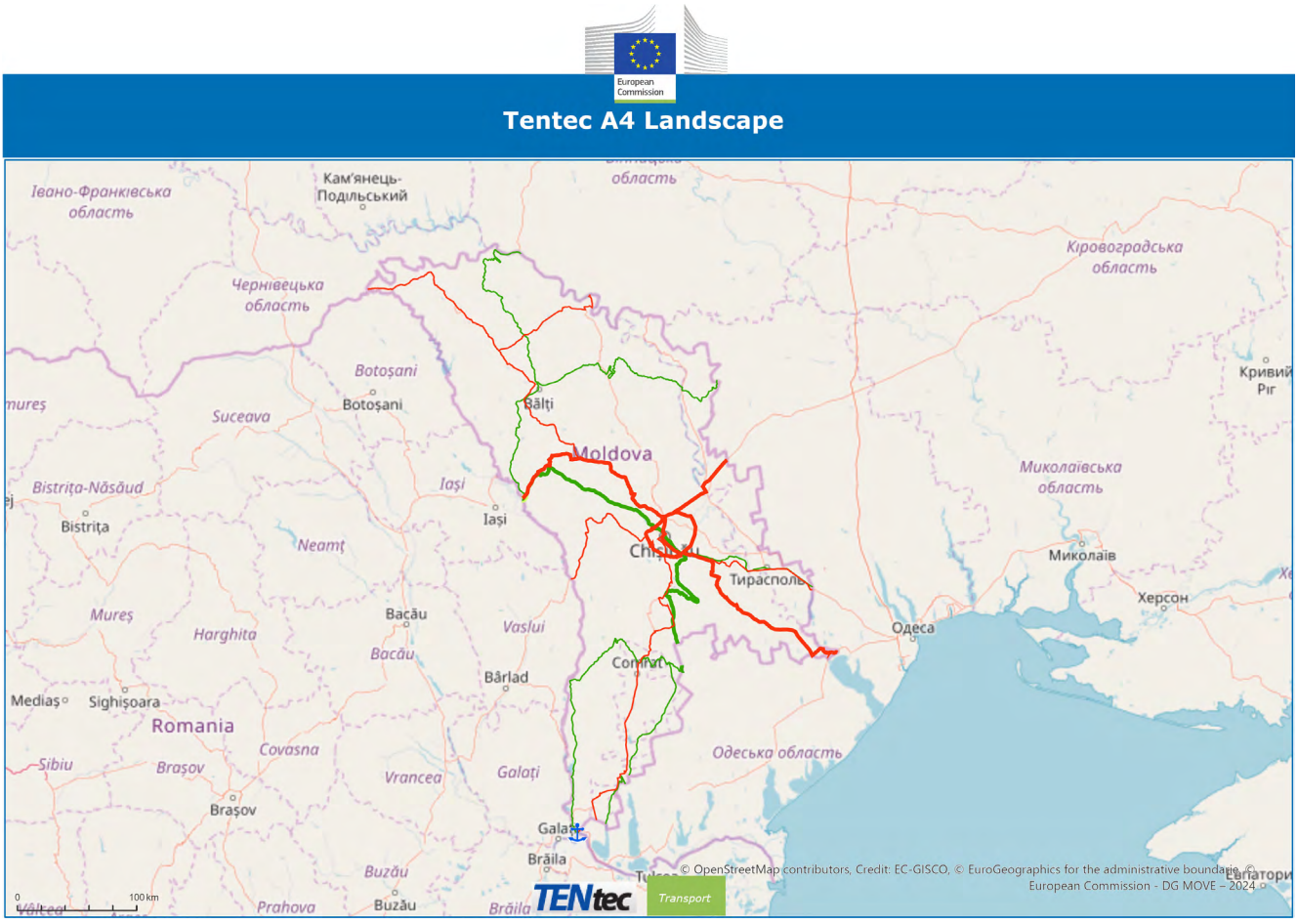

Figure 31. Indicative extension of TEN-T ports in the Republic of Moldova

Indicator		International Free Port of Giurgiulesti	Passenger and Goods Port Giurgiulesti
TEN-T Network		comprehensive	comprehensive
Rail connection		yes	no
Road connection		yes	yes
IWW Connection		yes	yes
Port Reception Facilities		partially	partially
Alternative fuels availability		no	no
Multimodal Terminal availability		no	no
Telematic applications	VTMIS	partially	partially
	RIS	no	no
	MNSW and SafeSeaNet	no	no

Table 20. Compliance assessment for each indicator in Port of Giurgiulești

Road and Railway Connections. The Giurgiulești International Free Port benefits from direct connections to both rail and road infrastructure, enhancing its role as a key logistics hub in Moldova. In contrast, the adjacent Passenger and Goods Giurgiulești Port currently rely solely on road access, which limits its intermodal capabilities. However, plans are underway to launch a feasibility study in the coming years aimed at linking the state-managed port to the national rail network, which would significantly improve its cargo handling efficiency and regional connectivity.

IWW Connections: Both terminals at Giurgiulesti Port are reported to have Inland Waterway (IWW) Connections. The International Free Port is located on the left bank of the Danube River, while the State Port (Passengers and Goods Port) benefits from access to both Danube and the Prut Rivers.

Port Reception Facilities (PRF): Both ports currently support partial waste collection from vessels. A cost analysis has been conducted to assess the requirements for expanding this service to full capacity, and a formal request for funding has been submitted to the state budget to cover the necessary improvements.

Alternative Fuels Infrastructure: Currently, neither the Giurgiulesti International Free Port nor the State Passenger and Goods Port have infrastructure in place to support alternative fuels such as LNG, hydrogen, shore-side electricity, or biofuels. This lack of facilities limits the ports' ability to serve environmentally friendly vessels and poses a challenge to meeting EU Green Deal objectives and TEN-T sustainability requirements. Addressing this shortfall has been designated as a priority in the Transport Community's Action Plan for Waterborne Transport & Multimodality 2025-2027, which emphasizes the development of alternative fuel infrastructure to support greener and more efficient maritime transport across the TCT Observers, including the Republic of Moldova.

Multimodal Terminal availability: The Giurgiulești Port Complex comprises a range of essential terminals, such as those for oil products, grain, vegetable oil, bulk cargo, containers and general cargo, Ro-Ro operations, and passenger services. However, while the ports are offering multimodal connectivity, integrating river, road and rail transport (via International Free Port) there is currently no dedicated multimodal terminal in place that integrates various transport modes and enables seamless cargo transfer between them.

The Giurgiulesti Port Complex, classified as a transport node on the Comprehensive TEN-T Network, is subject to specific telematic requirements. The port must ensure compliance with key EU standards to support interoperability and efficient transport operations. These include the implementation of Vessel Traffic Management and Information Systems (VTMIS), integration with e-Maritime services such as SafeSeaNet, and the operation of a National Maritime Single Window to streamline reporting formalities. The provision of River Information Services (RIS) is also mandatory, as the port is situated on the Danube River, which is part of the TEN-T inland waterway network. While the use of Port Community Systems is not a formal requirement, their adoption is encouraged as a best practice to enhance coordination and data exchange among port stakeholders.

VTMIS: At present, the Giurgiulesti Port Complex, including both the International Free Port and the Passenger and Goods Terminal is making partial use of Vessel Traffic Management and Information Systems (VTMIS). The European Maritime Safety Agency (EMSA) is currently conducting a feasibility study for the implementation of VTMIS for the Naval Agency. Once the draft version of the study is finalised, EMSA will assess the potential for providing technical assistance based on the findings made.

National Maritime Single Window System (NMSW): At present, the NMSW has not been implemented at either of the two port terminals within the Giurgiulesti Port Complex. A feasibility study is currently underway by EMSA to establish a NMSW. Once the draft is finalized, EMSA will evaluate the possibility of providing technical assistance based on the study's conclusions. The Embassy of the United States of America, in collaboration with the EXBS program, has also expressed interest in supporting the financing of the Maritime Single Window development. The MSW is a key priority for the Naval Agency as part of its efforts to advance the digitalization of institutional services and improve coordination among national cross-border authorities. Its implementation is expected to increase the number of vessel calls at the Port of Giurgiulești and help alleviate congestion along the Danube caused by ships waiting to enter the port.

SafeSeaNet as a central EU system developed by EMSA, which connects the national SafeSeaNet nodes is aimed at vessel traffic monitoring and information exchange to strengthen maritime safety, port security, environmental protection and the overall efficiency of maritime transport operations. The Port Complex of Giurgiulești in the Republic of Moldova has not yet adopted or integrated SafeSeaNet functionalities into its operational framework.

River Information System (RIS): currently the Republic of Moldova does not operate a functional RIS system. Currently, the Government is working on the soft measures related to aligning the national legal framework with the EU RIS acquis. River Information Services (RIS) are a top priority for the Naval Agency as it seeks to modernize its operations through digital transformation. By implementing RIS, the agency aims to strengthen coordination with national cross-border authorities, boost the number of vessel calls at the Port of Giurgiulești, and ease congestion along the Danube caused by ships awaiting entry.

Port Community System (PCS): Currently, the Giurgiulești Port Complex does not operate a functional PCS.

The Republic of Moldova has made no visible progress in achieving compliance with the TEN-T indicators for maritime and inland waterway transport and transport infrastructure.

Further efforts shall be undertaken regarding ensuring railway connectivity of the State Port of Giurgiulesti, and full deployment of facilities for handling of waste from ships arriving, staying and departing both at the International Free Port and the State Port of Giurgiulesti.

Structural and consistent efforts need to be undertaken in relation to design and deployment of infrastructure for alternative fuels, establishment of connectivity to Multimodal Freight Terminal/s and digitalization of waterborne operations. Moldova is in the initial phase of commencement of concrete activities in this regard, therefore systematic and sequential assistance is necessary to achieve full compliance with the TEN-T requirements within the timeframes set.

V.2.4 **Airports**

The Republic of Moldova has one TEN-T airport, namely Chișinău International Airport, which is part of the core network.

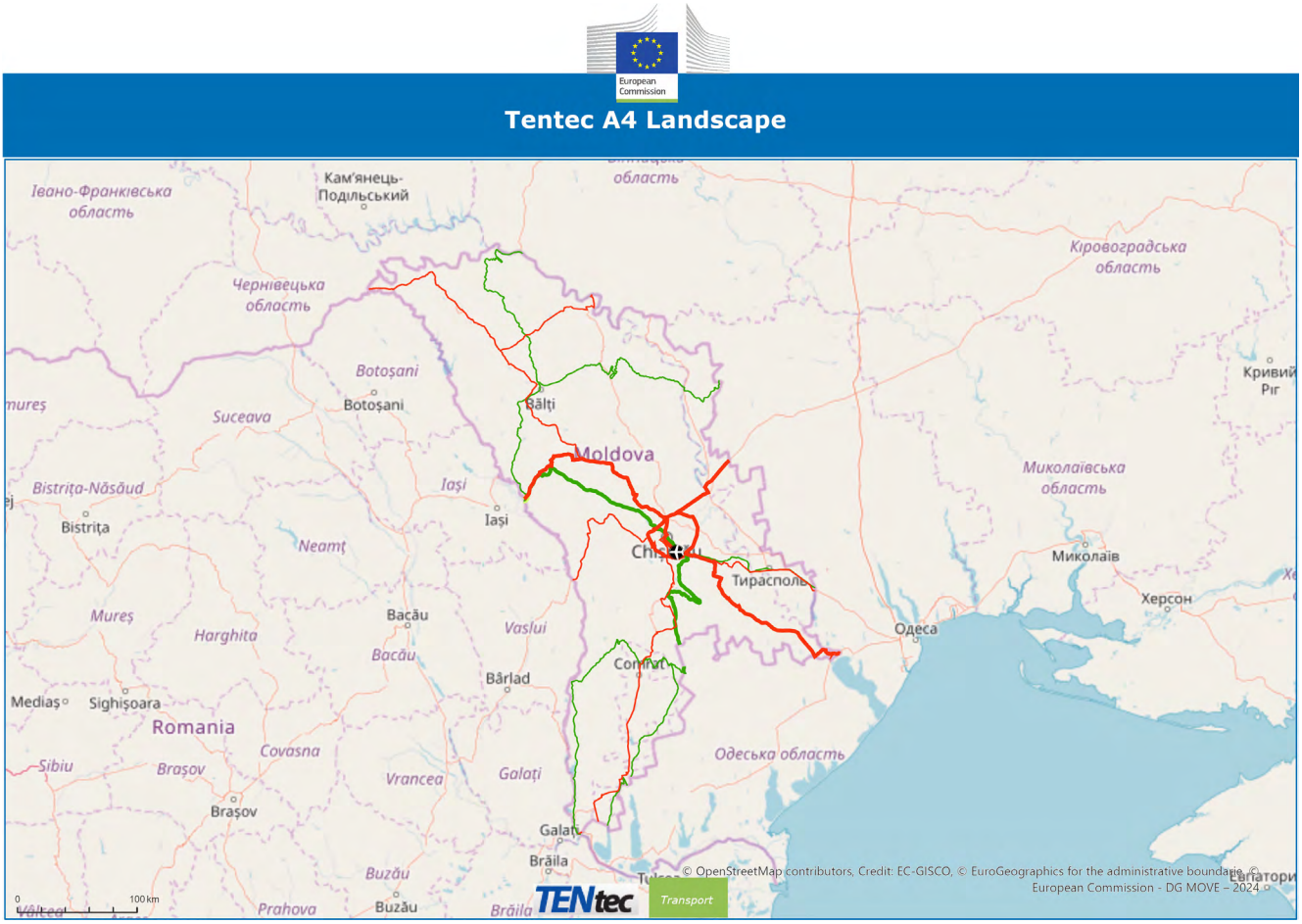

Figure 32. Indicative extension of TEN-T Comprehensive and Core Airports to the Republic of Moldova

Below is an overview of the basic compliance data for Chișinău International Airport, assessed against the criteria outlined in Section IV.

a) Connection to other modes

A critical condition for ensuring interoperability of TEN-T Network airports is their connection to the railway network. Currently, Chișinău airport doesn't have a rail connection, being linked to the nearby urban node through the road network only.

Country code	Airport name	TEN-T (Core/Comprehensive) Network	Connection to other modes	
			Road connection	Rail connection
MD	Chișinău International airport	Core	Yes	No

Table 21. Moldova: list of airports with road and rail connections

b) Availability of alternative fuels

Currently, no fixed storage tank facilities for aviation biofuel are reported to be in use at Chișinău Airport. Under Regulation (EU) 2024/1679, compliance with this essential criterion is no longer linked to market demand.

Country code	Airport name	TEN-T (Core/ Comprehensive) Network	Clean fuels availability	
			Tank facilities for aviation biofuel	availability of alternative fuels for airport ground services
MD	Chișinău International airport	Core	No	No

Table 22. Moldova: list of availability of alternative fuels in airports

c) Terminal availability

Chișinău Airport is open to international traffic, with foreign air carriers operating in and out, with sufficient terminal capacity to serve the current traffic needs.

Country code	Airport name	TEN-T (Core/Comprehensive) Network	Terminal availability	
			Terminal availability (open to all market players on non-discriminatory basis)	Terminal availability (sufficient capacity to operate)
MD	Chișinău International airport	Core	Yes	Yes

Table 23. Moldova: list of terminal availability

V.3 Ukraine

V.3.1 Railways

V.3.1.1 Current Compliance Status

Regulation (EU) 2024/1679 plays a notable role for Ukraine, as four TEN-T corridors traverse the country: the Baltic Sea – Black Sea – Aegean Sea Corridor, the North Sea – Baltic Corridor, the Mediterranean Corridor, and the Rhine – Danube Corridor.

Ukrainian Railways operate a total of 19,790 km of main tracks, comprising **8,244.2 km of the Comprehensive Network** and **4,465.5 km of the Core Network**. The network predominantly uses a 1,520 mm track gauge, standard across most of the country. However, near the borders with Poland, Hungary, Slovakia, and Romania, 1,435 mm gauge tracks are in operation, covering 270.9 km. In these areas, dual-gauge tracks (1,435 mm and 1,520 mm) facilitate cross-border railway transport and connections with neighbouring EU member states.

