Council of the European Union
General Secretariat

Brussels, 23 February 2022

WK 2681/2022 INIT

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INFORMATION

From:	General Secretariat of the Council
To:	Working Party on Transport - Intermodal Questions and Networks
Subject:	EU-Western Balkans Transport Community - First draft of a five year rolling work plan for the TEN-T

The Permanent Secretariat of the Transport Community sent to the RSC members yesterday the attached first draft five-year work plan.

The draft work plan is linked to agenda item 2 of the next meeting of the Regional Steering Committee on 15 March 2022 (" Information by the TC Secretariat on the Five-year rolling work plan for the development of the indicative TEN-T extension of the comprehensive and core networks to the Western Balkans and the identification of priority projects of regional interest (Article 9 of TCT)".

The EU position for this agenda item is set out in document ST 6219/22.

The Permanent Secretariat has underlined that the draft work plan still needs to be completed, in some parts, with project information and project advancement action. It hopes that the provision of missing information and the discussion of the work plan at the next RSC meeting will allow the finalisation of the draft and its subsequent re-submission to RSC and, on 27 April 2022, to the TC Ministerial Council.

We would like to draw delegations' attention to the fact that the draft highlights the incompleteness of the TEN-T database and of the related tools (regional transport model and project appraisal and prioritisation methodology) (page 14). The need to advance work in this regard is part of the EU position.

As a consequence, the Permanent Secretariat has applied a simplified approach for the proposed planning and, in particular, the identification of priority projects (see page 53), requesting that the work plan at the first revision (2024) be fine-tuned in accordance with the tools currently under development.

Following the discussion in RSC, the Commission services will return to Council Working Party with the draft when finalised by the Permanent Secretariat, before moving towards endorsement by RSC and Ministerial Council.

Five-year rolling work plan for the development of the indicative TEN-T extension of the Comprehensive and Core Network in Western Balkans

Permanent Secretariat of Transport Community

February 2022

Version 1

FOREWORD

The preparation of the 5-years rolling plan represents yet another key milestone for the implementation of the Transport Community Treaty and the achievement of its wide political objectives, as laying a sound basis for a common, more focused approach on regional connectivity.

As stated under the Brdo Declaration of 06 October 2021, *"sustainable transport is a cornerstone of the economic and social integration of the EU and the Western Balkans"*. Connectivity lies at the very foundation of our societies and economies. It fuels growth and prosperity while easing political tensions and supporting the swift integration of the region into the EU. Over the last years, the EU's significant financial support for the region's transport infrastructure has been channelled under the connectivity agenda umbrella, to ensure seamless connections between the regional partners and with the neighbouring Member's States alongside the indicative extension of the TEN-T Network in Western Balkans.

However, while significant progress has been achieved in this regard, there is still plenty of work ahead. Compliance with TEN-T standards is far from being achieved, while non-physical barriers are still hampering the seamless transport and trade flows in the region.

While all regional partners are actively pursuing their own connectivity goals, additional effort is yet needed to ensure coordinated development of TEN-T in the region, so that to ensure the transition from a patchwork to a network. The existing infrastructure gap and the limited (though substantial) available funding call for more coherent and focused strategic planning in the region to increase the network's overall efficiency.

Green and digital transition will define all sectors of economy, including transport. Building on the European Green Deal and the Sustainable and Smart Mobility Strategy, the newly proposed TEN-T package puts additional focus on the network's quality, efficiency and sustainability. The major shift towards sustainable and zero-emission mobility in the EU requires fundamental re-thinking of the transport policy in the region, as pollution knows no borders and there is a certain limit to what can be achieved at national level only.

Infrastructure investments should go hand-in-hand with policy reforms to reach the full potential of a common transport market. The Action Plans for the railway, road, road safety, transport facilitation and waterborne transport set up an ambitious reform agenda that shall enhance and multiply the effects of infrastructure improvement.

The stakes are high, and the region simply cannot afford to be left behind. Time has now come to align our agendas in pursue of a wider, common goal.

Together, we can do more!

Matej Zakonjšek

Director of the Permanent Secretariat of the Transport Community

Gjynejt Mustafa

Chair of the Regional Steering Committee

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AND	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	Agreement concerning the International Carriage of Dangerous Goods by Road
AGN	European Agreement on Main Inland Waterways of International Importance
AIS	Automatic Identification System
Annex 1	Annex 1 of the Transport Community Treaty
BHMAC	Bosnia and Herzegovina Mine Action Center
CBA	Cost Benefit Analysis
CEF	Connecting Europe Facility
CEFTA	Central European Free Trade Agreement
CEMT / ECMT	European Conference of Ministers of Transport
CEN	European Committee for Standardization
CESNI	European committee for drawing up standards in the field of inland navigation
COTIF	Convention concerning International Carriage by Railway
EBRD	European Bank for Reconstruction and Development
EC	European Commission
EIA	Environmental Impact Assessment
EIB	European Investment Bank
EIP	EU's Economic and Investment Plan for the Western Balkans
ERTMS	European Railway Traffic Management System
ETCS	European Train Control System
EU	European Union
EUSAIR	EU Strategy for the Adriatic – Ionian Region
IPA	Instrument for Pre-Accession
ITS	Intelligent Transport Systems
IWW	Inland Waterways
JBCP	Joint Border Crossing Points
LNG	Liquified Natural Gas
NAIADES	Navigation and Inland Waterway Action and Development in Europe
RID	Regulations concerning the International Carriage of Dangerous Goods by Railway
RIS	River Information System
RP	Regional Partners (Albania, Bosnia and Herzegovina,Kosovo*North Macedonia, Montenegro, Serbia)
RSC	Regional Steering Committee
SEE	South East Europe
SLA	Service Level Agreement
SPP	Single Project Pipeline
TC	Transport Community
TCPS	The Transport Community Permanent Secretariat
TEN-T	Trans-European Networks Transport
VHF	Very High Frequency
VTMIS	Vessel Traffic Management Information System
WB	Western Balkans
WBIF	Western Balkans Investment Framework

* *This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo declaration of independence*

EXECUTIVE SUMMARY AND RECOMMENDATIONS

1. **Much has been done over the last years for TEN-T Network development in the region.** 44.86% of Core and 51.89% of Comprehensive Network roads are currently compliant with the basic TEN-T standards on infrastructure profile and condition. Railway compliance rates vary significantly between criteria. Electrification and freight axle load compliance percentages are high (73/54% and 87/72% respectively for Core and Comprehensive Networks) while only 15/13% of the network complies with operating speed criterion and ERTMS deployment is zero. In inland waterways, maritime and airports TEN-T compliance rates are satisfactory, especially in comparison to the performance of other modes.

2. **However, there is still considerable work ahead and challenging deadlines to be observed.** Regulation 1315/2013 requires the Core Network to be completed by 2030, while the deadline for the Comprehensive Network is 2050. Overall, approximately 2,800 km of roads require various forms of upgrade, of which almost 2,000 on the Core Network. Lack of railway maintenance results in only 30% of the Core Network and 28% of the Comprehensive Network being currently in a very good to good condition. Compliance with key TEN-T standards like alternative fuels deployment, ERTMS, train length is (close to) zero, while meeting certain criteria like road safety, ITS or tolling compliance require acquis transposition and institutional reforms.

3. **The region's current spending on TEN-T development is significant.** Under the Connectivity Agenda umbrella, substantial EU support has been channelled towards TEN-T projects since 2015. EU grants amounting at approx. € 1 billion leveraged additional investment of € 3.7 billion under the WBIF framework. The Regional Partners have also mobilized additional resources in this regard (mostly in forms of loans from 3rd parties/own budgets spending) with a combined value of approx. € 4.6 billion for on-going TEN-T projects. Overall, financing is currently secured for a total of 62 TEN-T projects in the region, with a combined value of almost € 12 billion.

4. **Overall spending for TEN-T infrastructure development in the region is expected to remain high over the next years**. No less than € 9 billion grant funding potentially mobilising additional € 20 billion of investments in the next decade have been pledged under the Economic and Investment Plan for the Western Balkans. Of this amount, around € 5 billion (out of which € 2 billion in grants) will be channelled towards transport to meet TEN-T standards and to address the objectives of the Green Agenda in the Western Balkans. In case the development/preparation of the Flagship projects progresses according to plans, further EU funds could be mobilized.