Ukraine's railway network is vital for international trade, especially given the severe restrictions on seaport operations following Russia's invasion. It ensures crucial connections to neighbouring countries, including Poland, Slovakia, Hungary, Romania, and Moldova, but faces significant logistical challenges. A major issue is the difference in track gauges - Ukraine primarily uses 1,520 mm, while most neighbouring EU states use 1,435 mm - further complicated by cross-border controls and limited infrastructure. Nevertheless, initiatives under the Solidarity Lanes programme, alongside joint control measures with Moldovan customs at a key crossing, are gradually improving connectivity and facilitating trade flows.

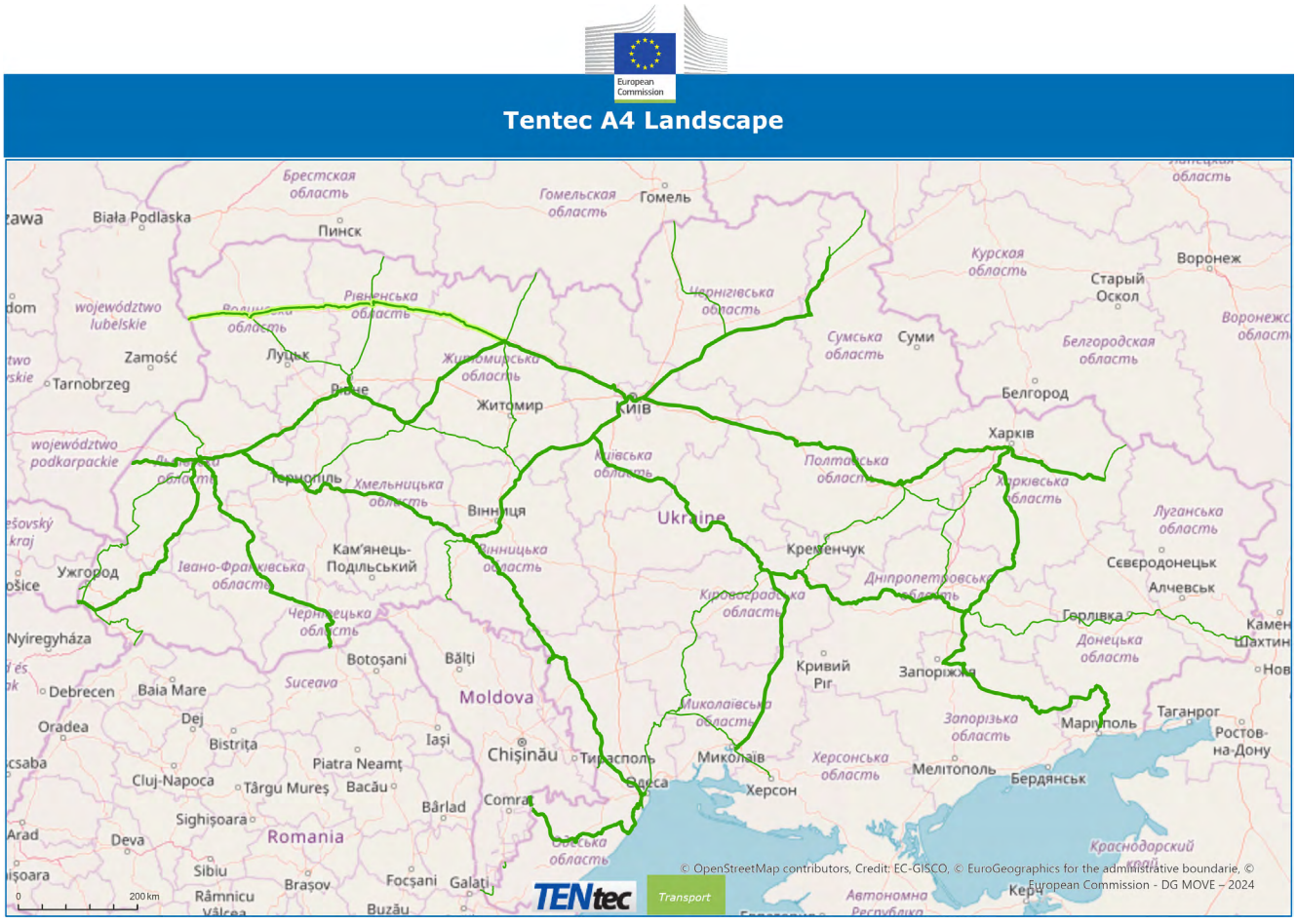

Figure 33. Indicative extension of the TEN-T rail network to Ukraine

At present, traffic is suspended on 319 km of the Core Network and 721.5 km of the Comprehensive Network, representing 8.75% of the total Comprehensive Network. Moreover, 167 km of the Core Network and 460.4 km of the Comprehensive Network remain outside Ukrainian control. Of these sections, 260.1 km of the Comprehensive Network are affected by poor infrastructure, their proximity to Russia and Belarus, and ongoing hostilities.

Electrification:

In Ukraine, 80.83% of the Core Network and 71.36% of the Comprehensive Network are electrified. The railway system operates using two main types of electrical power systems:

- **25 kV AC:** Primarily used to connect Kyiv with Lviv in the western part of the network, Odesa in the south, and Kharkiv in the east.
- **3 kV DC:** Mainly concentrated in the Donetsk region, Kharkiv, and the Crimea area.

Axle load:

The entire Comprehensive Network supports an axle load of at least 22.5 t, in compliance with TEN-T requirements. In the Odesa area, the axle load even reaches 23.5 t.

Freight lines speed:

On most sections of the Comprehensive Network, the design speed for freight trains reaches 80 km/h, which does not comply with TEN-T requirements, as the minimum design speed across the Core and Comprehensive Network should be 100 km/h.

Passenger lines speed:

According to information provided by Ukrainian Railways, 21.29% of the Core Network and 12.55% of the Comprehensive Network meet the TEN-T minimum design speed requirement of 160 km/h for passenger trains. In addition, 77.99% of the Core Network and 84.66% of the Comprehensive Network have design speeds for passenger services between 100 km/h and 160 km/h.

Train length:

98.95% of the Core Network and 93.21% of the Comprehensive Network can accommodate freight trains of 740 m in length.

Ukrainian Railways provided information that the requirements under the TEN-T Regulation regarding a minimum train length of 740 m and the minimum train path for single and double railway lines are met on 98.90% of the Core Network and 91.77% of the Comprehensive Network.

Electrification (2025)

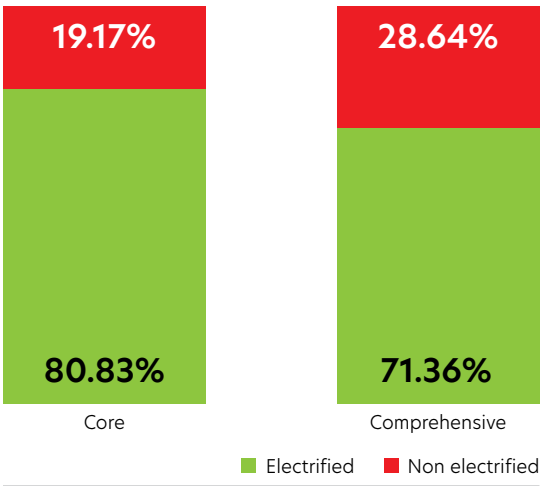

Figure 34. Ukraine: Electrification

Passenger line speed (2025)

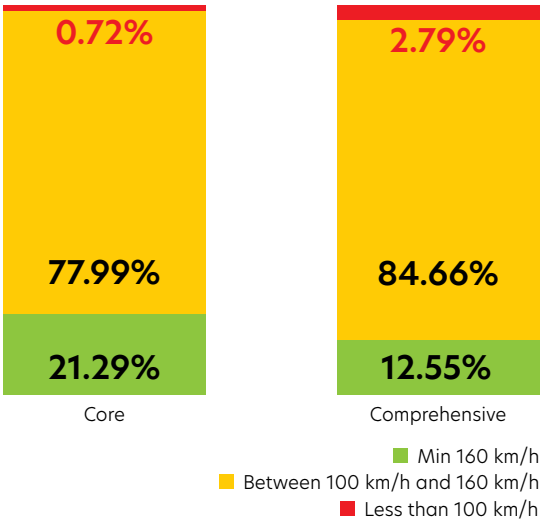

Figure 35. Ukraine: Passenger lines speed

Train lenght (2025)

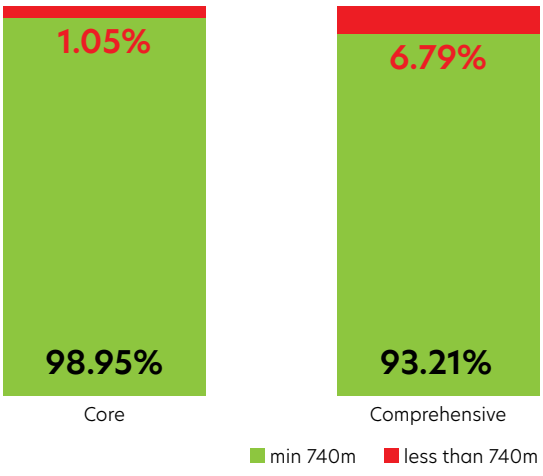

Figure 36. Ukraine: Train length

Min train path availability requierments for 740m freight trains

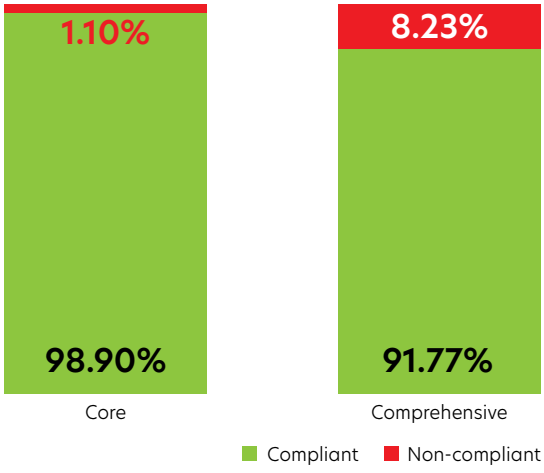

Figure 37. Ukraine: Minimum train path availability requirements for 740-m freight trains

Track gauge (2025)

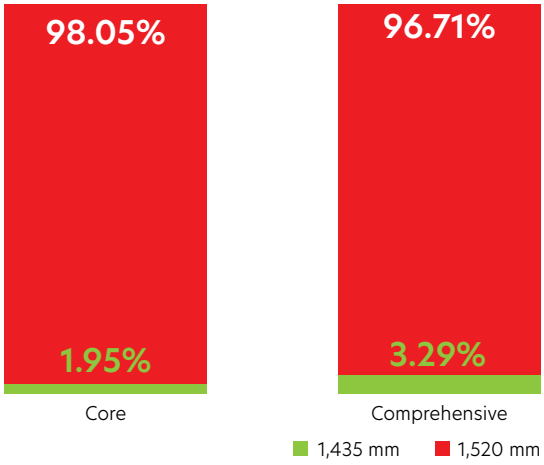

Figure 38. Ukraine: Track gauge

Standard track gauge

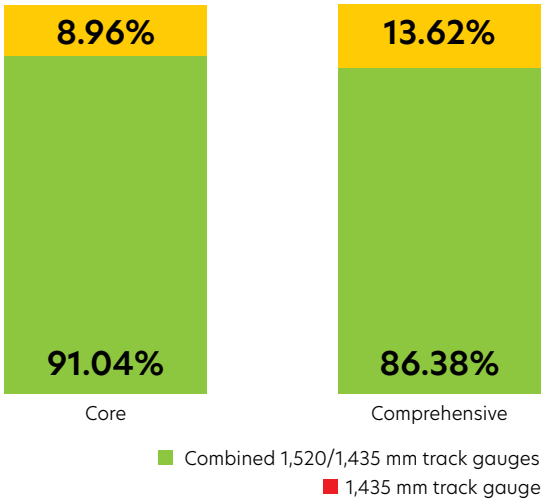

Figure 39. Ukraine: Standard track gauge

Track gauge:

The Core rail network in Ukraine predominantly operates on a broad-gauge system (1,520 mm), accounting for 98.05% of its total length and differing from the standard gauge of 1,435 mm required under the TEN-T Regulation. Within the comprehensive network, the proportion of standard gauge lines is slightly higher but remains limited to only 3.29%.

In Ukraine, standard gauge tracks are predominantly combined with broad-gauge infrastructure. On the Core Network, such mixed-gauge sections account for 91.04%, while on the Comprehensive Network they represent 86.38%. The remaining parts of the network equipped with standard gauge are operated exclusively on that gauge.

ERTMS:

Ukrainian railways have not yet implemented the European Rail Traffic Management System (ERTMS). Railway safety is instead ensured by the legacy "ALSN" signalling system, which is based on relay interlocking principles dating back to the Soviet era. While functional, this technology limits interoperability with EU networks and constrains modernisation efforts.

Loading gauge:

Although Ukrainian Railways allows the transport of semi-trailers up to 4 m (and in some cases 4.1 m) in height, the technical characteristics of existing wagon platforms - with the level of the rail heads ranging from 970 mm to 1,133 mm above the rail - are significantly higher than the required 27 cm. Therefore, the present infrastructure allows the circulation of freight trains carrying standard semi-trailers up to 4 m high according to this standard.

Number of tracks:

In accordance with the provided information, Ukrainian Railways has 61.22% of lines with double tracks on the Core Network and 54.12% on the Comprehensive Network.

Maximum gradient:

In accordance with the infrastructure parameters for main international railway lines, the maximum gradient for passenger and freight traffic must be ≤12.5 ‰. Also, according to the Infrastructure TSI, the maximum gradient permitted for main tracks at the design phase is 12.5 ‰, with several specific exemptions allowing steeper gradients in certain sections.

In accordance with the information provided by Ukrainian Railway, 74.59% of the Core Network has a maximum gradient of less than 12.5‰, while for the Comprehensive Network, the corresponding figure is 73.34%.

Infrastructure conditions

In Ukraine, the assessment of the railway network's condition was based on the ratio between the designed and actual operational speed. The findings indicate that only 12.44% of the Core Network and 6.89% of the Comprehensive Network are in average condition, enabling trains to operate at approximately 36,85% of the designed speed. The remaining 87.56% of the Core Network and 93.11% of the Comprehensive Network are in poor or very poor condition, which severely limits performance and reliability.