5. **Besides projects already under implementation, significant investment portfolios have been assembled by each Regional Participant, under the methodological framework of Single Projects Pipelines.** SPPs include priority projects of each Regional Partner, based on national and sectoral development strategies. The total number of transport projects included in the most recent versions of the SPPs is 77, of which 44 for roads, 23 for the railway, 2 for ports, 4 for IWW and 4 for airports. The total amount of investments needed is €22.7 billion, €7.7 billion for mature projects and €14.9 billion for projects under preparation. In terms of modal share investments needs in roads amount to €14.8 billion, followed by rail projects with €7.4 billion, inland waterways with €246 million, ports €26.3 million and airport with €138.4 million.

6. **These projects have been prioritised and ranked based on a consistent methodology, mirroring the same strategic documents and principles across all Regional Participants.** SPPs are the result of a thorough screening, appraisal and prioritisation exercise that started with projects' identification followed by strategic relevance and quality/maturity assessment. Strategic relevance was assessed based on criteria like demand/supply analysis, relation with other corridors/routes, safety or economic growth potential. The maturity assessment was made in relation with the quality and completeness of project documentation so that to identify any possible gaps.

7. **The implementation of the projects that are currently on-going or mature will likely bring significant improvements in TEN-T compliance rates by 2030.** Roads Core Network compliance is expected to grow to 60% in 2027 and 77% in 2030. Compliance rate of the Comprehensive Network will also increase, though at a slower pace, from almost 52% (current) to 57% in 2027 and 62% in 2030. On railways, forecasted compliance growth varies between criteria. Electrification will likely be achieved for 86% of the Core Network and 61% of the Comprehensive Network. The already high axle load compliance will reach 91% on the Core and 74% on the Comprehensive, while ERTMS is expected to jump from 0 to 10%. Minimum operating speed compliance will also grow to 44% on Core and 32% on Comprehensive Network, which is expected to have a positive impact on the rail transport overall competitivity and attractiveness.

8. **However, despite the significant forecasted progresses, full compliance of the Core Network would still not be achieved, even in the best-case scenario with all projects completed on time.** Besides infrastructure profile and condition criterion (still not hitting 100%), road TEN-T standards include alternative fuels availability, ITS, tolling and safety compliance. Railway compliance forecast for train length, operating speed or ERTMS is particularly worrying, while no projects are currently addressing the alternative fuels availability in either inland or maritime Core Network ports.

9. **Besides and above infrastructure development, TEN-T compliance is also about policy reform and capacity development.** Regional Partners have committed to adopt in full the EU transport acquis, with Action Plans rolled-out by the TCT entailing the highest-ranked priorities in this regard. EU *acquis* transposition is the first step for achieving full compliance with certain TEN-T standards, but actual implementation requires also institutional and capacity building.

10. **While the financial resources to be potentially mobilized for TEN-T Network improvements are high, so remains the financing gap.** The estimated value of the projects currently in the Regional Partners' portfolios largely exceed the amount of financing available under WBIF framework. Regional Partners' capacity to mobilize additional resources in this respect (mostly in the form of budget funding and commercial/3rd parties' loans) is also limited and uneven, as GDP/debt ratios in the region vary significantly.

11. **The above call for a more focused approach at regional level, so that to ensure the optimal use of the available resources and maximize benefits (buying more for less).** Besides focusing on the highest-ranked priorities, this would include proper infrastructure dimensioning based on forecasted demand and projects' economic performance, maximizing the use of grant funding and payments structuring over time (with due consideration given to the increased funding needs for maintaining the newly-build assets). There should also be an increased focus on small-scaled and well-targeted interventions likely to bring quick wins and tangible benefits in terms of TEN-T compliance with only fractions of the costs that large infrastructure projects typically need.

12. **There is an overall necessity to improve planning and prioritization process at regional level.** There has been significant progress in the past years in projects' prioritisation and ranking at national level, through Regional Partner's Strategies and SPPs. However, this has not been systematically mirrored at regional level in a form of prioritisation of projects of importance for regional and EU connectivity and cooperation between Regional Partners have sometimes been suboptimal. Adequate cooperation structures and mechanisms have been set under WBIF framework and the strategic orientation and priorities for TEN-T development are clear. Having a rolling plan with prioritised projects list is a further step towards more tightened cooperation and improved regional planning.

13. **Referring to highest-ranked priority projects only, their timely implementation still requires considerable institutional and financial resources, as well as firm political commitment.** Securing the progress of these initiatives that would also maximise the available grant financing is therefore of the essence. Pursuing parallel/alternative strategic objectives and routes would only put additional strain on the limited available resources and might also alter the economic performance of future projects for which grant financing is being sought.

14. **The revision of TEN-T Regulation is putting more focus on the green and digital transformation of the transport sector, and this will have to be mirrored by the Regional Partners.** There is still imbalance between transport modes, as clearly shown by both TEN-T compliance actual rates and the priority projects currently in the pipeline. More should be invested in ITS (particularly in ERTMS) and alternative fuels should be made available for all modes of transport. Single project pipelines should be updated to reflect transport sustainability and include green and digital elements based on the Smart and Sustainable Strategy for Western Balkans. This should be also backed by dedicated financing schemes for small-scaled interventions targeting non-physical barriers removal, safety improvement as well as green and digital transformation. Targeted support as well as technical assistance from EU, TC PS and IFIs to address these issues will be of a paramount importance for the region to leapfrog in decarbonisation of transport sector.

15. **Given the complexity of implementing ERTMS, a regional action plan should be developed.** This plan should cover the line where in priority ERTMS should be implemented as well as the related technical and administrative needs that regional partners will have to deal with in the coming years. The possibility to mutualize some resources (technical ones / testing equipment) could also be explored.

16. **Project implementing capacity should also increase**. Persistent problems are still hindering faster development of transport in Western Balkans. Issues such as lack of human capacity and resources, lengthy development of project documentation (app. half of time of implementation of works), long grant approval process by all stakeholders included etc. Finally, better cooperation on a regional level especially on cross border projects and corridor projects is needed in all stages: from project documentation development, project execution, operation and maintenance. The region will further benefit of substantial technical assistance resources for projects preparation, implementation and institutional support. Dedicated project preparation facilities such as IPF and CONNECTA will remain active, with JASPERS also offering advisory support for capacity building and closing projects' maturity gaps. Transport Community will be providing targeted assistance in the

areas covered by the Treaty, while European Commission's instruments like TAIEX might be also used for institutional support. Making best use of such resources is one of the keys for success!

BACKGROUND

The signing of the Treaty establishing the Transport Community by the six South East European Parties and the European Union on behalf of all EU Member States has boosted the regional dimension of transport cooperation, accelerating reforms and strengthening the European perspective for the entire region. Building on previous work carried out under the Memorandum of Understanding on the Development of the South East Europe Core Regional Transport Network, the Transport Community Treaty is the ultimate expression of the signatories' determination and firm commitment to a united and better-connected Europe.

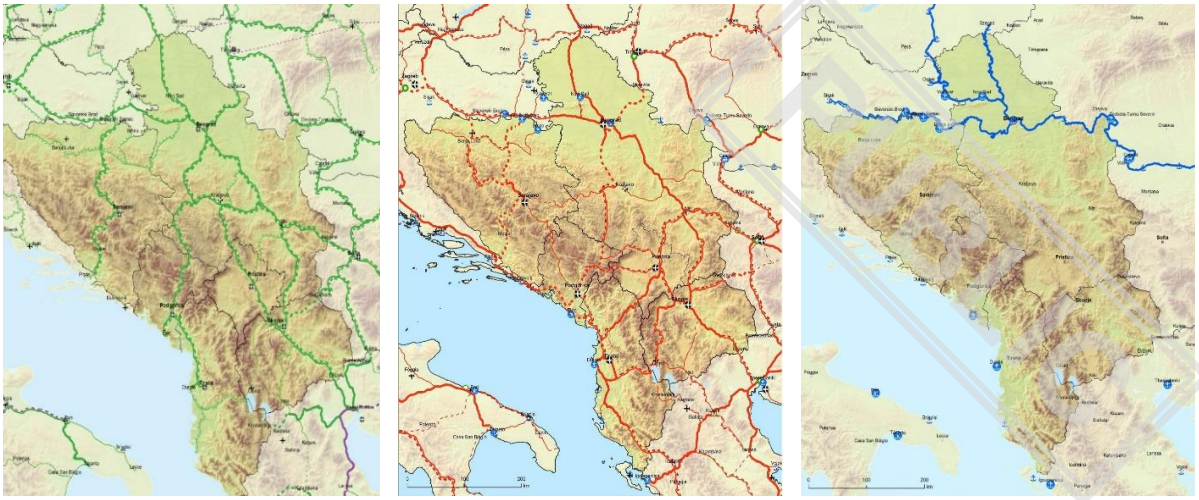
The core obligation to which the parties have committed under the Treaty is the creation of a Transport Community in the road, railway, inland waterway and maritime transport based on progressive transposition by the Regional Partners of the relevant EU acquis. The policy reforms targeting markets opening and removal of non-physical barriers to transport and trade are complemented by infrastructure development alongside the indicative extensions of TEN-T Comprehensive and Core networks in the Western Balkans.

The institutional framework set up under the Treaty has proved instrumental for the overall achievement of its broad political objectives. In pursuit of its mandate to help the parties achieve their common connectivity goals, the Permanent Secretariat of Transport Community has rolled out dedicated Action Plans for roads, railways, road safety, waterborne transport and transport facilitation. The Action Plans contain concrete measures whose implementation will likely ensure the achievement of the core policy objectives provided under the Treaty. Approval of the Action Plans by all six South East European Parties and the effective start of their implementation has helped policy reform to gain momentum, marking a new milestone on the region's European path.

The Regional Partners'commitment to the development of the indicative TEN-T extensions on their territory (previously followed through the Connectivity Agenda rolled out under the Berlin Process) is embedded in the Treaty, together with adequate planning, monitoring and follow-up institutional mechanisms. The recently adopted Economic and Investment Plan for the Western Balkans with its unprecedented financial stimulus confirms the European Union's commitment in this regard, in response to the region's well-documented need for high-quality infrastructure and the closing of development gaps.

The indicative extension of the TEN-T Core and Comprehensive Networks in Western Balkans as provided by the Commission Delegated Regulation (EU) 2016/758[2] and included in Annex I.1 of the Treaty establishing the Transport Community is provided below.

[2] *Commission Delegated Regulation (EU) 2016/758 of 4 February 2016 amending Regulation (EU) No 1315/2013 of the European Parliament and of the Council as regards adapting Annex III thereto (OJ EU L 126, 14.5.2016, p. 3).*



Comprehensive Network: Railways and airports
Core Network: Railways (passengers) and airports

Comprehensive and Core Networks: Roads, ports, railway-roads terminals, and airports

Comprehensive and Core Networks: Inland Waterways and Ports

Figure 1. The indicative trans-European transport network (TEN-T) extension of Comprehensive and Core networks to the Western Balkans

The Treaty includes dedicated provisions on the preparation and biannual revision of a strategic plan for the development of the TEN-T network in Western Balkans and identification of priority projects of regional interest (***the 5-year rolling work plan***). This plan should contribute to the region's sustainable development and improve connectivity between the South European Parties and with the EU while giving due consideration to the environmental and social dimensions. As per the provisions of article 9 of the Treaty, the five-year rolling work plan shall:

- *Comply with the relevant legislation of the European Union as set out in Annex I, in particular when funding of the European Union is envisaged;*
- *Demonstrate best-value-for-money and broader socio-economic impacts, following donors' funding rules and best international standards and practices;*
- *Give special attention to global climate change and environmental sustainability at the stage of project definition and analysis;*
- *Include the funding opportunities from donors and international financial institutions, in particular through the Western Balkans Investment Framework.*

In due consideration of the requirements set out under the Treaty, the Permanent Secretariat of Transport Community has coordinated the work on preparing the first edition of the five-year rolling work plan under the Treaty framework.

The preparation of the five-year rolling work plan was mainly based on the following:

- The work already undertaken in the framework of the TEN-T Annual Report and its main findings and conclusions;
- The TEN-T compliance conditions and deadlines, as laid down by *Regulation No. 1315/2013 of the European Parliament and of the Council of 11 December 2013 on Union guidelines for the development of the trans-European transport network and repealing Decision No 661/2010/EU;*
- EC Communication no. COM (2021) 820 final of 14.12.2021 *on the extension of the trans-European transport network (TEN-T) to neighbouring third countries* accompanying the newly proposed TEN-T package;

- The Economic and Investment Plan for the Western Balkans and its transport-related Flagship Projects;
- The priority TEN-T projects currently considered by each Regional Participant, as per the latest versions of their Single Project Pipelines.

The adopted methodological approach reflects the fact that the analytical tools to be developed under the Transport Observatory framework have yet to be operationalized; inevitably, this resulted in data scarcity and no demand forecasting analysis being available at the regional level to back-up the future development needs through bottlenecks identification. This impacted in particular the project prioritisation exercise that could only be carried out based on a simplified methodology focusing mainly on pre-identified projects in respect of which political consensus already exists.

In due consideration of the above, the drafting process of the 5 years rolling work plan entailed the following sequence of steps:

- Defining the strategic objectives of TEN-T network development (See Chapter 1);
- Summary presentation of the TEN-T network current situation and compliance rate as well as the forecasted evolution of the compliance indicators in consideration of the currently ongoing and mature projects (Chapter 2);
- An overview of TEN-T Projects currently considered by the Regional Parties for future implementation, definition of the highest-ranked priority projects and setting-up of future implementation milestones and actions. (Chapter 3);
- Summarizing the relevant policy initiatives and development (Chapter 4);
- Drawing the key findings and overall conclusions (Chapter 5).

The overcoming of the methodological shortages upon the full commissioning of the Transport Observatory (the TEN-T database/TODIS and the regional transportation model plus a project appraisal and prioritisation methodology to be agreed in advance with all relevant stakeholders) shall allow for a more consistent project planning exercise at the time of the first revision of the 5 years rolling work plan (due for delivery in 2024). Transport Observatory's analytical tools will facilitate testing, comparison and prioritization of individual projects based on their economic, social and environmental expected outcomes using best international standards and practices. As per the currently considered implementation schedule TODIS will become operational in late 2022, while the regional transport model and project appraisal tool should be ready by mid-2024.

By such time it is also anticipated that the new TEN-T package shall be approved, which will provide additional reasons and impetus for a substantial revision of the 5 years rolling work plan.

1. STRATEGIC OBJECTIVES

Regulation 1315/2013[3] set up an ambitious timeline for the development of the TEN-T Core and Comprehensive Networks to the standards lied down therein by 2030 and 2050 respectively. While the same applies to the South East European Parties, bridging the TEN-T compliance gap should also consider the specific conditions in the region, namely the historical infrastructure lag and the limited available funding.

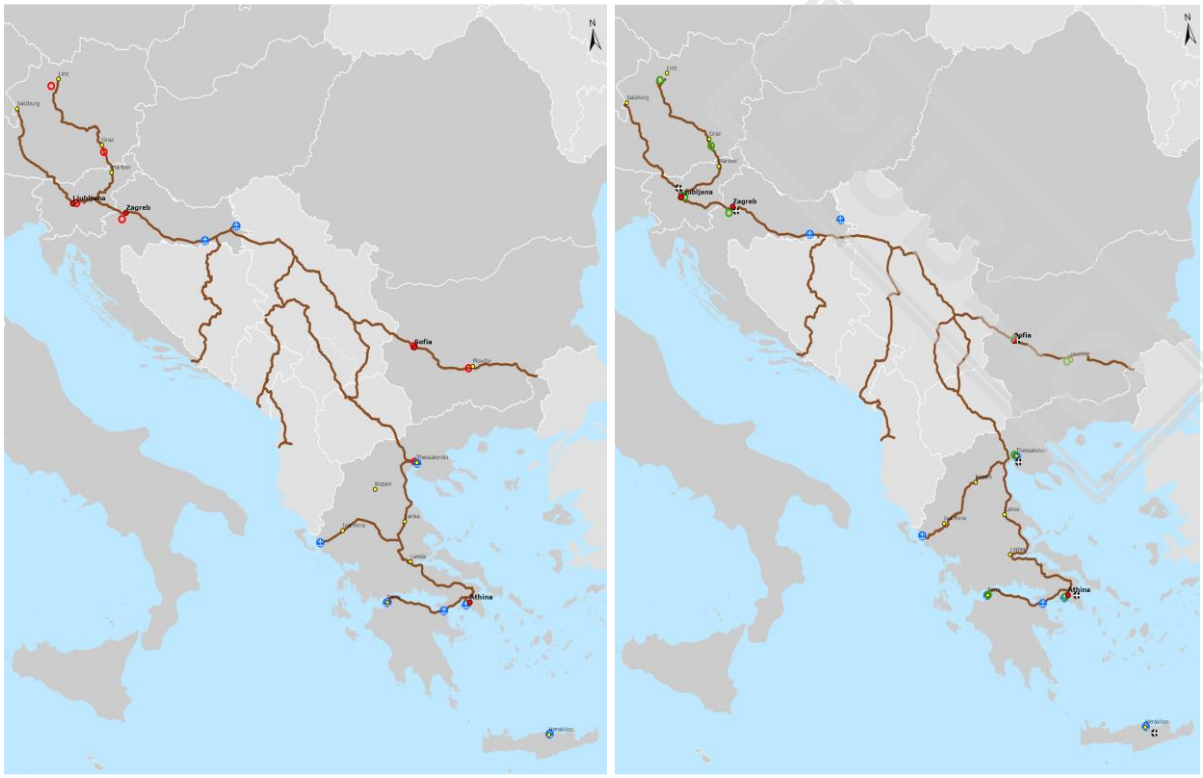
As per the conclusions of the TEN-T Annual Report[4], the progress likely to be achieved should all projects currently under implementation (i.e. with ensured financing) get completed on time seem not sufficient to ensure that the Core Network will be fully compliant by 2030. While additional financing shall be made available and new projects (currently in various preparation stages) shall further advance, it becomes increasingly obvious that simply referring to the compliance indicators and deadlines set up by the Regulation could not form the basis of a realistic and result-oriented TEN-T development strategy for the region.