Number of tracks

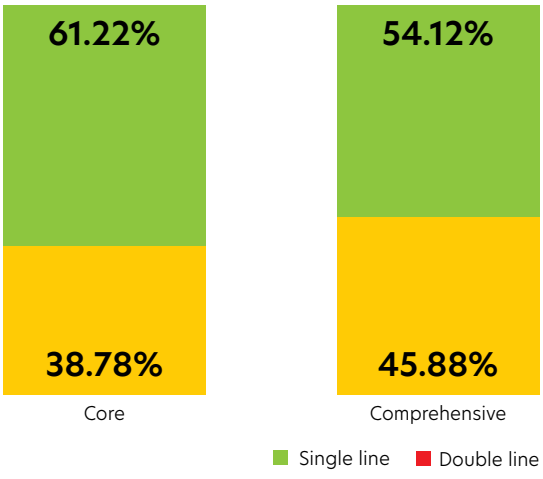

Figure 40. Ukraine: Number of tracks

Maximum gradient

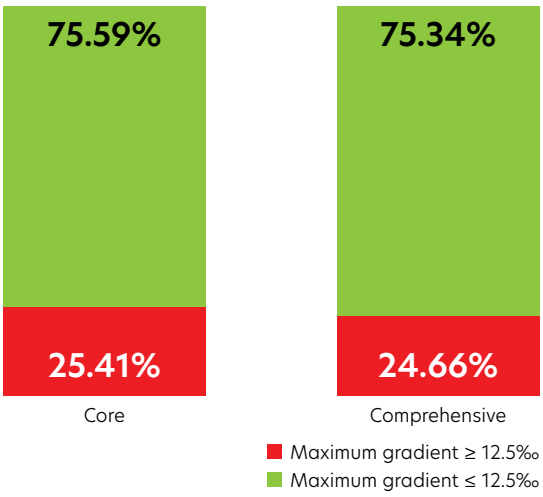

Figure 41. Ukraine: Maximum gradient

Railway infrastructure conditions

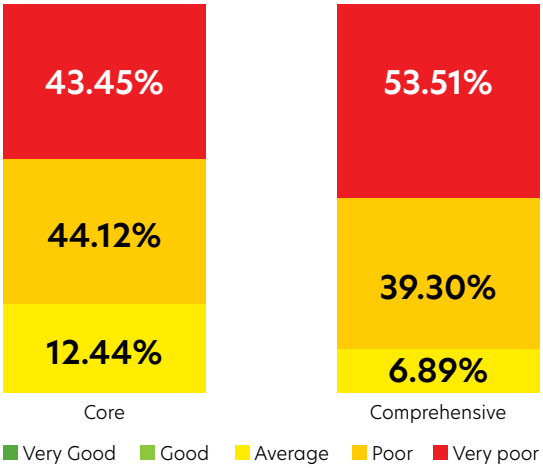

Figure 42. Ukraine: Condition of the Rail Network

V.3.1.2 Progress from Last Year's Reporting

In accordance with the data provided last year, JSC Ukrainian Railways supplied the previously missing information for the sections Berdychiv – Ovruch and Ovruch – "Berezhest" (State border with Belarus). This update has affected the comparison with last year's data regarding train length.

Train length 2023-2025 comparison

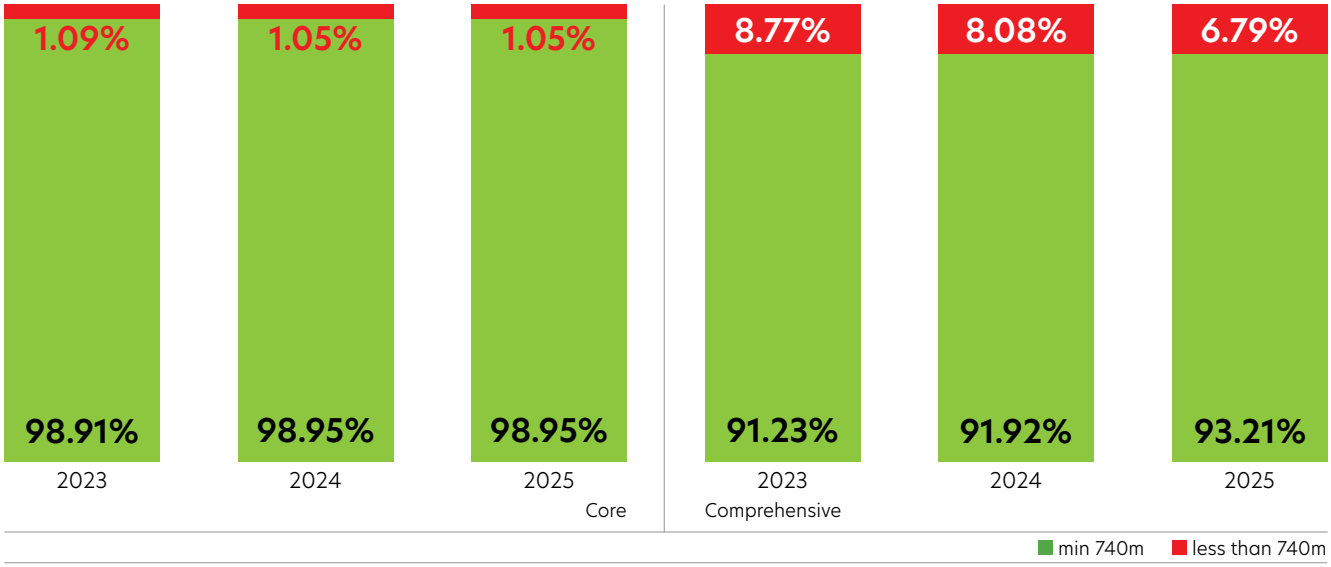

Figure 43. Ukraine: train length comparison (2023 - 2025)

Compared with 2024, by September 2025 works on 22 km of 1,435 mm standard-gauge track between Uzhhorod (on the border with Slovakia) and Chop (near Ukraine's border with Hungary) had been completed. These works affected the percentage of normal-gauge track within the Comprehensive Network.

The Uzhhorod - Chop project was implemented under the EU - Ukraine Solidarity Lanes initiative, aimed at establishing new and improving existing routes in response to the Russian invasion of Ukraine. The project was co-financed in equal parts by a loan from the European Investment Bank (EIB), guaranteed under the Ukraine Facility, and by an EU grant from the Connecting Europe Facility (CEF).

Ukraine continues to adapt the track gauge in border areas to reduce unnecessary costs resulting from the difference between the EU's standard gauge and its own 1,520 mm network.

Train gauge 2023-2025 comparison

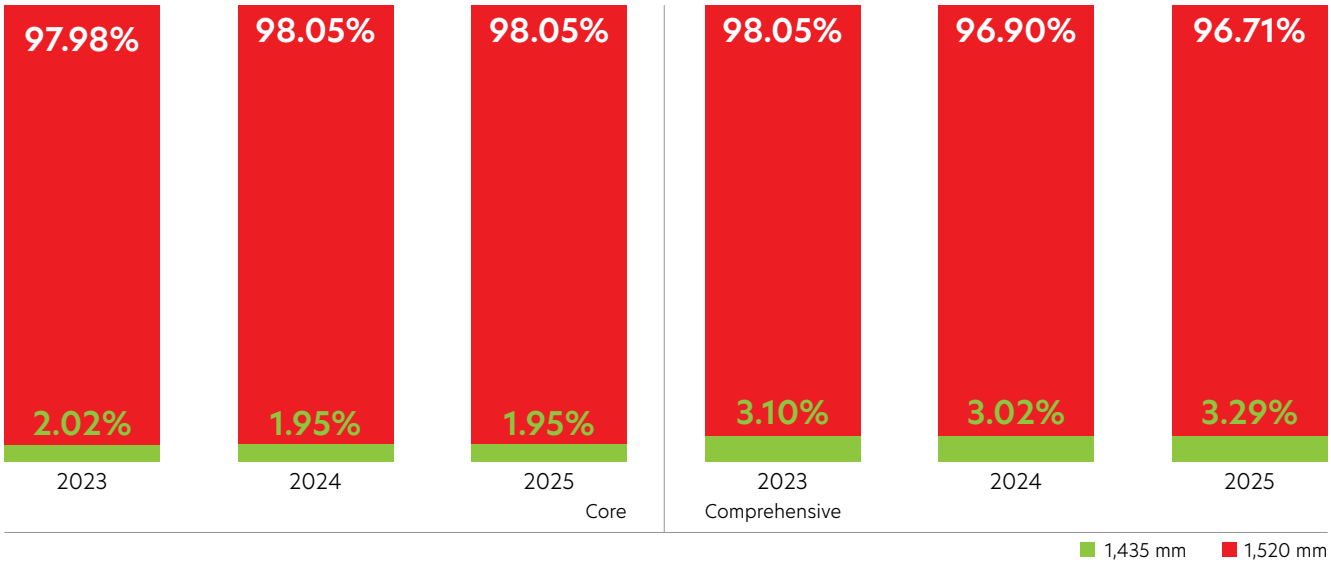

Figure 44. Ukraine: Track gauge comparison (2023 - 2025)

Compared to 2024, the overall condition of the railway network has slightly improved. A minor improvement was recorded on the Core Network, where 12.44% of lines are now classified as being in average condition, and on the Comprehensive Network, where the share is 6.89%. On the Comprehensive Network, the share of lines in poor or very poor conditions has slightly decreased to 92.82%.

The deviations compared with the previous year are not significant, especially considering the harsh conditions Ukraine is currently facing.

Condition of the Rail Network 2023 - 2025 comparison

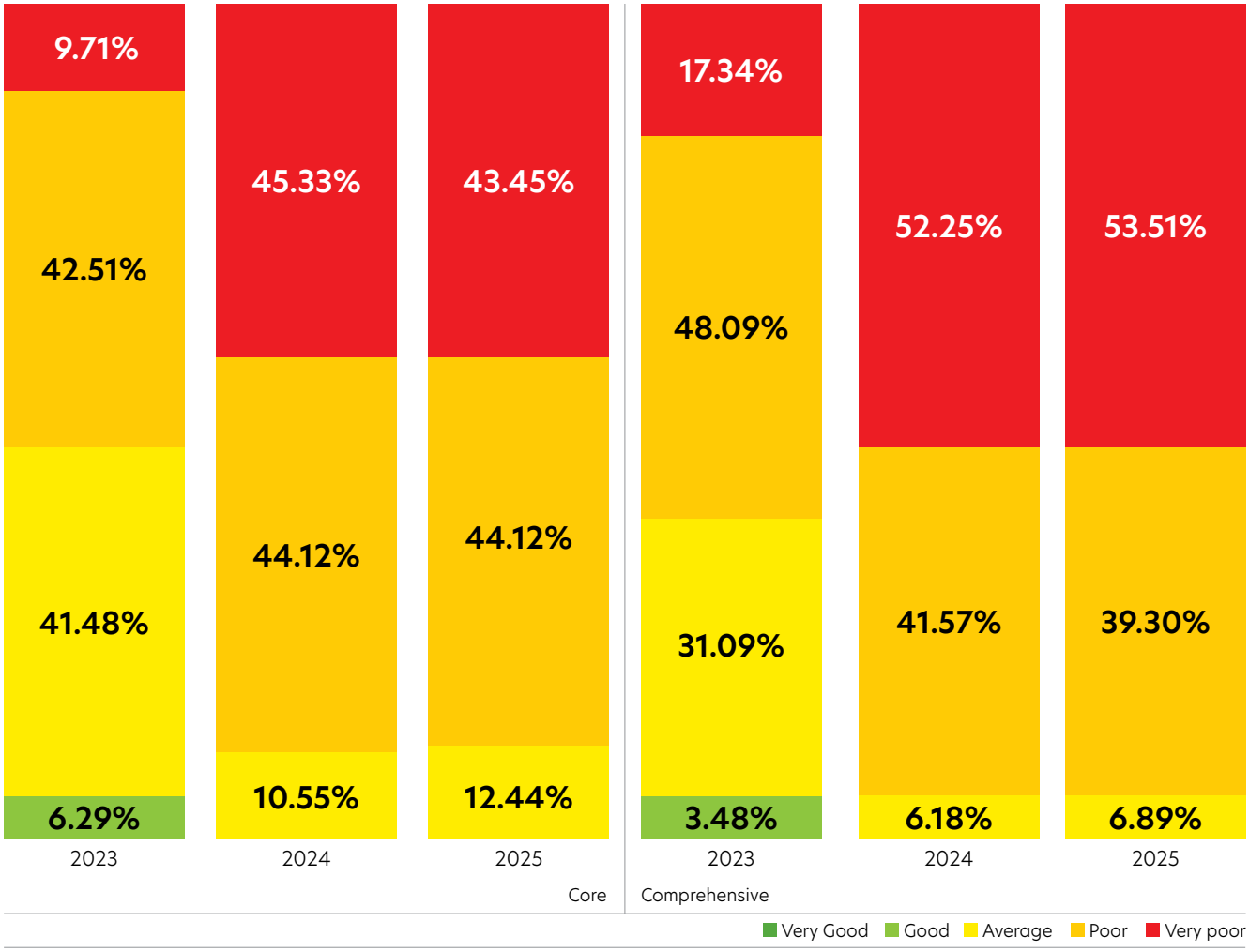

Figure 45. Ukraine: Condition of the Rail Network comparison (2023 - 2025)

V.3.2 **Roads**

The Ukrainian Road network is a crucial component of the country's transportation infrastructure, ensuring vital connections between its regions and beyond, and supporting the movement of people and goods. While the condition of the Ukrainian road network has been a subject of ongoing improvement efforts, the Russian invasion has had a profound and devastating impact on the country's infrastructure. The regions affected by the conflict have witnessed severe damage to infrastructure, including key roads and transportation arteries. Disruptions caused by military operations, displacement of populations, and the destruction of critical infrastructure have led to significant challenges in maintaining and repairing the road network, disrupting the normal flow of transportation and trade and severely impacting the overall connectivity of the road network.

The indicative extension of the TEN-T Core and Comprehensive network in Ukraine stretches over no less than 7,372.22 km, which is more than the entire Western Balkans plus the other observing participants combined. Of this, 4,753.03 km are part of the Core Network, with the remaining 2,619.19 km part of the Comprehensive network only.

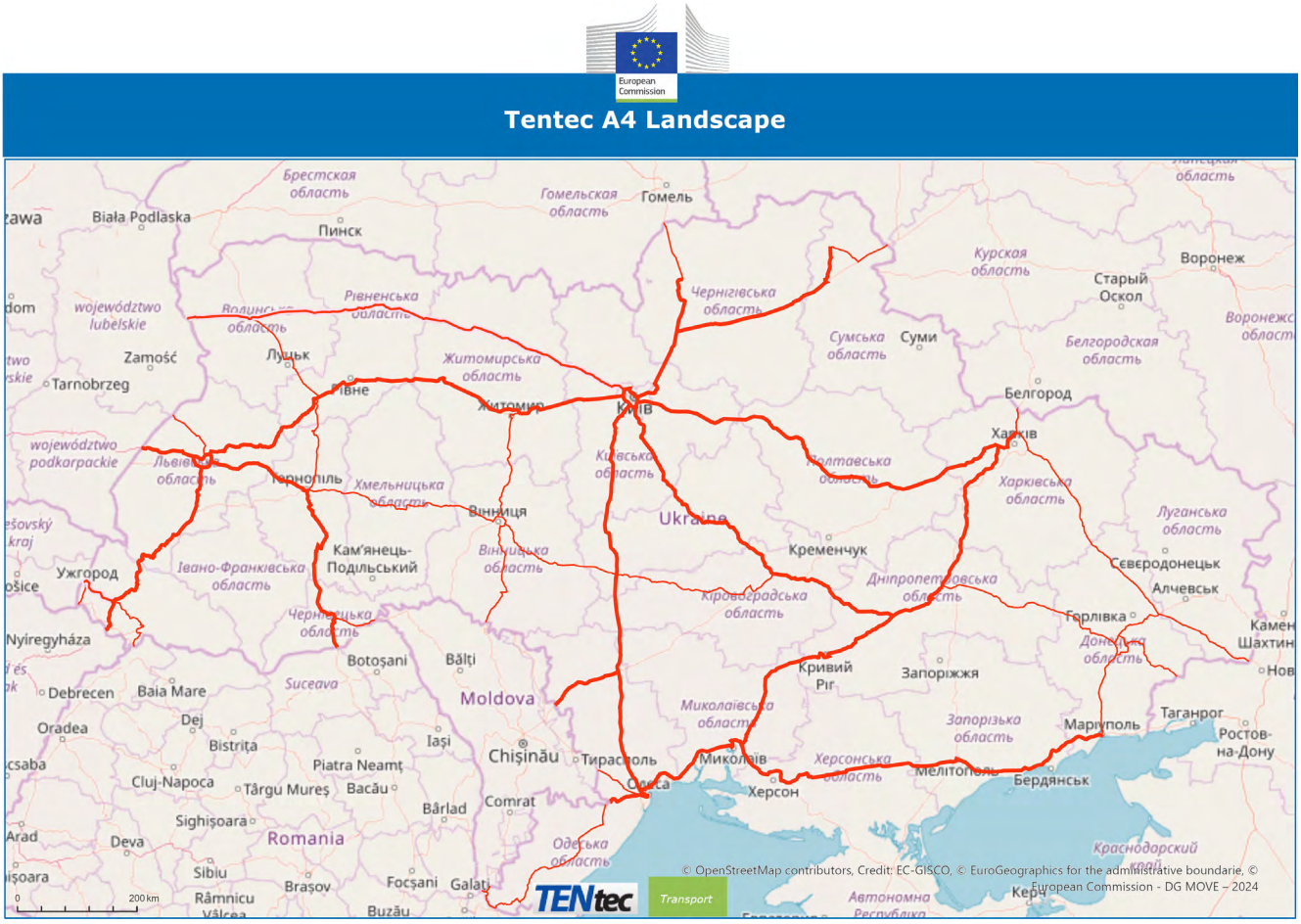

Figure 46. Indicative extension of the TEN-T road network to Ukraine

Compared to the previous TEN-T layout, the revised map in Regulation (EU) 2024/1679 introduces significant changes, including downgrading core network connections with Belarus and Russia, adding new sections, and upgrading one connection with Poland to the extended core network.