One of the cornerstones of the European integration path is to connect the economies of the Western Balkans more effectively between themselves and with the EU, by developing a common regional transport market based on the EU acquis. Transport connectivity underpins economic growth, strengthen social and territorial cohesion and ultimately results in people's lives' improvement. To this end, a TEN-T development strategy should focus on delivering an integrated multimodal transport network fostering the corridor approach to planning and investments, embedding the principles of better connectivity within the region and with the EU, safer, climate-resilient, energy-efficient and fit for the digital age networks.

The planning and prioritisation of the indicative TEN-T extension in Western Balkans should basically align to a set of already-established key principles. The dual-layer nature of the TEN-T sets-up different priority levels for the Core and the Comprehensive network respectively. Moreover, the Economic and Investment Plan for the Western Balkans with its pre-identified Flagship Projects narrows down the focus to several essential TEN-T links whose completion is deemed bringing the most significant connectivity gains for the region.

The region's particular importance in the overall European context is also mirrored in the newly-proposed TEN-T package[5] consisting of four proposals aiming at modernising the EU's transport system. The Western Balkans are geographically embedded into the EU, with the neighbouring Member States like Greece and Bulgaria relying heavily on the region's infrastructure for ensuring their connectivity with the EU. A more inclusive approach is the natural consequence of the above and this is duly reflected by the proposed creation of a new Western Balkans Corridor across the region, linking Austria, Slovenia and Croatia to Greece and Bulgaria and covering the territory of all South East European Parties. Once the new TEN-T package shall be adopted, the new Western Balkans Corridor and its associated institutional mechanisms shall likely become an essential tool for the coordinated implementation of the Core Network in the region.

[3] *Source: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2013.348.01.0001.01.ENG*
[4] *Source: https://www.transport-community.org/wp-content/uploads/2021/08/TEN-T-report-2020.pdf*
[5] *Source: https://transport.ec.europa.eu/news/efficient-and-green-mobility-2021-12-14_en*



Railway *Road*

Figure 2. Alignment of the newly-proposed Western Balkans Corridor[6]

While giving due priority to the pre-identified network sections referred to above, design of individual intervention schemes and ranking of competing projects sharing the same priority level should also consider compliance with the following key policy objectives:

1. Enhancing connectivity within Western Balkans and with the European Union

Developing fast and high-quality connections between the South East European Partners and with the European Union will ensure closer ties between the parties, accelerate economic integration, boost investments, speed-up convergence and help bridging the prosperity gap. Existing bottlenecks and missing links will therefore remain among the key matters that should be addressed with priority in the coming years.

2. Improving accessibility and mobility on the TEN-T Network

Improved accessibility supports balanced territorial development by ensuring better access to markets for remote and lagged-behind regions. Increased mobility results in tangible economic benefits like travel time savings, shorten physical distances and creates new links and opportunities for people and business. While accessibility and mobility are generally regarded as potentially competing (if not opposed) transport policy objectives, the characteristics of the transportation system in Western Balkans require a smart balance being achieved between the two of them.

[6] *COM(2021) 812 Annex 3: Alignment of the European Transport Corridors*

3. Building the transport of the future. Towards a smart, sustainable, green, safe and resilient TEN-T network

3.1. Green and sustainable network

Recent changes in EU sector policies propelled by the adoption of the European Green Deal and laid down in the Sustainable and Smart Mobility Strategy have resulted in more and more priority being given to actions mitigating the environmental impact of the transport system, in consideration of the increasing need to curtail GHG emissions and move towards a carbon-neutral economy. At regional level, the vision shift towards a clean, sustainable and smart transport policy has been transposed in the Green Agenda endorsed by the Sofia summit declaration and the Economic and Investment Plan and further mirrored by the Smart Mobility Strategy for Western Balkans rolled-out by the Permanent Secretariat of the Transport Community.

TEN-T development should adequately align to such policy changes ensuring synergy with the objectives and flagships of the Sustainable and Smart Mobility Strategy for Western Balkans (provided in more details under Section 4.1) by promoting actions that would support:

- A modal shift towards more environmental-friendly modes of transport, so that railway and waterborne transport reach their potential in full;
- Decarbonizing road transport.

3.2. Smart Network

EU transport and mobility policy is becoming increasingly oriented towards future-proof solutions, as digitalization is seen as a key element for achieving seamless and efficient intermodality which in turn will result in non-polluting transport modes reaching their full potential. Transposing this policy line into reality would require action on two different levels:

- Including smart & digital elements in all major investments to be further implemented on the TEN-T network;
- Implementing small-scaled interventions targeting specifically smart solutions that would help increase the network's efficiency and reach the full potential of intermodality.

3.3. Safe Network

Transport safety is a key matter of concern in the region, given the huge human and economic costs of accidents and should therefore be addressed as a matter of priority.

TEN-T Network safety improvement requires both policy measures to be delivered alongside the transposition and implementation of the relevant acquis and well-targeted and calibrated infrastructure improvements. The latter would require the following to be implemented:

- Transport safety to become an essential project prioritization criterion;
- Safety-oriented small-scaled interventions are likely to bring quick wins and improve the safety characteristics of the network.

4. EU acquis implementation and associated policy reforms

TEN-T compliance is not solely a matter of infrastructure improvements. Policy reforms and institutional set-up is also a matter, in certain areas like road safety, ITS, users charges, ERTMS, etc. require significant legislative and institutional reforms while soft measures for cross-border transport facilitation might bring standard economic benefits like time and vehicle operating cost savings with only a fraction of the costs of big infrastructure projects.

The ultimate scope of the Treaty is to create a unified transport market and at its very basis lies the transposition of the relevant acquis, including the areas of technical standards, interoperability, safety, security, traffic management, social policy, public procurement and environment, for all modes of transport excluding air transport, as per the provisions laid down by the acts specified in Annex 1 of the Transport Community Treaty.

A stepwise approach will be necessary to address and programme the implementation of policy reforms. For EU Acquis which is a part of the Annex I of the TCT and that is not currently subject of the Action Plans the transposition plans of each regional partner will be screened in order to find a common denominator that leads to forward looking planning for the Region.

The transposition and implementation of EU Acquis included in the Action Plans will be subject to monitoring and revision via the yearly reports. The experts in the Technical Committees are constantly consulted and inform TCT on the evolution of their legislation based on the targets set in the Action Plans. Moreover, consequential updates of each Action Plan can be done upon reasoned request from Regional Partners and with the consent of the Regional Steering Committee.

Transport Community Permanent Secretariat will assist all Regional Partners in finding the best possible solution to address their need of capacity building. Constant cooperation is in place with DG NEAR's services catering for dedicated capacity building instruments, such as TAIEX and TWINNING. Also, capacity building programmes are financed by DG MOVE and the Agencies under its mandate – the European Agency for Railways (ERA), the European Climate Infrastructure and Environment Executive Agency (CINEA) and the European Maritime Safety Agency (EMSA).

To ensure cross-disciplinary dialogue stemming from areas where greening of transport is concerned, concerted actions in terms of capacity building can be envisaged with other relevant services, e.g. with DG ENV and DG CLIMA, as well as with Ministries of Environment is the Regional Partners.