Due to challenges in collecting updated information, the current report refers to the previous TEN-T network alignment, supported by data from previous years.

The road TEN-T network in Ukraine consists of both conventional and express roads (mostly on the Core network). However, the design and construction standards of the latter will have to be reviewed against relevant TEN-T requirements. Of a total of 4,753.03 km of Core network roads, just under half are reportedly built to express road standards.

The quality of the road infrastructure is suboptimal, with less than a quarter of the Core network currently in 2024 in good condition.

Road profile	Kilometres (km)	%
Motorway	0	0%
Express road	2,380.78	50.09%
Conventional road	2,372.24	49.91%

Table 24. Ukraine: core road network profile

Core road network profile

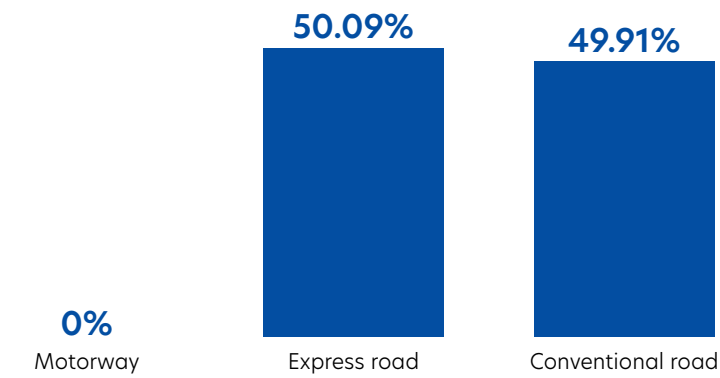

Figure 47. Ukraine: core road network infrastructure profile

Road condition	Kilometres (Km)	%
Very Good	0	0.00%
Good	1,133.43	23.85%
Medium	1,924.13	40.48%
Poor	1,695.47	35.67%
Very Poor	0	0.00%

Table 25. Ukraine: TEN-T core road network (infrastructure condition)

Road profile	Road condition	Km	%
Motorway	Very Good	0	0.00%
	Good	0	0.00%
	Medium/Poor/Very Poor	0	0.00%
Expressway	Very Good	0	0.00%
	Good	645.61	13.58%
	Medium/Poor/Very Poor	1,735.17	36.51%
Conventional road	Very Good	0	0.00%
	Good	487.81	10.26%
	Medium/Poor/Very Poor	1,884.43	39.65%

Table 26. Ukraine: TEN-T core road network compliance (infrastructure profile and condition)

Core road network condition

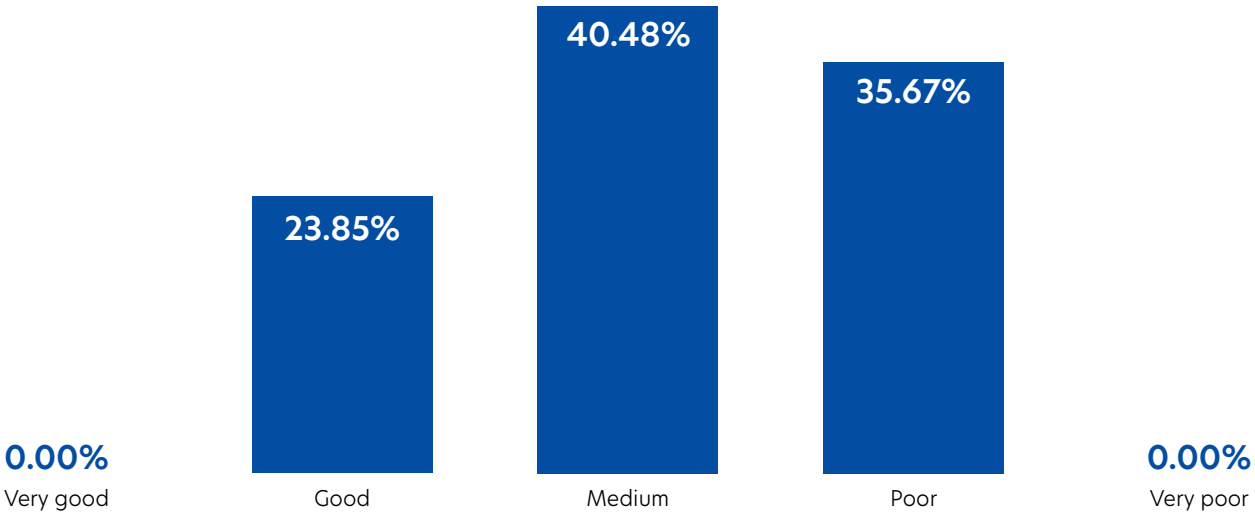

Figure 48. Ukraine: core road network condition

Outside the Core corridors, Ukraine's Comprehensive network comprises 2,619.19 km of roads, of which 332.91 km are at express road standard.

The quality of the roads on the Comprehensive network is worse than that on the Core network, with only 5% of the Comprehensive network in 2024 in good condition.

Road condition	Kilometres (Km)	%
Very Good	0	0.00%
Good	142.915	5.46%
Medium	1499.907	57.27%
Poor	883.194	33.72%
Very Poor	93.175	3.56%

Table 27. Ukraine: TEN-T comprehensive road network (infrastructure condition)

Comprehensive network profile

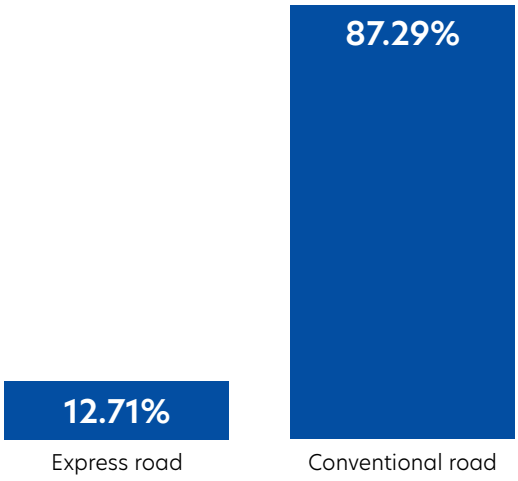

Figure 49. Ukraine: comprehensive road network infrastructure profile

Comprehensive road network condition

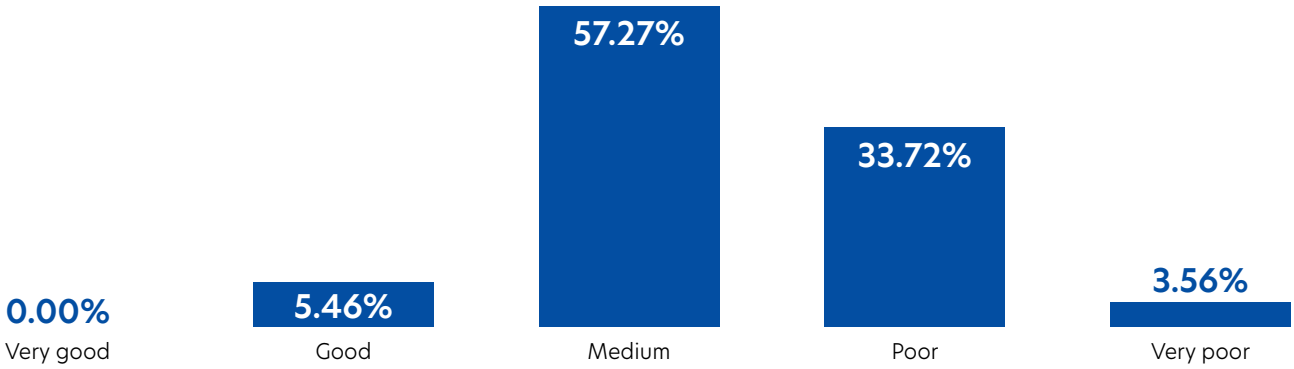

Figure 50. Ukraine: comprehensive road network condition

Altogether, 10.7% of the TEN-T road network in Ukraine in 2024 meets the relevant standards. The chart below illustrates the overall compliance of Ukraine's TEN-T road network with the infrastructure profile and condition criteria.

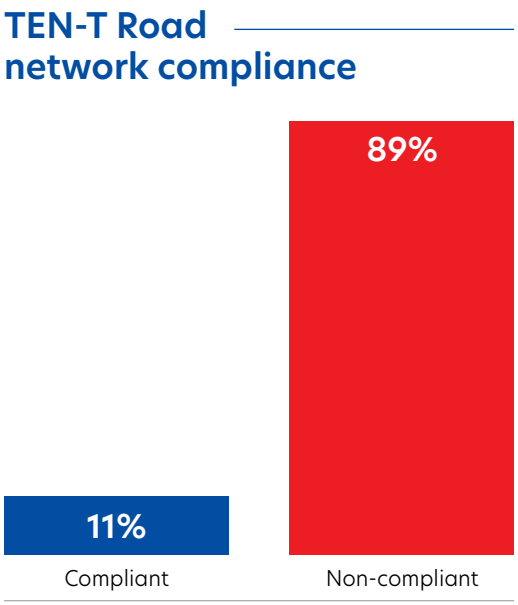

Figure 51. Ukraine: TEN-T road network compliance rates

Lack of data provided by the Ukranian authorities for 2025 on all TEN-T compliance indicators caused no presentation of the progress in road network compliance rates in 2025 compared to 2024 for Ukraine.

V.3.3 **Waterborne Transport**

According to the Indicative Extension of the TEN-T Network, Ukraine has five (5) ports on the TEN-T Core Network and three (3) on the TEN-T Comprehensive Network.

The five TEN-T Core Ports include:

1) **Mykolaiv Sea Port**, which is currently partially functioning as a dry port is one of Ukraine's most strategically important maritime hubs, located at the confluence of the Southern Bug River and the Dnipro estuary. The port is specialized mostly in handling grain, metal products, timber, and containers.

2) **Odesa Sea Port** is Ukraine's largest seaport and one of the most significant ports in the Black Sea basin. It serves as a key hub for international trade, connecting Europe, Asia, and the Middle East. Odesa Port has 46 berths along a 10+ km berthing line, 21.5 km of railway track and 8.2 km of road links. It has an established passenger terminal. In freight terms, its annual cargo capacity is over 50 million t. Major cargo types include general bulk, dry bulk, containers, oil and oil products and vegetable oils.

3) **Pivdennyi Sea Port** is one of Ukraine's deepest and busiest maritime hubs, located near the city of Pivdenne on the Ajalyk Estuary of the Black Sea, approximately 30 km east of Odesa. The Port features 34 berths with depths reaching up to 19 meters, allowing it to accommodate large-capacity vessels. It is equipped with a 2.4 km long approach channel and extensive rail and road connections, making it a key node in Ukraine's export infrastructure. It handles a wide range of dry bulk, liquid bulk, containerised cargo, etc. Its annual cargo volume as of 2020 reached 61 million t of cargo.

4) The **Sea Port of Chernomorsk** is located near Odesa on Ukraine's Black Sea coast. It is a vital maritime gateway with strategic importance for domestic and international trade. With 28 berths and deep-water access, it accommodates large vessels and handles diverse cargo types, including containers, grain and Ro-Ro shipments. As Ukraine's only state-operated container terminal, it is undergoing significant upgrades. Its multimodal infrastructure-featuring ferry and rail links, positions Chernomorsk as a key player in the Greater Odesa port cluster and a cornerstone of Ukraine's economic and transport resilience.

5) **Mariupol Sea Port**, which is currently temporarily occupied/closed due to the Russian war of aggression. The Port of Mariupol is Ukraine's deepest port in the region, capable of handling large vessels and exporting significant volumes of bulk cargo such as steel products, coal, and grain. Despite being occupied, Ukraine has proposed a long-term reconstruction strategy for Mariupol.

Ukraine has three (3) designated ports on the TEN-T Comprehensive Network. Among them are:

1) **Port of Kherson**, which is currently closed and there is no access to it, being on the combat line. It is located at the mouth of the Dnipro River, connecting river and sea transport in Southern Ukraine. Before the full-scale invasion in 2022, it operated under a public-private partnership. The port featured 5 berths, 6 warehouses, 11 open storage areas, and a fleet of cranes and handling equipment, supporting bulk cargo like grain, sand, scrap, and fertilizers.

2) **Izmail Sea Commercial Port** is located on the Danube River in Ukraine's Odesa region. It is considered a vital hub for the country's trade, especially for grain exports. It features over 30 berths and extensive infrastructure for handling dry and liquid bulk, general cargo, and containers. It has around 50 000 m2 open and covered storage areas, grain terminals and fuel storage tanks. The Ports operational equipment includes gantry cranes, floating cranes, forklifts, tractors and bulldozers, etc.

3) **Reni Sea Port** is located on the left bank of the Danube River in Ukraine's Odesa Oblast. It is considered to be a key multimodal transport hub, integrating river, sea, road, and rail logistics. The Port spans over 94 hectares, featuring 37 berths with a total length of nearly 4 km. The Reni Sea Port handles a wide range of cargo including grain, petroleum products, fertilizers, and general cargo, supported by specialized terminals and equipment like gantry cranes, floating cranes, and extensive storage facilities.

The map below illustrates Ukraine's inland waterways and maritime ports that are part of the extended TEN-T Network.

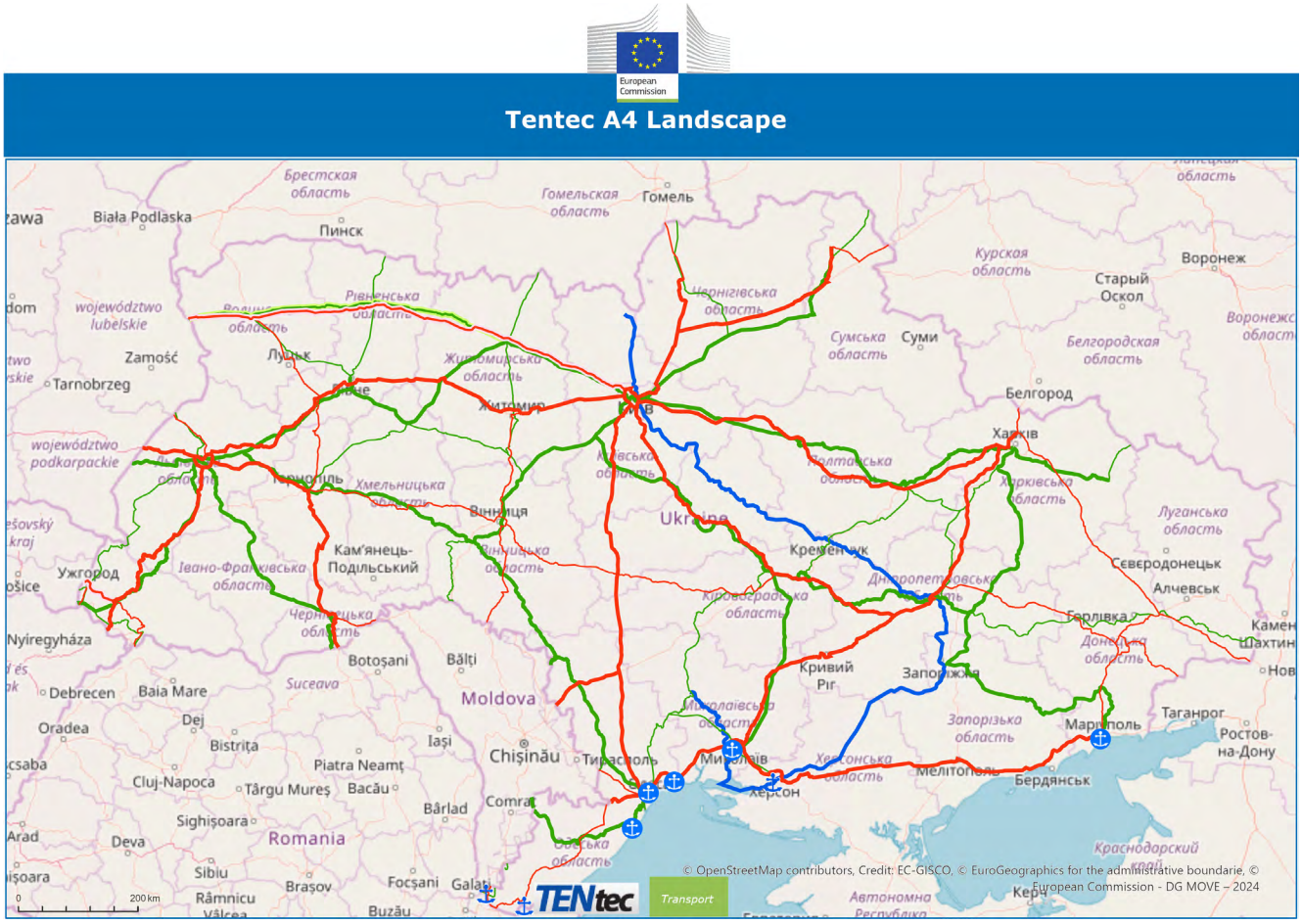

Figure 52 - Indicative extension of TEN-T ports and inland connections in Ukraine

The table below presents the extent to which Ukraine's ports meet the relevant TEN-T compliance criteria:

Port name	TEN-T Network	Rail connection	Road connection	IWW Connection	Port Reception Facilities	Alternative fuel availability[3]	Multimodal Terminal availability	Telematic applications		
								VTMIS/VTS/[4]	RIS	MNSW and SafeSeaNet
Mykolaiv Sea Port (partially functioning)	Core	YES	YES	NO[5]	YES	NO	YES	YES	NO	Under develop.
Odesa Sea Port	Core	YES	YES	YES	YES	NO	YES	YES	NO	Under develop.
Pivdennyi Sea Port	Core	YES	YES	YES	YES	NO	YES	YES	NO	Under develop.
Chornomorsk Sea Port	Core	YES	YES	YES	YES	NO	YES	YES	NO	Under develop.
Mariupol Sea Port[6] (occupied)	Core	NO	NO	NO	NO	NO	NO	NO	NO	NO
Izmail Sea Port	Compr.	YES	YES	YES	YES	NO	YES	YES	Under develop.	Under develop.
Reni Sea Port	Compr.	YES	YES	YES	YES	NO	YES	YES	Under develop.	Under develop.
Kherson Sea Port (Closed)[7]	Compr.	NO	NO	NO	NO	NO	NO	NO	NO	NO

Table 28. Compliance assessment of the ports of Ukraine

[3] In all the ports of Ukraine, alternative fuel infrastructure has not yet been fully developed and put into operation. However, Onshore Power Supply (OPS) systems are available, allowing vessels to connect to local electricity while docked.
[4] Ukrainian ports are currently using Vessel Traffic Services (VTS) for ensuring safe navigation, efficient traffic flows and environmental protection in certain areas.
[5] The port lacks a connection to inland waterways because the navigable channels and approaches are bypassed.
[6] Due to the lack of access to the port, it is impossible to provide accurate information.
[7] Access to the port is currently impossible due to its location on the combat line.

Connection Road and Railway: All the major ports in Ukraine are connected to national rail and road networks, ensuring seamless integration with the broader transport infrastructure. However, for the ports of Mariupol and Kherson, such connectivity information is unclear/unavailable due to their temporary occupation and closure due to war.

IWW Connections: Most of the aforementioned ports benefit from established inland waterway connections. However, the Mykolaiv Sea Port currently lacks such connectivity, as its navigable channels and approaches are bypassed. For the ports of Mariupol and Kherson, information on inland waterway access remains unclear and unavailable due to their temporary occupation and closure due to the Russian war of aggression.

Port Reception Facilities (PRF): Several Ukrainian ports, particularly those currently operational, as the Black Sea ports of Odesa, Pivdennyi, Chernomorsk, Mykolaiv (dry port) and the Danube ports of Izmail and Reni are equipped with Port Reception Facilities (PRF) to handle ship-generated waste in compliance with the MARPOL Convention. However, the status of the PRF in the ports of Mariupol and Kherson remains unclear due to their temporary occupation and closure.

Alternative fuel infrastructure availability: Ukrainian ports such as Odesa, Chernomorsk, Pivdennyi on the Black Sea and Izmail and Reni on the Danube River currently have Onshore Power Supply infrastructure, which enables docked vessels to connect to the local electricity grid reducing emissions and noise, while improving environmental performance at ports. While full-scale deployment of alternative fuel infrastructure is still not yet developed, interventions supported by the EU and international partners aim to accelerate this transition. The ongoing conflict has hindered expansion efforts. Nevertheless, alternative fuel infrastructure is recognised as essential for reducing the environmental footprint of port activities, and strategic plans are in place to integrate these technologies into Ukraine's maritime logistics system. Information about availability of alternative fuel infrastructure in the Sea Ports of Mariupol and Kherson remains unclear due to their temporary occupation and closure.

Multimodal Terminals availability: Several Sea Ports of Ukraine such as Odesa, Chernomorsk, Pivdennyi, as well as the Danube ports like Izmail and Reni have access to or are integrated with multimodal terminals that provide connections between sea, rail, road, and river transport. These ports are supported by inland multimodal terminals such as Batiovo, Chornotysiv, and Mostyska-II, which continue to handle cargo via rail and road links to the EU. Due to their current status of occupation or closure due to the Russian war of aggression, no information is available regarding the connectivity of the Ports of Mariupol and Kherson to multimodal terminals.

Telematic systems such as Vessel Traffic Management and Information Systems (VTMIS), River Information Services (RIS) and a range of other e-Maritime services including single-window platforms like the National Maritime Single Window, SafeSeaNet and Port Community Systems represent a key priority for Ukraine, and their development status is as follows:

- *VTMIS/VTS/* – currently Ukrainian ports operate using Vessel Traffic Services (VTS), which are shore-based systems focused on ensuring navigational safety and efficient vessel movement within designated port areas. While VTS provides essential services such as traffic monitoring, navigational assistance, and communication, Ukraine has not fully implemented Vessel Traffic Management and Information System (VTMIS). The full deployment of VTMIS remains a strategic goal for enhancing maritime safety, security, and operational efficiency in Ukrainian ports and coastal waters. No information is currently available regarding the functionality of VTS in the Ports of Mariupol and Kherson, as both ports are closed or under occupation due to the Russian war of aggression.
- *RIS* – Ukraine is progressing steadily in RIS deployment. It is currently implementing the UkrRIS – Danube Action, funded by the Connecting Europe Facility, sector "Transport" 2021-2027. The project focuses on the deployment of RIS infrastructure along the 169 km Ukrainian stretch of the Danube River, integrating both river and maritime segments. A central RIS hub has been established in Kyiv, supported by automated stations along the Danube and regional centers on the Dnipro River. Ukraine has aligned its efforts with EU standards, including the upcoming ES-RIS, and is actively participating in international RIS coordination through CESTNI/TI and cooperation with the CEF Transport RIS Comex 2 project. The RIS functionality along the Dnipro river has been severely disrupted due to the ongoing conflict.

- *NMSW and SafeSeaNet* – Ukraine is currently developing its National Maritime Single Window (NMSW), while already launching DocPort system (a national analogue of the MSW) in a test mode in Pivdennyi Port. This system streamlines vessel-related administrative procedures by enabling one-time digital data submission, improving efficiency and transparency in port operations. The initiative meets IMO requirements and is being integrated with customs and border guard systems. Although Ukraine is not yet connected to the EU's SafeSeaNet system, the DocPort platform is being harmonized with EU standards, paving the way for future interoperability and supporting Ukraine's broader goal of integration into the European transport and maritime safety frameworks.
- Port Community System – Ukraine has not yet implemented a functional Port Community System.

Ukraine's inland waterway infrastructure within the TEN-T network includes two key sections:

1) The Dnipro River section spans 943 km from the estuary to the Pripyat arm and is reported to be equipped with RIS, supporting vessel tracking, traffic and transport management. It is reported that this section features bridge clearance from a minimum of 9.25 m to up to 14.65 m under raised water conditions, allowing navigation of larger vessels. However, this section is currently severely affected by the Russian war of aggression, with parts of the river occupied and others rendered non-operational due to security risks and damaged infrastructure.

2) The Danube River section covering 169 km from the port of Reni to the Bystroye mouth, lacks RIS and has bridge clearance below 5.25 m, which may limit access for certain vessel types.

Despite the ongoing war, Ukraine has made visible progress in achieving compliance of its functioning Core and Comprehensive Ports and inland waterways with the TEN-T indicators. Further steps are needed in terms of full deployment of alternative fuel infrastructure and speeding up the design and operation of telematic applications in waterborne transport – VTMIS, NMSW, SafeSeaNet and PCS.

In terms of inland waterways compliance, the Dnipro River section part of the TEN-T meets the stipulated compliance indicators but is currently not fully operational due to the Russian war of aggression.

The Ukrainian Danube Section still needs to achieve compliance regarding vertical bridge clearance and deployment of RIS. Certain steps are undertaken by the Ukrainian side to tackle pending inconsistencies.

V.3.4 **Airports**

Ukraine has eight TEN-T airports, four of which are located on the core network.

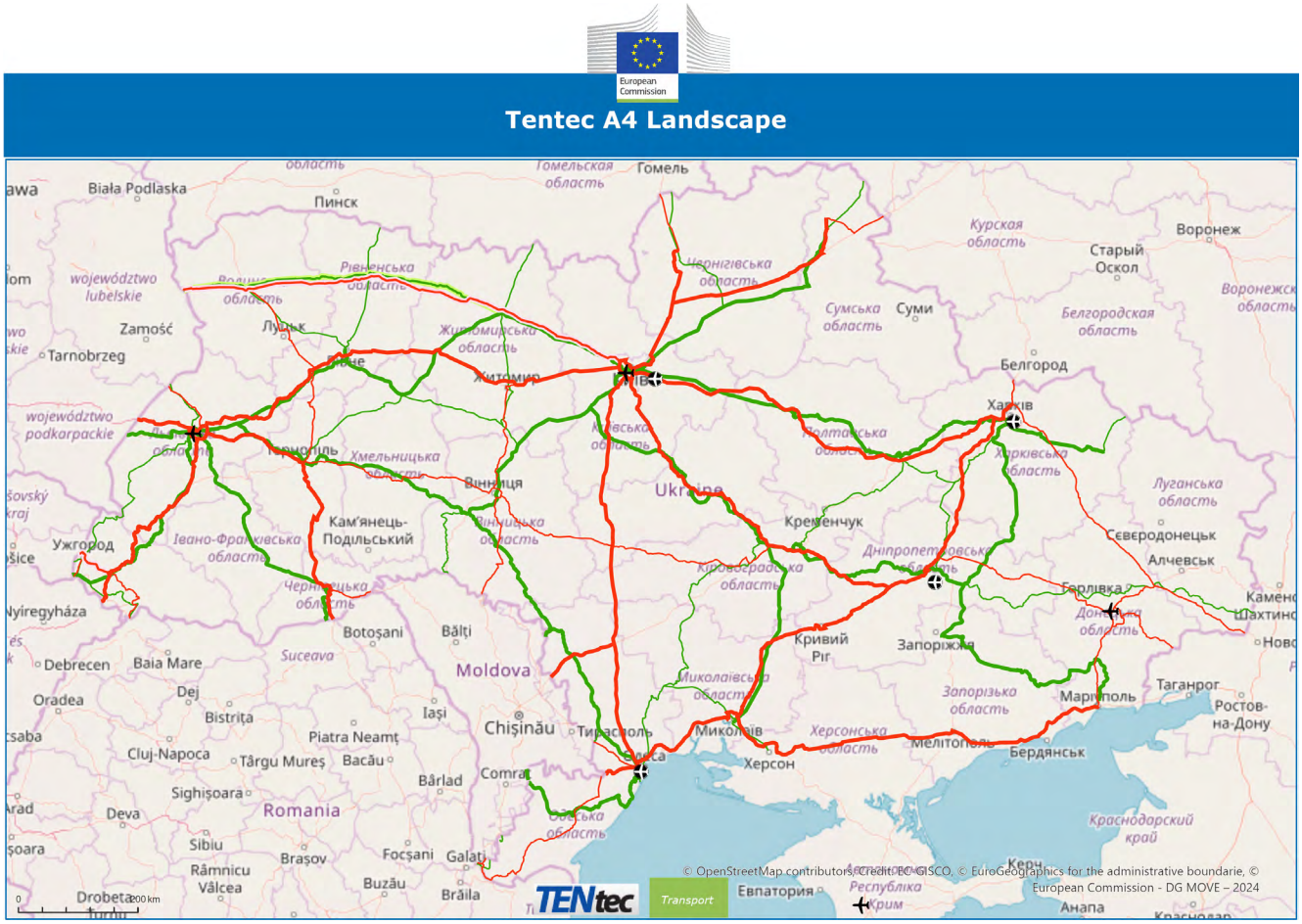

Figure 53. Indicative extension of TEN-T Comprehensive and Core Airports to Ukraine

Below is an overview of the basic compliance data for Ukrainian TEN-T airports, assessed against the criteria outlined in Section IV.

d) Connection to other modes

A critical condition for ensuring interoperability of TEN-T Network airports is their connection to the railway network. Currently, only KYIV/Boryspil airport has a direct rail connection, while the other airports are connected solely by road.

Country code	Airport name	TEN-T (Core/Comprehensive) Network	Connection to other modes	
			Road connection	Rail connection
UKR	KYIV/Boryspil	Core	Yes	Yes
UKR	Lviv	Comprehensive	Yes	No
UKR	Kharkiv/Osnova	Core	Yes	No
UKR	Kyiv/Zhuliany	Comprehensive	Yes	No
UKR	Odesa	Core	Yes	No
UKR	Dnipropetrovsk	Core	Yes	No

Table 29. Ukraine: list of airports with road and rail connections

e) Availability of alternative fuels

Currently, no fixed storage tank facilities for aviation biofuel are reported at any of the airports. Regulation (EU) 2024/1679 broadens the scope of requirements for alternative clean fuel availability at TEN-T airports, introducing a more proactive and comprehensive approach. Unlike Regulation (EU) No 1315/2013, which applied this criterion only to core network airports and linked implementation to market demand, the new regulation extends the obligation to all airports within the comprehensive network. It removes the market dependency and instead mandates that every airport must actively ensure the availability and accommodation of alternative clean fuels, reinforcing the EU's commitment to sustainable aviation and decarbonisation objectives.

Country code	Airport name	TEN-T (Core/Comprehensive) Network	Clean fuels availability	
			Tank facilities for aviation biofuel	availability of alternative fuels for airport ground services
UKR	KYIV/Boryspil	Core	No	No
UKR	Lviv	Comprehensive	No	No
UKR	Kharkiv/Osnova	Core	No	No
UKR	Kyiv/Zhuliany	Comprehensive	No	No
UKR	Odesa	Core	No	No
UKR	DNIPRO	Core	No	No

Table 30. Ukraine: list of availability of alternative fuels in airports

f) Terminal availability

All airports are open to international traffic, with foreign air carriers operating in and out, with sufficient terminal capacity to serve the current traffic needs.