2. TEN-T INFRASTRUCTURE DEVELOPMENT OVERVIEW

This chapter provides an overview of the state of play of development of the indicative extension of the TEN-T network to Western Balkans. The current status will draw data from the Annual Report on Development of the TEN-T network, endorsed by the Regional Steering Committee in July 2021.

2.1. Railways

The TEN-T railways network consists of two layers: Core and Comprehensive Networks. **The total length of the Comprehensive is 3,895 and 2,602 km of the Core** and it consists of three corridors (Vc, VIII and X) and seven routes.

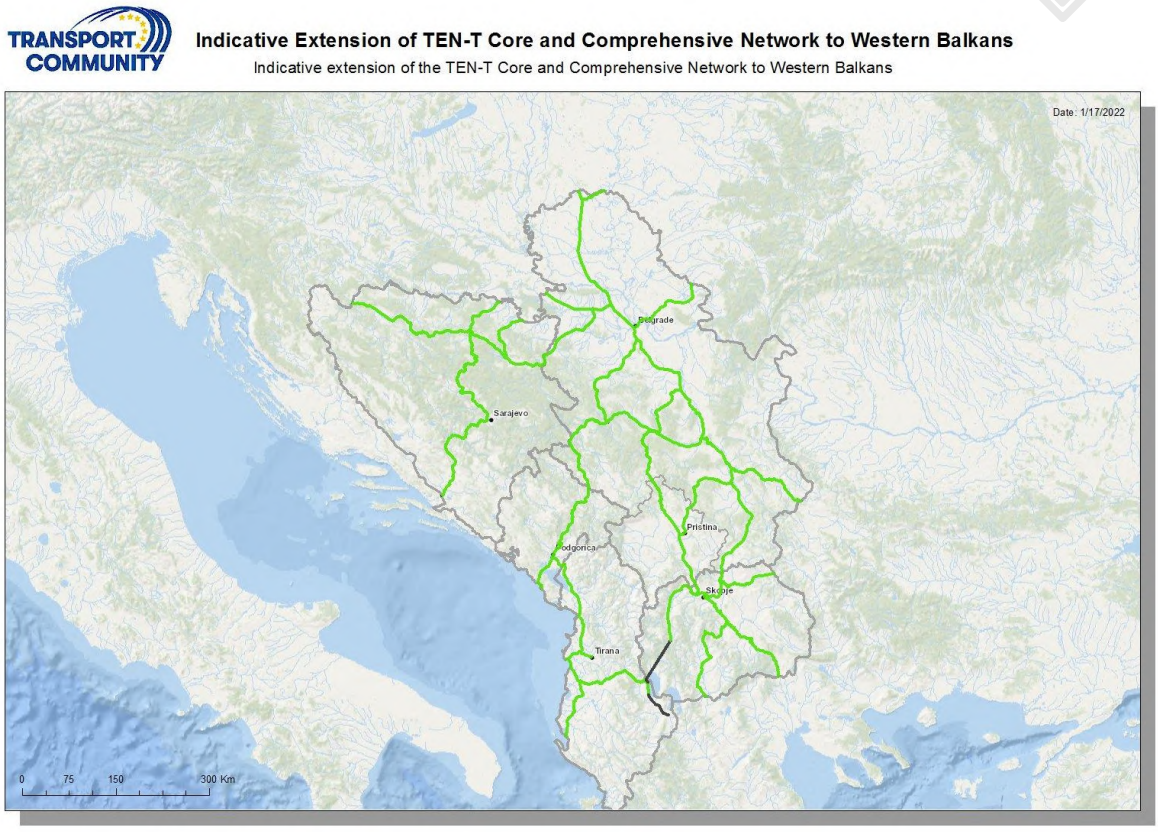


Figure 3. Indicative extension of the TEN-T Core and Comprehensive Railways Network to the Western Balkans

Regulation (EU) No 1315/2013 defines the transport infrastructure requirements as well as the specific requirements raised from the priorities for railway infrastructure development:

- **Electrification** - railways network to be electrified by 2030 (including sidings where necessary);
- **Axle load**: Freight lines 22.5 t axle load by 2030.
- **Line speed**: Freight lines must allow 100 km/h by 2030 (no speed requirement for passenger lines);
- **Train length**: Freight lines to allow for 740 m trains by 2030;
- **Track gauge**: Nominal track gauge for new railway lines 1.435 mm;
- **European Railway Train Management System (ERTMS)** / signalling system: Core network to be equipped with ERTMS by 2030.

Railway **electrification** compliance of the operational network is already **73% on the Core and 54% on the Comprehensive Network**. Certain parts of the networks, mainly in **Albania** and **North Macedonia** (Corridor VIII), are still in the construction phase and are not part of this analysis.

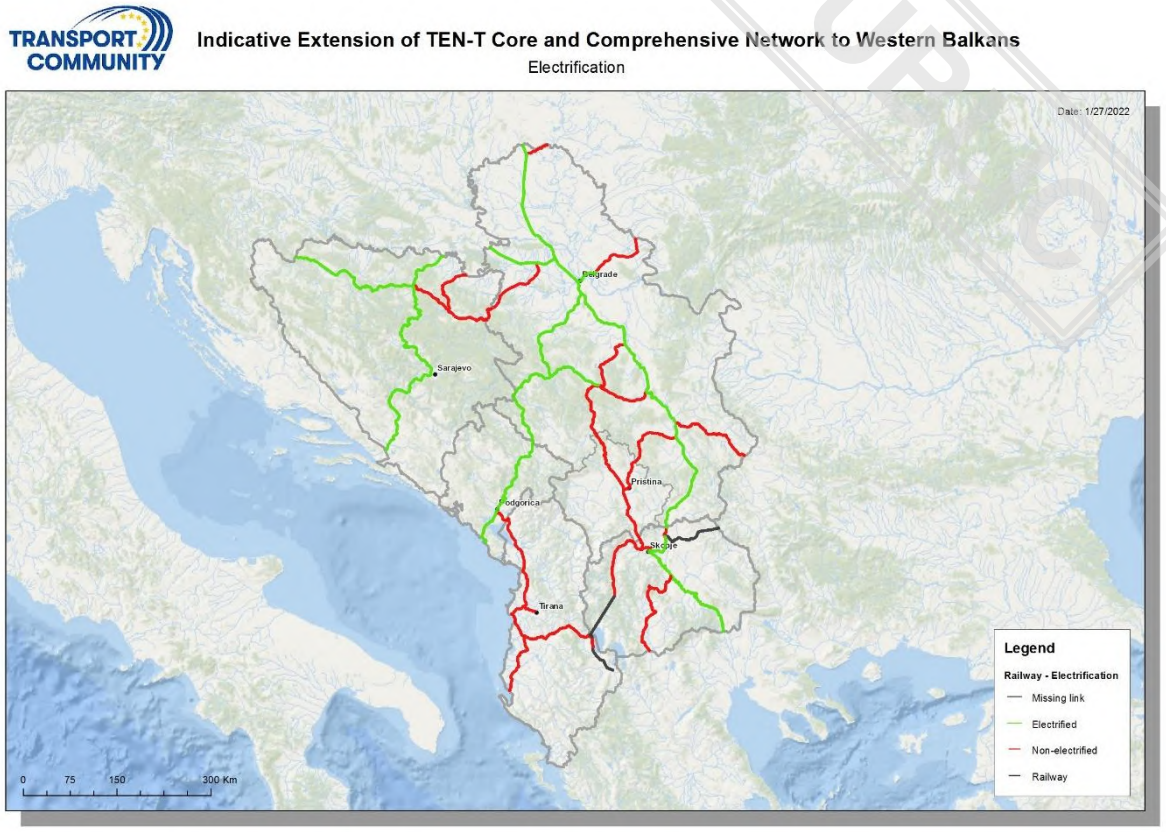


Figure 4. Maps of Electrified lines

For **freight axle load**, the compliance parameter of 22.5 t per axle is already at **87% on Core and 72% on Comprehensive Network** as per 2021 data. The deficiencies are in **Albania, Kosovo and Bosnia and Herzegovina** because of poor maintenance mainly.

For **freight line design speed, 72% of the Core network** is compliant with the parameter of 100 or more km/h as per 2021 data and **61% on the Comprehensive network**. Related to the **operational speed**, **only 15% of the operational Core network** has an operational speed of more than 100 km/h and **13% of the Comprehensive Network**. The deficiencies are mainly in **Albania, Montenegro, Serbia, Kosovo and Bosnia and Herzegovina**.

For **freight train length**, none of the networks is compliant with the parameter of **740 m** or longer sidings for trains. However, **79.5% of the Core Network and 73.4% of the Comprehensive can accommodate trains longer than 500 m**. The region mainly meets the 500 m parameter except for **Albania**. This, however, needs to be read with the above-mentioned caveats that the situation continues to improve and that there are differences here and there between nominal compliance and actual operational possibilities. For example, a line may be fit for 740 m trains but does not have enough sidings to turn that possibility into reality.

The railway track gauge is already compliant at a **maximum of 100%** as per 2021 data. There is one notable exception in **Serbia** (the Mokra Gora narrow gauge railway line), but this is not part of the Core

and Comprehensive Network and is only used for touristic purposes. The situation has been the same for many years and does not affect interoperability.

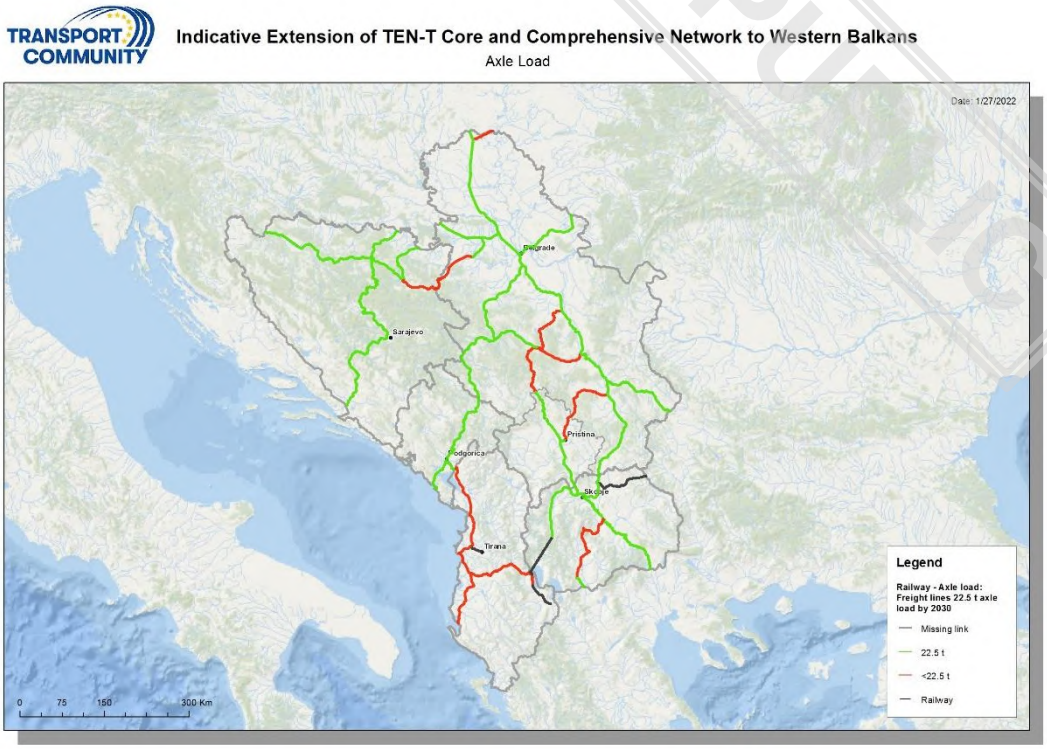


Figure 5. Maps of Axle load per line

Currently, **there are no European Railway Train Management Systems** in operation throughout the entire network. Almost all Regional Partners partly transposed the interoperability directive (third or fourth railway package). Some published a certain number of TSIs, but no one implemented them in practice.

Looking at ongoing projects (presented in TEN-T Annual Report) and planned projects, there are intentions to implement European Train Control System (ETCS) level 1 or even 2 in Albania, Serbia and North Macedonia. These current plans don't cover the whole Core Network or even the majority of it which leads to conclusion that there is a strong necessity of more focus on the implementation of the ERTMS.

On top of this, the recently proposed Western Balkan Core Corridor will bring additional investments and users which are additional reasons for full TEN-T compliance of the Corridor.

Since the implementation of ERTMS is not just procurement and installation of equipment, according to the European experience there is also a need for serious capacity building of the railways systems which will assure proper operation and benefiting from the system.

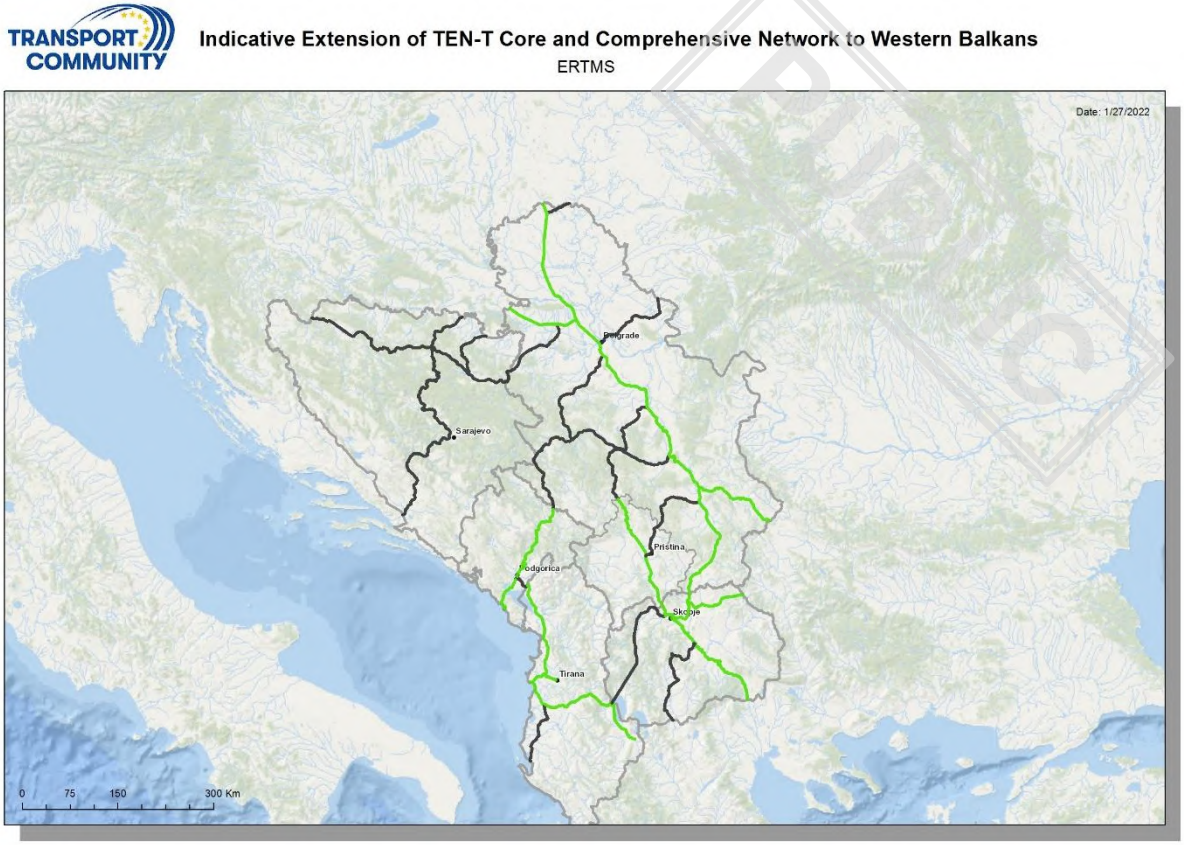


Figure 6. Maps of ERTMS future implementation

ERTMS deployment (track-side) does not exist as per 2021 data. ERTMS deployment is the greatest challenge in terms of TEN-T parameters, and progress is slower than anticipated or wished. **Albania, Montenegro, North Macedonia and Serbia** as indicated on the Figure 6 have certain number of ongoing, mature and projects under preparation which foreseen plans for implementation of ERTMS on around 1800km or around 50% of the Indicative Extension Comprehensive Network. The majority of the projects foreseeing ERTMS are projects under preparation.

However, all Regional Partners should make additional efforts in further transposition and implementation of the interoperability directive.

The current condition of the network was assessed based on data received from Regional Partners on the current state of their tracks. To this purpose, conditions have been divided into five parts based on the ratio between current maximum operational speed and maximum designed speed on the network. This was done to better describe the current condition of the railways.