Country code	Airport name	TEN-T (Core/ Comprehensive) Network	Terminal availability	
			Terminal availability (open to all market players on non-discriminatory basis)	Terminal availability (sufficient capacity to operate)
UKR	KYIV/Boryspil	Core	Yes	Yes
UKR	Lviv	Comprehensive	Yes	Yes
UKR	Kharkiv/Osnova	Core	Yes	Yes
UKR	Kyiv/Zhuliany	Comprehensive	Yes	Yes
UKR	Odesa	Core	Yes	Yes
UKR	DNIPRO	Core	Yes	Yes

Table 31. Ukraine: list of terminal availability

VI TEN-T Projects

VI.1 Methodological Aspects

Collecting project-related data in this exercise served two main purposes. Firstly, it aimed to present an overview of the ongoing initiatives undertaken by participating countries to upgrade the indicative extensions of the TEN-T core and comprehensive corridors within their territories. Secondly, it sought to provide the foundational data required to assess the anticipated progress of TEN-T compliance indicators by 2030, marking the first major milestone for the network's completion. For this purpose, TEN-T projects were defined as any greenfield or brownfield investment, as well as soft/policy measures that collectively meet the following criteria:

- They concern specific section(s) of the TEN-T Network; and
- They address at least one relevant TEN-T compliance indicator.

To ensure the accuracy of compliance forecasts, only projects with secured financing were included.

The data collection process was structured accordingly, requesting the following information for each project:

- **General project details** (infrastructure type, cost, and - if applicable - length).
- **Implementation status,** with only fully financed projects considered for compliance projections.
- **Targeted TEN-T section,** enabling updates to the network's compliance status upon completion.
- **Relevant compliance indicators** before and after implementation, allowing updates to post-project compliance; and
- **Estimated completion date**, used to project TEN-T compliance status in future reporting periods.

VI.2 Georgia

VI.2.1 Rail Projects

Main construction works have been successfully completed under the implementation of one TEN-T railway project, with a total value of EUR 454,710,478 aimed at upgrading 40km sections of the Core Network. Completion of safety system installation in one of the tunnels along the Zestafoni-Kharagauli section is expected by November 2025.

Two key TEN-T requirements - electrification and an axle load capacity of 23.5t have been met within this project. However, the design speed remains limited to 80 km/h for passenger and freight transport, and the maximum train length to 660m. In addition, the project does not envisage ERTMS deployment, and the track gauge will remain at 1,520 mm. An overview of the TEN-T rail project currently being implemented in Georgia is presented in the table below.

Name of the project	Core/ Comprehensive Network	Foreseen intervention	Total length (km)	Total Cost (M€)	Estimated completion deadline
Georgian Railway Modernisation Project (Modernisation Zestafoni-Kharagauli section and construction Khashuri-Moliti section)	Core	Modernisation/ Construction	40	454.7	November 2025

Table 32. List of TEN-T rail projects in Georgia

VI.2.2 **Road Projects**

Georgia is currently implementing nine road projects, of which eight are on the Core Network and one on the Comprehensive Network. Compared to last year's report one project is excluded from the list since it was completed and put into operation in August 2025 (section: Surami-Chumateleti (Project Name: Zemo Osiauri-Chumateleti Lot 2).

The combined length of road sections currently undergoing various upgrades is 141.2 km (123.6 km on the Core and 17 km on the Comprehensive Network). The priority given to the Core Network is also reflected in the overall value of projects (EUR 1,053.9 million for the entire network, of which EUR 953.9 million is on the Core and EUR 100 million on the Comprehensive Network).

The list of individual TEN-T road interventions is provided in Table below:

Name of the project	Core/ Comprehensive Network	Foreseen intervention	Total length (km)	Total Cost (M€)	Estimated completion deadline
Algeti-Sadakhlo (Project Name: Lot 3 and Lot 4)	Core	Motorway/express road (new construction)	29.3	100	2028
Red Bridge-Rustavi (Project Name: Lot 1 and Lot 2)	Core	Motorway/express road (new construction)	31.9	185	2028
Chumateleti-Khevi (F1)	Core	Motorway/express road (new construction)	11.7	116	2025
Poti Bridge-Poti (Project name: Lot 1 - Poti Bridge and Access Roads)	Core	Motorway/express road (new construction)	2.5	17.5	2026
Grigoleti-Tskaltsminda (Project Name: Grigoleti-Kobuleti - Lot 1)	Core	Motorway/express road (new construction)	14	83	2025
Khelvachauri-Sarpi (Border of Turkey) -Project name: Batumi – Sarpi	Core	Motorway/express road (new construction)	11.3	330	2030
Zugdidi-Anaklia (Project Name: Access Road to the Anaklia Deep Sea Port)	Comprehensive	Motorway/express road (new construction)	17	100	2030
Samtredia-Japana (Project Name: Samtredia-Grigoleti - Lot 1)	Core	Motorway/express road (new construction)	11.5	18.4	2026
Lanchkhuti-Khazhalia (Project Name: Samtredia-Grigoleti - Lot 3)	Core	Motorway/express road (new construction)	12	114	2026

Table 33. List of TEN-T road projects in Georgia

VI.2.3 **Waterborne Transport Projects**

The Anaklia Deep Sea Port project is a major infrastructure initiative in Georgia aimed at establishing the country as a key logistics hub on the Black Sea and along the Middle Corridor trade route. The project has officially entered the construction phase, with initial state-funded activities already underway, while bathymetric studies are being conducted to support the detailed design and implementation of marine infrastructure. At the same time, negotiations are ongoing regarding the selection of a private partner for the project. Despite these negotiations, progress continues, with the Belgian firm – "Jan De Nul" responsible for dredging and breakwater construction. The port is planned to be developed and put into operation in phases. The initial phase, which includes major infrastructure works such as dredging, construction of breakwaters, and basic terminal facilities, is expected to be completed no later than 2029. Once operational, it will enable the port to handle over 600,000 containers annually. Subsequent phases will further expand capacity and services, including additional berths, logistics zones, and intermodal connections by road and rail.

APM Terminals Poti that is the concessionaire and managing company of the TEN-T Core Sea Port of Poti has recently expanded its container yard by acquiring and upgrading 5.4 ha of land, increasing the port's berth capacity by 50 000 TEUs and raising its annual container handling capacity to 600 000 TEUs. This expansion is part of a broader strategy to enhance operational capacity and accommodate growing regional demand. To further improve vessel operations the terminal has introduced a pre-stacking process, allowing containers to be brought in advance from off-dock terminals, which leads to enhancing control, safety, and turnaround times. In parallel, a new deep-water container terminal is

under development, expected to be completed by 2027, featuring a new berth for larger vessels, two Post-Panamax STS cranes, and an additional capacity of 400 000 TEUs.

Georgia continues to implement port interventions, which will improve the capacity, connectivity, accessibility and efficiency of its core and comprehensive ports. Since last year, this year's report also included investments made in the Core Port of Poti.

VI.2.4 **Airport Projects**

An infrastructure expansion project is currently underway at Kutaisi International Airport, which will enable the airport to further develop its Air Cargo operations. As part of this project, a new 3.5 km runway is being constructed, which will be the longest runway in Georgia upon completion. Scheduled to be finished in 2026, this runway will allow the airport to accommodate large aircraft without operational restrictions.

At this stage, the airport's infrastructure is undergoing expansion works, while the cargo terminal project remains under preparation.

Further investments are being allocated to upgrading the Instrument Landing System (CAT II), expanding the apron at Kutaisi International Airport to accommodate larger aircraft, and developing additional parking facilities for wide-body aircraft.

VI.3 Republic of Moldova

VI.3.1 **Rail Projects**

Two railway projects are currently underway in Moldova on the Core and Comprehensive Networks, with secured funding totalling €227 million.

The railway infrastructure of the Southern Corridor, Bender– Basarabeasca – Etulia – Giurgiulesti, is being rehabilitated over a total length of 233 km, of which 185.8 km form part of the Core and Comprehensive Networks. The project, with an investment of EUR 113 million, will allow freight trains to operate at a design speed of 100 km/h, with an axle load of 23.5 t and a train length of 740 m. Electrification and ERTMS implementation are not included, and the 1,520 mm track gauge will remain unchanged.

The Northern and Central Corridors, covering the sections Valcinet-Ocnita-Balti-Ungheni-Chisinau-Cainari, are also undergoing rehabilitation. This 128 km stretch, currently in poor or very poor condition, is being upgraded under a EUR 114 million project. The works aim to achieve the TEN-T freight requirements of 100 km/h design speed, 23.5 t axle load, and 740 m train length, without electrification or ERTMS, while retaining the 1,520 mm gauge.

Name of the project	Core/ Comprehensive Network	Foreseen intervention	Total length (km)	Total Cost (M€)	Estimated completion deadline
Rehabilitation of railway infrastructure of the Southern Corridor Bender-Basarabeasca-Etulia-Giurgiulesti	Core/Comprehensive	Rehabilitation	185,8[9]	113	2027
RLF - Moldovan Railways Crisis Response - Rehabilitation of railway infrastructure of the Northern and Central Corridor Valcinet – Ocnita – Balti – Ungheni - Chisinau-Cainari	Core/Comprehensive	Rehabilitation	128	114	2027

Table 34. List of TEN-T rail projects in Moldova

[9] The project for the rehabilitation of the railway line Bender-Cainari-Basarabeasca-Etulia-Giurgiulești has a total length of 233 km, with a total cost of €113 million allocated for the entire project.

VI.3.2 **Road Projects**

Moldova is currently implementing a total of five projects on the TEN-T road network, four of which are on the Comprehensive Network. Lack of data provided by the Moldovan authorities for 2025 on all TEN-T road projects caused no presentation of the progress in project implementation in 2025 compared to 2024 for Moldova.

The combined length of road sections currently undergoing various upgrades is 79.92 km (8.2 km on the Core and 71.72 km on the Comprehensive Network).

The list of individual TEN-T road interventions is provided in table form below:

Name of the project	Core/ Comprehensive Network	Foreseen intervention	Total length (km)	Total Cost (M€)	Estimated completion deadline
Vulcănești bypass	Comprehensive	New infrastructure	8.58	21.3	2025
Cimișlia bypass	Comprehensive	New infrastructure	7.39	38	2027
Chișinău bypass (lot II)	Core	Rehabilitation	8.2		2028
Rehabilitation of M5 trunk road (lot IV)	Comprehensive	Rehabilitation	33	100	2028
Rehabilitation of M1 trunk road (lot III)	Comprehensive	Rehabilitation	22.75		2028

Table 35. List of TEN-T road projects in Moldova

VI.3.3 **Waterborne Transport Projects**

The Republic of Moldova is currently implementing two strategic infrastructure projects aimed at enhancing its waterborne transport capacity and regional connectivity. The first project focuses on expanding the Giurgiulesti International Free Port. The initiative includes the construction of a 100 m shore consolidation wall (quay), a technological platform, administrative and operational facilities, and two silos with a combined capacity of 12 000 t. Additionally, the project will integrate railway infrastructure and anchoring platforms to support the reception, storage, and delivery of goods. Danube Logistics, the port operator, has secured a construction permit for a new universal berth that is expected to increase transshipment capacity by 600,000 t. The total investment is estimated at approximately EUR 7.99 million, pending final approval from the EBRD. Once approved, the construction phase is projected to last one year.

The second major undertaking is the development of the Passenger and Goods Giurgiulesti Port, led by the Government of the Republic of Moldova. The project aims to significantly boost the port's transshipment capacity by 800 000 t and provide a reliable export alternative for Moldovan producers affected by the disruption of Ukrainian ports. The key components of the project include construction of a grain silos with a total capacity of 80 000 t, high-speed grain loaders, capable of handling 1 500 t/h, and the development of railway lines, unloading stations and truck parking facilities. The estimated project cost is EUR 31.96 million. The feasibility study and procurement process are scheduled for completion within 2025, with construction planned 2026-2027. Full operational capacity is expected to be reached by 2028.

The Republic of Moldova has demonstrated ambitious plans in terms of increasing the capacity of its two port terminals, part of the Giurgiulesti Port Complex, namely the International Free Port and the State Port. Their implementation is at an early stage, and further efforts are needed on behalf of the Moldovan state in terms of organizational and financial commitment.

VI.3.4 **Airport Projects**

Chișinău Airport is currently planning the rehabilitation of its old passenger terminal building to increase passenger capacity. Additional investments are focused on upgrading the Instrument Landing System (ILS) and expanding parking facilities. Further capacity extension investments are also planned for the medium and long term.

VI.4 Ukraine

VI.4.1 Rail Projects

Ukraine is preparing a railway project on the Core Network, with an estimated budget of €192 million. The project involves the reconstruction of 81 km of track on the section from the Polish border – Mostyska II – Mostyska I – Sknyliv (L'viv). Once completed, it will comply with TEN-T standards for electrification, axle load (22.5 t), line speed for mixed traffic (100 km/h), train length (740 m), and track gauge (1,435 mm), although it will not feature ERTMS.

The table below outlines the TEN-T rail project currently being implemented in Ukraine.

Name of the project	Core/ Comprehensive Network	Foreseen intervention	Total length (km)	Total Cost (M€)	Estimated completion deadline
Reconstruction of the railway track Ukraine - European Union border – Mostyska II – Sknyliv	Core	Reconstruction	81	192	2028

Table 36. List of TEN-T rail projects in Ukraine

The following three rail projects are currently being prepared in Ukraine:

- **Reconstruction of Railway Structures with Electrification on the Kovel – Yagodin – State Border with Poland**

  This project, part of the Regional Branch "Lviv Railway" of JSC Ukrainian Railways in the Volyn region, covers 65 km on the Core Network and has an estimated cost of €250 million. It is expected to comply with TEN-T requirements for electrification, axle load, train length and a track gauge of 1,435 mm. The feasibility study was completed in 2024, and preparation of the general design is ongoing. Project development, from the general design stage to implementation documentation, is expected to be co-financed equally by the CEF Call 2022 and an EIB loan.

- **Reconstruction of Railway Structures with Construction and Electrification on the Lviv – Chernivtsi – Vadul-Siret – State Border Section**

  This project covers 314 km on the Core Network, with an estimated cost of €1.234 billion. It is expected to comply with TEN-T requirements for electrification, axle load, train length, and track gauge (1,435 mm).

  Financing for the feasibility study and design documentation development is 50% secured through CEF Call 2023 co-financing. The feasibility study for the State border with Romania (Vadul-Siret) – Glyboka-Bukovyns'ka – Chernivtsi section is currently under development.

- **Reconstruction of Railway Structures on the Chop – L'viv Section (Conversion from Broad Gauge 1,520 mm to Standard Gauge 1,435 mm)**

  This project involves the conversion of the 275 km Uzhhorod – L'viv section from broad gauge (1,520 mm) to standard gauge (1,435 mm) and covers 292 km on the Comprehensive Network, with an estimated cost of €1.059 billion. It is expected to comply with TEN-T requirements for electrification, axle load, and track gauge (1,435 mm).

  22 km of standard-gauge track on the Chop – Uzhhorod section has been in operation since September 2025, co-financed under CEF Call 2022. Design documentation for the electrification of this 22 km section is currently under development (CEF Call 2023).

  Financing for the feasibility study and design documentation for the remainder of the Chop – L'viv section is 50% secured through CEF Call 2023 co-financing.

VI.4.2 **Waterborne Transport Projects**

Ukraine is undertaking a series of ambitious waterborne transport projects aimed at restoring critical infrastructure, modernizing its fleet, and aligning with EU standards. One of the key initiatives is the restoration of the Seredniodniprovskyi navigable lock, which was damaged by a Russian missile attack. With an estimated cost of EUR 1.7 million, the project is expected to reestablish vessel passage between the upper and lower parts of the Dnipro River, thereby restoring a vital shipping connection. Another major effort involves improving the safety and operability of inland waterways through the repair and procurement of 18 technical vessels and specialized equipment, including measuring vessels, tugs, and floating cranes. This project, valued at approximately EUR 34.41 million, aims to ensure proper maintenance of navigational channels and hydrographic support across Ukraine's inland waterway network.