As for the condition, **30% of the Core Railway Network and 28% of the Comprehensive is reported to be in very good and good condition**, where approximately 70-100% of designed speed can be achieved. Approximately 26% of the sections are reported to be in average condition, with wide variations in the maximum allowed speed.

The **greater part of the Core (44%) and Comprehensive Network (45%) is in poor or very poor condition, where the designed speed achieved averages only 50%.** An important issue that should be mentioned is the reliability of the system for assessing the condition. On several sections, there was a large discrepancy between the reported condition, designed, and maximum allowed speed.

Furthermore, several different systems seem to be in use for assessing conditions in different Regional Partners.

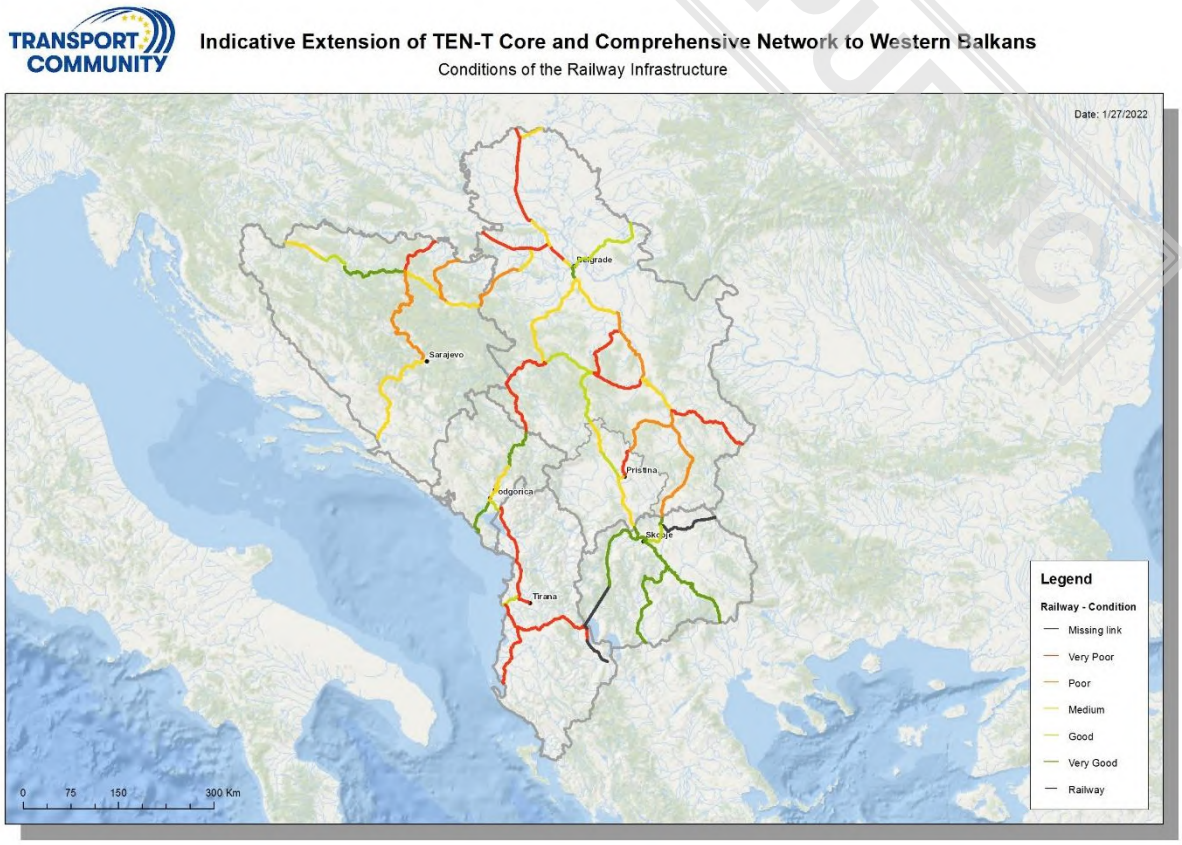


Figure 7. Railway infrastructure condition map

2.2. Roads

As per the provisions of Regulation no. 1315/2013, TEN-T comprises a dual-layer structure consisting of the Comprehensive and Core Networks, the latter consisting of the prioritized sections of the Comprehensive Network.

The total length of the TEN-T road network in the Western Balkans is 5,287.41 km, of which 3,540.55 km are on the Core Network.

The network's current layout is given below.

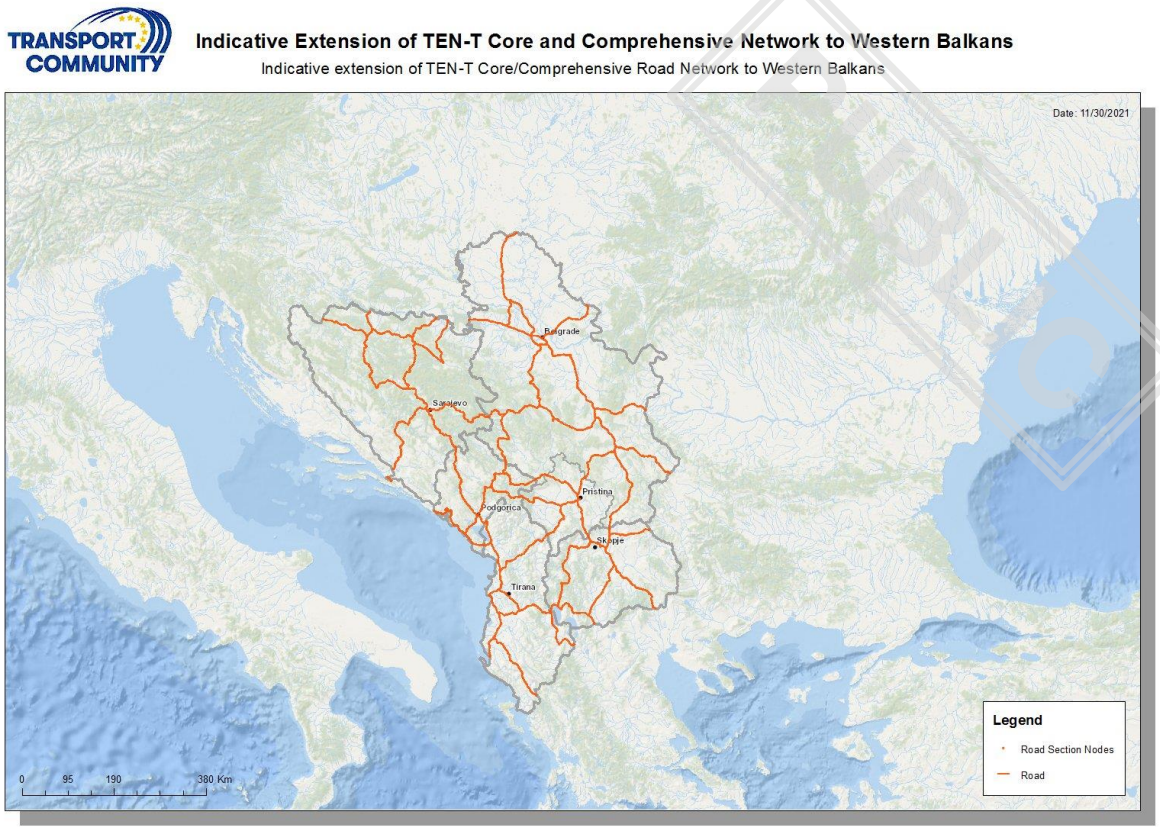


Figure 8. Indicative Extension of TEN-T Core and Comprehensive Road Network to Western Balkans

Road infrastructure components are laid down under art. 17 of the TEN-T Regulation[7]. Art. 18 further defines compliance requirements while development priorities are dealt with under art. 19 deals.

The TEN-T road network is deemed to include high-quality roads (motorways, expressways, or conventional strategic roads) specially designed and built for motor traffic with adequate levels of safety.

Based on the findings of TCT Secretariat Annual Report[8] on Development of indicative TEN-T extension of Core and Comprehensive Network to Western Balkans, **45% of Core Network and 52% of Comprehensive network are compliant with the TEN-T standards related to infrastructure profile and conditions**, as provided in Table 1 below.