In parallel, Ukraine is investing in developing its maritime logistics capacity. A flagship project involves the restoration and expansion of the Kiliya shipbuilding and ship repair yard, operated by the Ukrainian Danube Steam Shipping Company. With a total budget of approximately EUR 42.38 million, the initiative includes reconstruction of damaged facilities, modernisation of equipment, and the creation of a new production site in Romania. Additional projects include the modernisation of dredging capabilities through the overhaul of the "Tylihulskyi" hopper dredger (EUR 11.75 million), the purchase of a backhoe dredger (EUR 17.15 million), and the acquisition of self-propelled hopper barges (EUR 26.32 million), pilot boats (EUR 14.1 million), and waste collection vessels (EUR 8.46 million). These investments are designed to enhance Ukraine's autonomy in port maintenance, improve environmental safety, and ensure the continuity of pilot services, especially in the face of ongoing geopolitical challenges.

Ukraine is currently implementing the CEF Transport 2021–2027 project titled "River Information Services on the Ukrainian Danube" (UkrRIS). This initiative focuses on developing River Information Services (RIS) infrastructure by designing and deploying RIS technologies and services along the Ukrainian stretch of the Danube River. This section forms part of the Rhine-Danube Core Network Corridor (CNC). The implementation of UkrRIS will ensure full RIS coverage along the entire Rhine-Danube CNC, delivering harmonized, reliable, and efficient services to inland waterway users across this segment of the Trans-European Transport Network (TEN-T). UkrRIS represents the first phase of the broader "Smart IWT Ukraine" Global Project, laying the groundwork for future expansion. The systems and applications developed under UkrRIS are designed to be scalable and can be extended to cover the Dnipro River in Ukraine. Additionally, the project aims to integrate Ukrainian RIS services into the European platforms EuRIS and CEERIS, aligning with the RIS COMEX project. This will enable the implementation of RIS-enabled Corridor Management Services, ensuring interoperability with similar systems already in use across EU Member States. The introduction of River Information Services (RIS) and RIS-enabled Corridor Management Services will significantly enhance the performance of Ukraine's inland waterway transport system. These technologies will make navigation safer, more environmentally sustainable, more reliable, and easier to plan and monitor. Implementing RIS in Ukraine is a strategic priority, as it plays a crucial role in supporting the EU-Ukraine Solidarity Lanes, strengthening European Military Mobility, and improving the resilience and efficiency of Ukraine's supply chains. The total project budget is EUR 9.66 million, and its duration is between 1 August 2024 and 31 July 2028.

VI.4.3 **Other Projects**

No information has been provided by the Ukrainian relevant stakeholders on potential road or airport projects on the TEN-T core and comprehensive network.

VII TEN-T Compliance Indicators Forecast

The TEN-T Compliance Indicators Forecast assesses the expected progress of Georgia, the Republic of Moldova, and Ukraine toward meeting Trans-European Transport Network (TEN-T) standards by 2030, based on the completion of ongoing, fully financed projects described in Section VI. Overall progress in all three countries and per sector remains uneven and dependent on project implementation timelines and data availability.

In Georgia, the ongoing TEN-T project is projected to bring measurable improvements to the rail network's physical condition. However, the project does not address key compliance parameters such as electrification, train length, track gauge, axle load, or the minimum design speed of 100 km/h, which remains below target. On the road network, compliance progress depends on the completion of current TEN-T projects, which are expected to enhance infrastructure condition and connectivity through 2030.

For the Republic of Moldova, ongoing rail projects are expected to deliver substantial gains in design speed and infrastructure quality. By 2030, the Core Network is forecasted to achieve 100% compliance with the 100 km/h minimum design speed, while the Comprehensive Network will reach 63.35%. Additionally, 100% of the Core Network and 59.01% of the Comprehensive Network are projected to be in very good condition. Due to the unavailability of 2025 road and waterborne project data for the Republic of Moldova, no reliable road compliance forecast could be established for 2025–2030.

In Ukraine, despite the ongoing conflict, modest progress in rail infrastructure quality is anticipated. By 2030, around 2.03% of the Core Network and 1.13% of the Comprehensive Network are expected to reach very good condition, accompanied by a proportional reduction in very poor sections. The upgrades will result in slight improvements in track gauge compliance—3.54% on the Core Network and 4.15% on the Comprehensive Network, but no major changes are expected in electrification, train length, axle load, or minimum line speed. Due to the unavailability of 2025 road project data for Ukraine, no reliable road and waterborne compliance forecast could be established for 2025–2030.

VII.1 Georgia

VII.1.1 Rail Compliance Indicators Forecast

Georgia's anticipated partial alignment with TEN-T rail requirements relies on the completion of the ongoing TEN-T project outlined in Section VI. Railway sections outside the scope of planned upgrades are expected, at a minimum, to preserve their current operational standards. The project does not entail any modifications to the requirements concerning electrification, train length, track gauge, or axle load. The minimum design speed requirement of 100 km/h has not been achieved.

Overall, the project is expected to positively impact on the condition of the railway network, with approximately 6.84 % of the Core Network and 5.60 % of the Comprehensive Network projected to be in good condition by 2030, with these improvements already realised by 2026. These improvements will contribute to reducing the share of infrastructure in poor condition across both the Core and Comprehensive Networks, as illustrated in the following chart.

Condition of the Rail Network 2023 - 2030 progress forecast

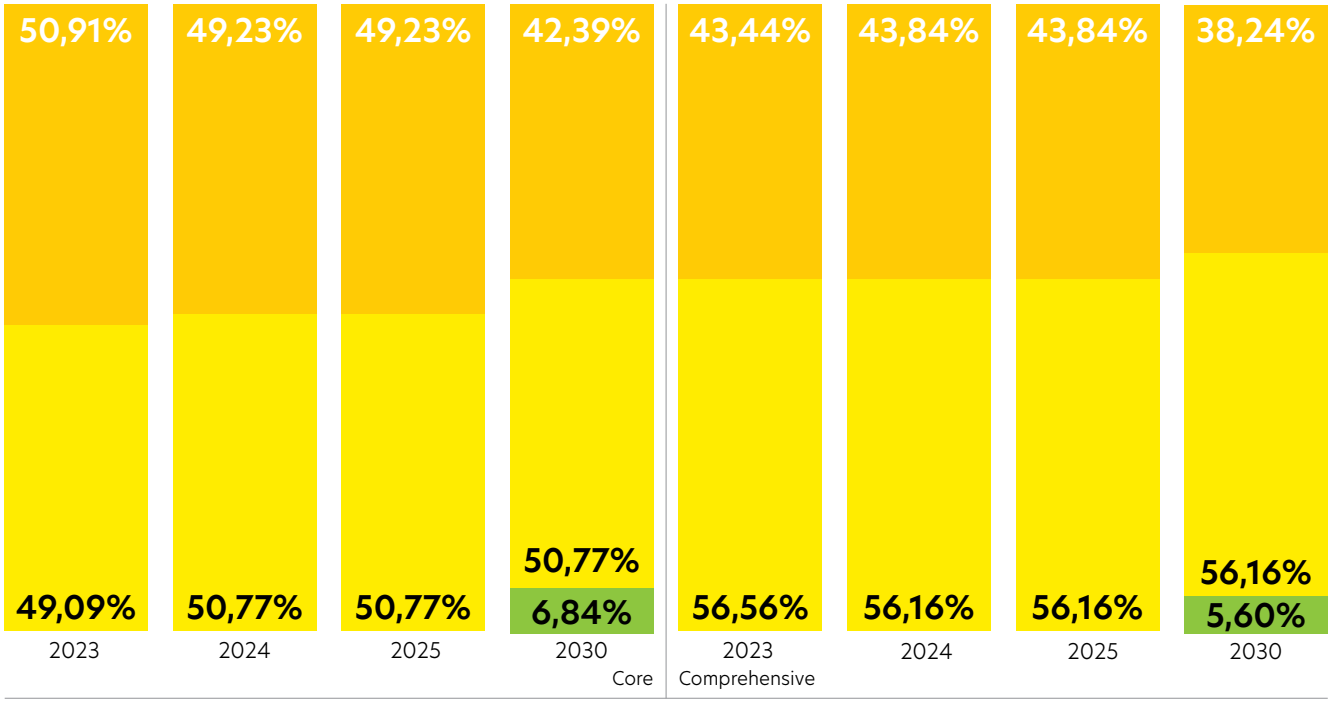

Figure 54. Georgia: Railway network infrastructure conditions 2023-2030 progress forecast

VII.1.2 Road Compliance Indicator Forecast

The TEN-T compliance forecast for Georgia is based on the estimated completion date for the ongoing TEN-T projects listed under Section VI above. The results of this exercise are given below:

Georgia: TEN-T road network 2024-2030 compliance progress forecast

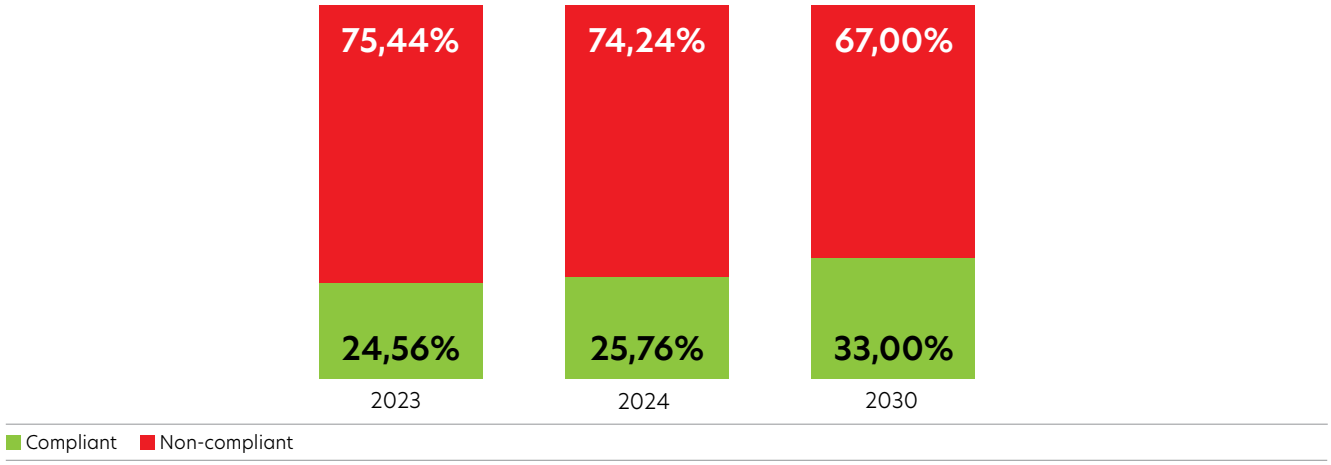

Figure 55. Georgia TEN-T road network 2024-2030 compliance progress forecast

VII.1.3 Waterborne Compliance Indicator Forecast

As TEN-T waterborne transport projects in Georgia involve nodal infrastructure such as ports rather than linear corridors, no compliance progress forecast for the period 2025-2030 can be presented.

VII.2 Republic of Moldova

VII.2.1 Rail Compliance Indicator Forecast

Moldova's forecasted compliance with TEN-T standards is based on the anticipated completion of the ongoing TEN-T projects described in Section VI. It should be noted that sections of the rail network not targeted for upgrades are expected to maintain, at a minimum, their current condition.

The projects do not introduce changes to existing infrastructure requirements for electrification, train length, track gauge, or axle load. However, improvements are expected in the minimum design speed, with compliance projected to reach 100% on the Core Network and 63.35% on the Comprehensive Network.

Min design speed 100km/h 2023-2030 compliance progress forecast

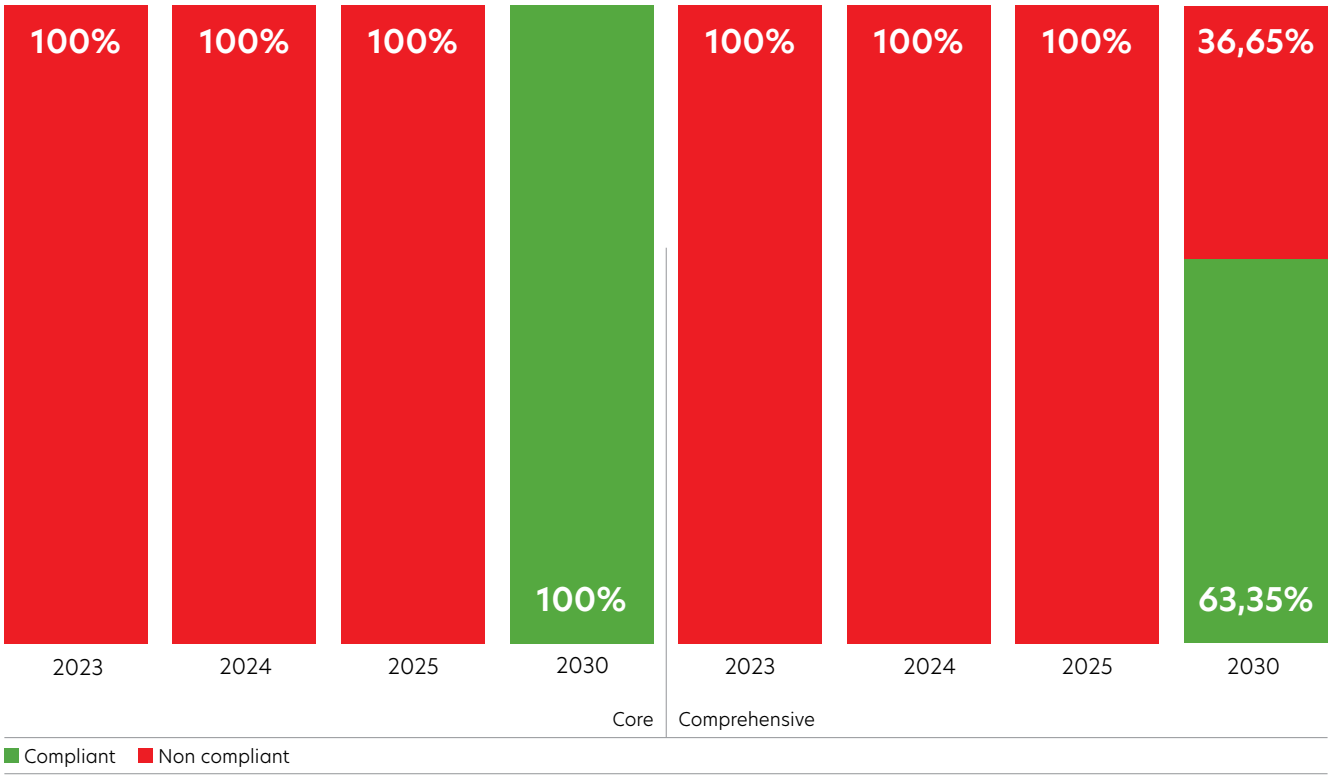

Figure 56. Moldova: Minimum design speed 100 km/h 2023-2030 compliance progress forecast

The project will improve the condition of the rail network, with an anticipated 100% of the Core Network and 59.01% of the Comprehensive Network in very good condition by 2030. Additionally, on the Comprehensive Network, sections in poor condition will decrease by 35.97%, while those in very poor condition will reduce by 5.02%.

Condition of the Rail Network 2023 - 2025 comparison

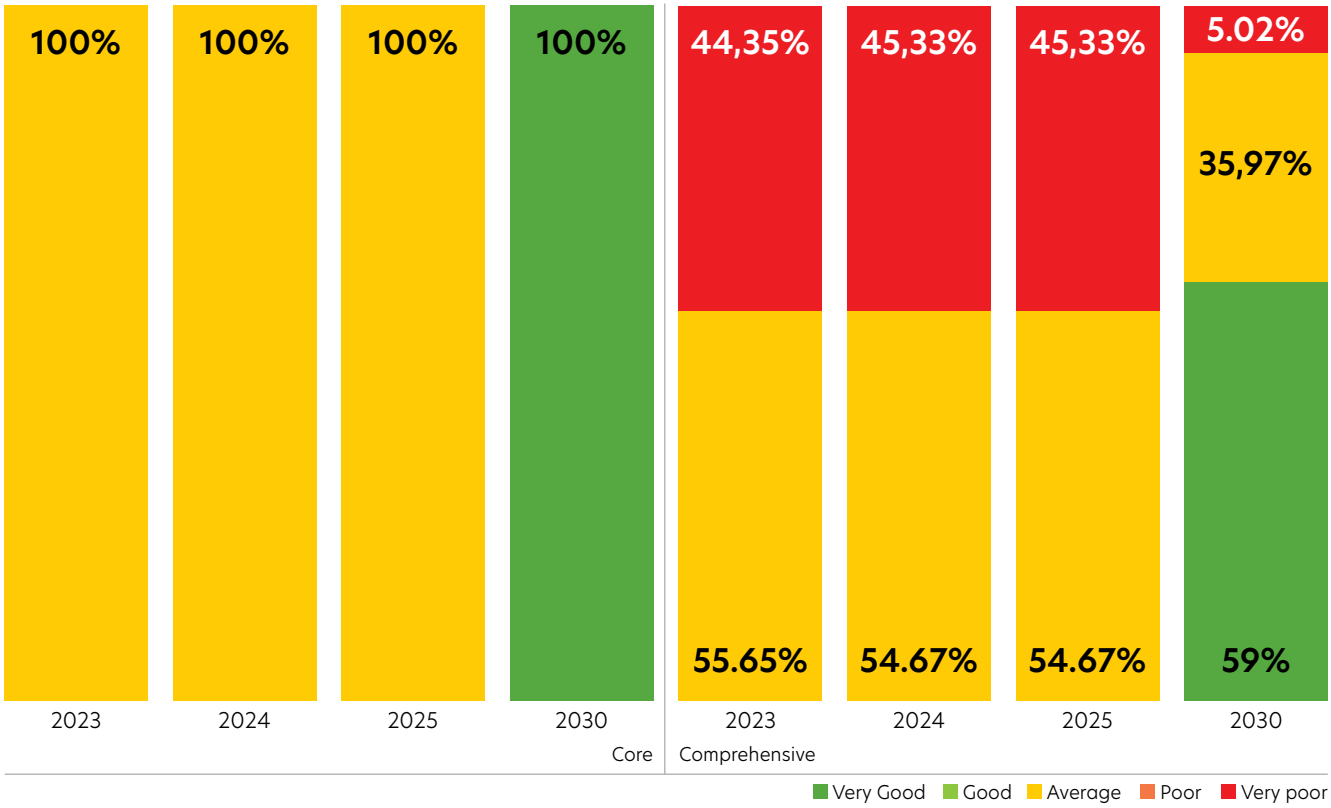

Figure 57. Moldova: Condition of the Rail Network 2023-2030 progress forecast

VII.2.2 Road Compliance Indicator Forecast

The TEN-T on the estimated completion dates for the ongoing TEN-T projects listed in Section VI above. Lack of data provided by the Moldovan authorities for 2025 on all TEN-T road projects caused no presentation of the compliance progress forecast from 2025 until 2030 for Moldova.

The results of this exercise are provided below:

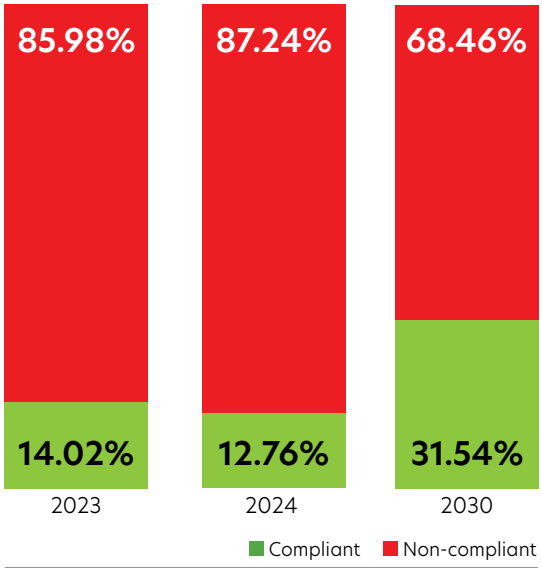

Figure 58. Moldova TEN-T Compliance progress forecast (infrastructure profile and condition)

VII.2.3 Waterborne Compliance Indicator Forecast

As TEN-T waterborne transport projects in Moldova involve nodal infrastructure such as ports rather than linear corridors, no compliance progress forecast for the period 2025–2030 can be presented.

VII.3 **Ukraine**

VII.3.1 **Rail Compliance Indicator Forecast**

The projection of Ukraine's adherence to TEN-T standards is derived from the anticipated completion of the ongoing TEN-T project described in Section VI, scheduled through to 2030. It is important to emphasise that parts of the rail network not designated for modernisation are expected, at the very least, to maintain their existing standards.

Although the initiative will bring only a modest improvement in track gauge, estimated at 3.54% on the Core Network and 4.15% on the Comprehensive Network—it will not alter the existing technical requirements. The 2025 parameters concerning electrification, train length, and axle load remain applicable, and the minimum line speed for freight services will continue to be set at 100 km/h.

By 2030, the project is expected to enhance the overall quality of Ukraine's rail infrastructure, with around 2.03% of the Core Network and 1.13% of the Comprehensive Network anticipated to reach a very good condition. At the same time, the share of sections categorised as being in very poor condition is projected to decline by equivalent proportions across both networks.

The following graphs present the forecast for the track gauge and the condition of the railway infrastructure network.

Track gauge 2023-2030 compliance progress forecast

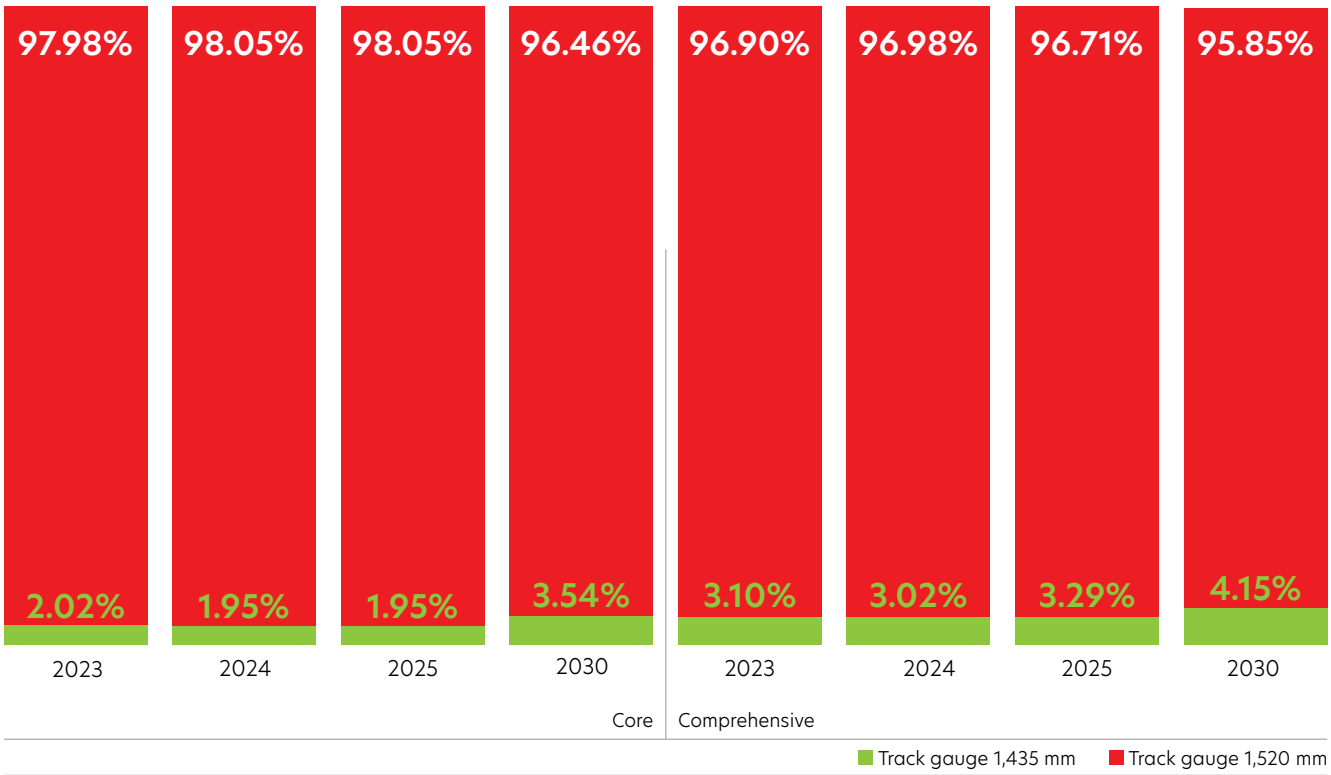

Figure 59. Ukraine: Track gauge 2023-2030 compliance progress forecast

Condition of the Rail Network 2023 - 2030 progress forecast

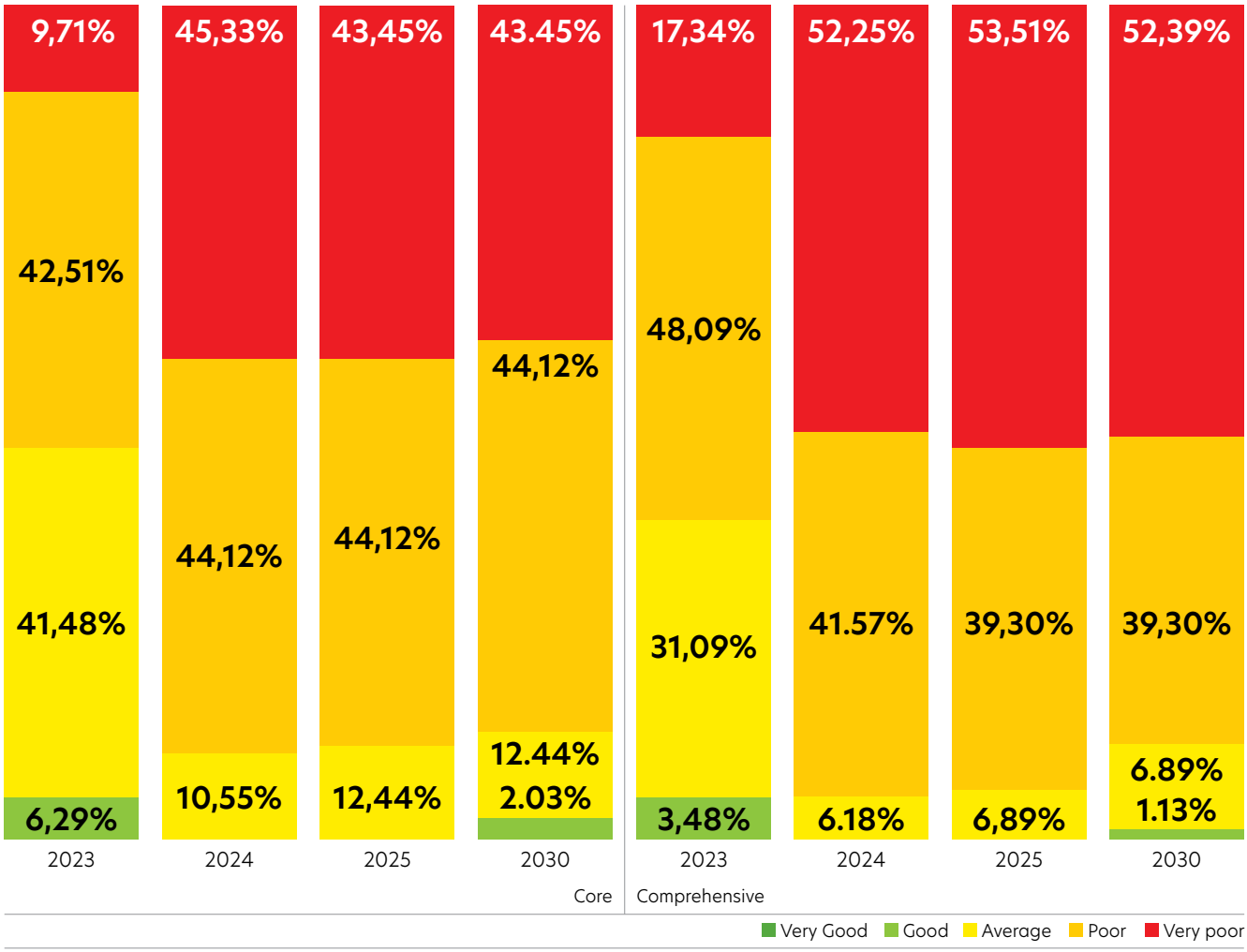

Figure 60. Ukraine: Condition of the Rail Network 2023-2030 progress forecast

VII.3.2 Road Compliance Indicator Forecast

Lack of data provided by the Ukrainian authorities for 2025 on all TEN-T road projects, caused no presentation of the compliance progress forecast from 2025 until 2030 for Ukraine.

VII.3.3 Waterborne Compliance Indicator Forecast

As TEN-T waterborne transport projects in Ukraine involve nodal infrastructure such as ports rather than linear corridors, no compliance progress forecast for the period 2025-2030 can be presented.

VIII Conclusions

The 2025 assessment of the indicative extensions of the Trans-European Transport Network (TEN-T) in Georgia, the Republic of Moldova, and Ukraine confirms gradual progress toward alignment with EU standards, though overall compliance remains limited.

Improvements recorded since 2024 have been modest and largely administrative, with physical upgrades lagging behind the targets set by Regulation (EU) 2024/1679. The three observing participants continue to face structural challenges, including under-investment, ageing assets, maintenance, fragmented data collection, and, in Ukraine's case, disruption caused by Russian's invasion.

Georgia shows good performance in rail electrification, having achieved full coverage and axle-load compliance, yet still operates below the required speed thresholds and on a non-standard (1,520 mm) gauge. Only 6 % of its core rail network can currently handle 740 m freight trains, and ERTMS deployment remains pending. On roads, about one-quarter of the TEN-T network now meets EU design and condition criteria, marking slight improvement over 2024. Maritime connectivity has advanced through the opening of the PotiTrans multimodal terminal and the nationwide rollout of VTMIS and the National Maritime Single Window, though alternative fuel infrastructure is still absent.

Republic of Moldova maintains non-electrified railways but achieves full compliance on train-length and axle-load indicators. The Port of Giurgiulești continues to expand and meets most basic TEN-T requirements yet lacks River Information Services and alternative fuels. Road data remain incomplete, and compliance is constrained by maintenance and safety issues.

Ukraine, despite severe wartime constraints, continues to operate its major corridors and ports and has completed a significant milestone in the rail sector—the first 22 km of standard-gauge line (1,435 mm) on the Uzhhorod–Chop section—strengthening interoperability with the EU. Its functioning ports remain largely TEN-T-compliant, though port digital infrastructure and alternative fuel facilities require substantial development.

Across all three countries, airports generally meet connectivity and terminal-capacity standards but lack sustainable aviation fuels and advanced energy systems.

The common priorities for all three countries include modernisation of rail infrastructure, road maintenance and safety, digital system deployment (ERTMS, ITS, VTMIS, NMSW), and alternative-fuel infrastructure.

The current state of TEN-T networks and infrastructure among participating observers demands urgent action. To enhance compliance with TEN-T standards and move toward a unified transport market, substantial funding, clear strategic frameworks, and targeted interventions are essential. Well-defined investment programs, focused on strategic objectives, will be critical for achieving connectivity goals and advancing European transport integration.

In conclusion, while all three countries are making some progress, further investment, data consistency, and policy alignment are required to meet full compliance by 2030, particularly in digital systems, technical parameters, and alternative fuel infrastructure.