[7] *Source: https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=COM%3A2021%3A812%3AFIN*
[8] *Source: https://www.transport-community.org/wp-content/uploads/2021/08/TEN-T-report-2020.pdf*

Table 1. TEN-T Core and Comprehensive Road Network Compliance (infrastructure profile and condition)

Road profile	Road condition	Core Network (km)	Comprehensive Network (km)
Motorway	Very Good	750.02	102
	Good	670.12	24
	Medium/Poor/Very Poor	144	0
Expressway	Very Good	28.3	0
	Good	140	69
	Medium/Poor/Very Poor	71.44	0
Conventional road	Very Good	66.9	94
	Good	804.76	617.517
	Medium/Poor/Very Poor	865.01	840.334

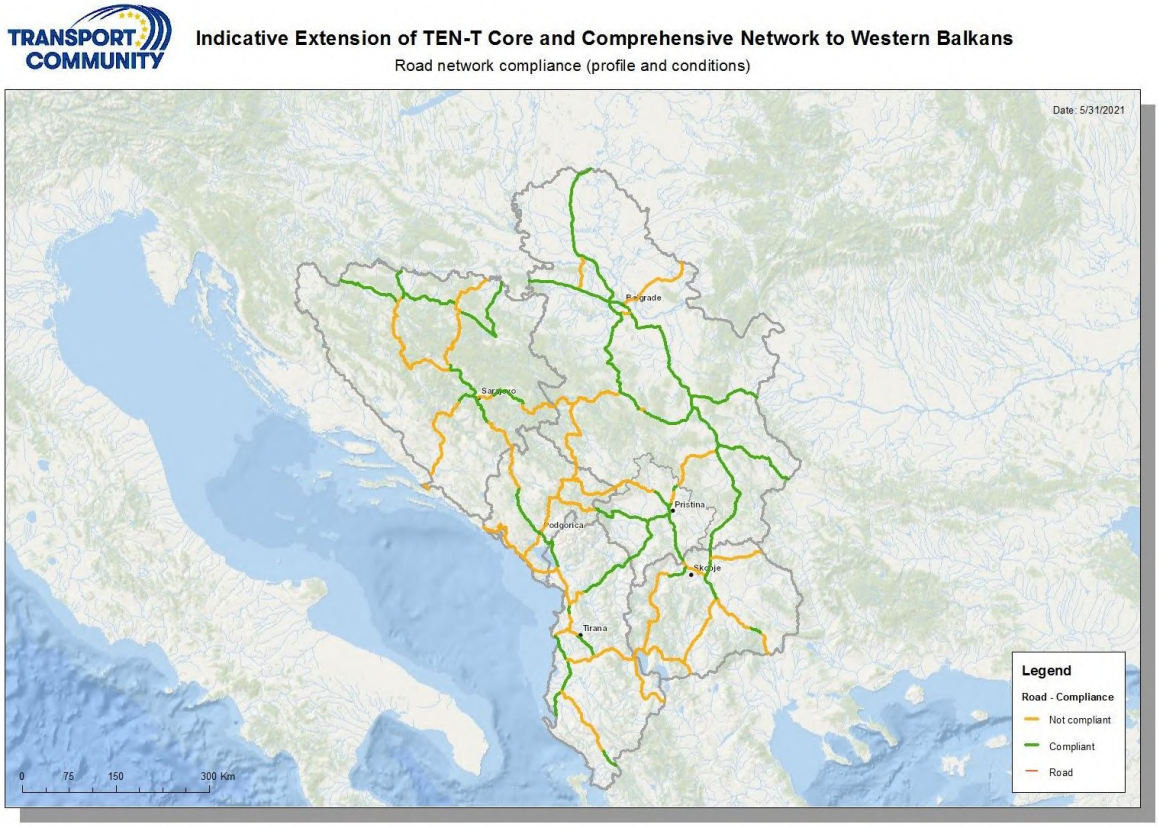


Figure 9. Indicative Extension of TEN-T Core and Comprehensive Road Network to Western Balkans – Compliance map

Compliance with the provisions of EU Directives on road tunnels, tolling interoperability and ITS should be ensured also. Additional conditions are imposed for the Core network, namely:

- Stricter application of road profile requirements (except for some clearly defined situations, roads should be either motorways or expressways);
- Development of rest areas on motorways approximately every 100 km;
- Availability of alternative fuels.

Overall compliance with ITS, tolling and safety Directives have been separately dealt with, given structural/institutional reforms currently being addressed under the dedicated Action Plans of the Transport Community Permanent Secretariat. Progress will be present in a policy-related chapter in this document.

However, **road maintenance needs to be more systematic and performance-oriented** to ensure assets preservation and proper road surface condition.

Considering that proper maintenance policies identified as a priority and included in the Road Action Plan[9] backed by adequate funding will be instrumental for ensuring long-term compliance with TEN-T standards in the region.

The overall compliance rate is practically zero for the **deployment of alternative fuels** in the Western Balkans. More efforts will be required in the coming period to ensure adequate deployment of alternative fuel infrastructure identified as priorities and included in the Road Action Plan. Reaching TEN-T compliance standards will therefore require **systematic and target-oriented public intervention**, to be undertaken within the framework provided by Directive 2014/94/EU (currently under revision to adjust it to the more ambitious targets set out by the European Green Deal).

The alternative fuels network in the Western Balkans is largely undeveloped, with most of the existing stations being set up by private investors with a bottom-up approach. Following market demand, refuelling stations are mostly located in the region's largest cities while deployment on the TEN-T Network is close to zero (given the low penetration rate of alternative fuel vehicles in the region). Only a few of the above listed alternative fuel stations are located on TEN-T and only 8 electrical re-charging stations are deployed on Corridor X in Serbia, resulting in approx. 400 km of the TEN-T Core Network becoming compliant with the sufficiency requirements for electric vehicle charging points (every 60km).

2.3. Inland waterways

The TEN-T Regulation 1315/2013 sets out the transport infrastructure requirements for the Inland Waterways (IWW) transport mode and the connected port infrastructure components. According to TEN-T Regulation, the Inland Waterway network consists of Core and Comprehensive IWW Ports.

On basis of the indicative extension of the TEN-T for the Western Balkans, the following Inland waterways (rivers) are included:

- Danube in Serbia
- Sava in Serbia and Bosnia and Herzegovina
- Tisa in Serbia (and Hungary)

[9] *Source: https://www.transport-community.org/wp-content/uploads/2020/11/Road-Action-Plan.pdf*

As regards the ports of the extended TEN-T IWW network in the Western Balkans, there are all together 4 core IWW Ports. Two Core Inland Waterway Ports in Bosnia and Herzegovina are the Port of Brčko and Port of Bosanski Samac. In Serbia, the two current Inland core ports are Port of Belgrade and Port of Novi Sad. There are no comprehensive IWW ports according to the extension of the TEN-T network to the Western Balkans.

Inland waterway transport infrastructure components are defined within Article 14 of the TEN-T Regulation, whereas the Art. 16 defines priorities for inland waterway infrastructure development. Article 15. further defines compliance requirements.

The infrastructure component of inland waterway comprises rivers; canals; lakes; related infrastructures such as locks, elevators, bridges, reservoirs and associated flood-prevention measures which may bring positive effects to inland waterway navigation; inland ports, including the infrastructure necessary for transport operations within the port area; associated equipment; telematic applications, including RIS; the connections of the inland ports to the other modes in the trans-European transport network.

The priorities set out for Inland waterways according to the TEN-T regulation are:

a) for existing inland waterways: implementing measures necessary to reach the standards of the inland waterways class IV;

(b) where appropriate, achieving higher standards for modernising existing waterways and for creating new waterways by the technical aspects of the infrastructure of the ECMT, to meet market demands;

(c) implementing telematics applications, including RIS;

(d) connecting inland port infrastructure to railway freight and road transport infrastructure;

(e) paying particular attention to free-flowing rivers which are close to their natural state and which can therefore be the subject of specific measures;

(f) the promotion of sustainable inland waterway transport;

(g) modernisation and expansion of the capacity of the infrastructure necessary for transport operations within the port area

The compliance indicators for TEN-T in inland waterways are the following: CEMT requirements for class IV; Permissible Draught (min 2.5 m); Height under bridges (min. 5.25 m); RIS availability/implementation.

In addition, compliance indicators used for Core inland ports are the following: CEMT connection (Class IV waterway connection); Railway connection; Connection to the road; Availability of clean fuels; Availability of at least one freight terminal open to all operators in a non-discriminatory way and application of transparent charges.

In the TEN-T Annual report for the year 2020 produced by the TCT secretariat, the Inland waterways in the Western Balkans, as well as the Inland core ports, were assessed according to compliance with the above-mentioned indicators.

The network's current layout regarding the TEN-T extension to IWW and Ports (including IWW and Maritime ports) to the Western Balkan is given in the image below.

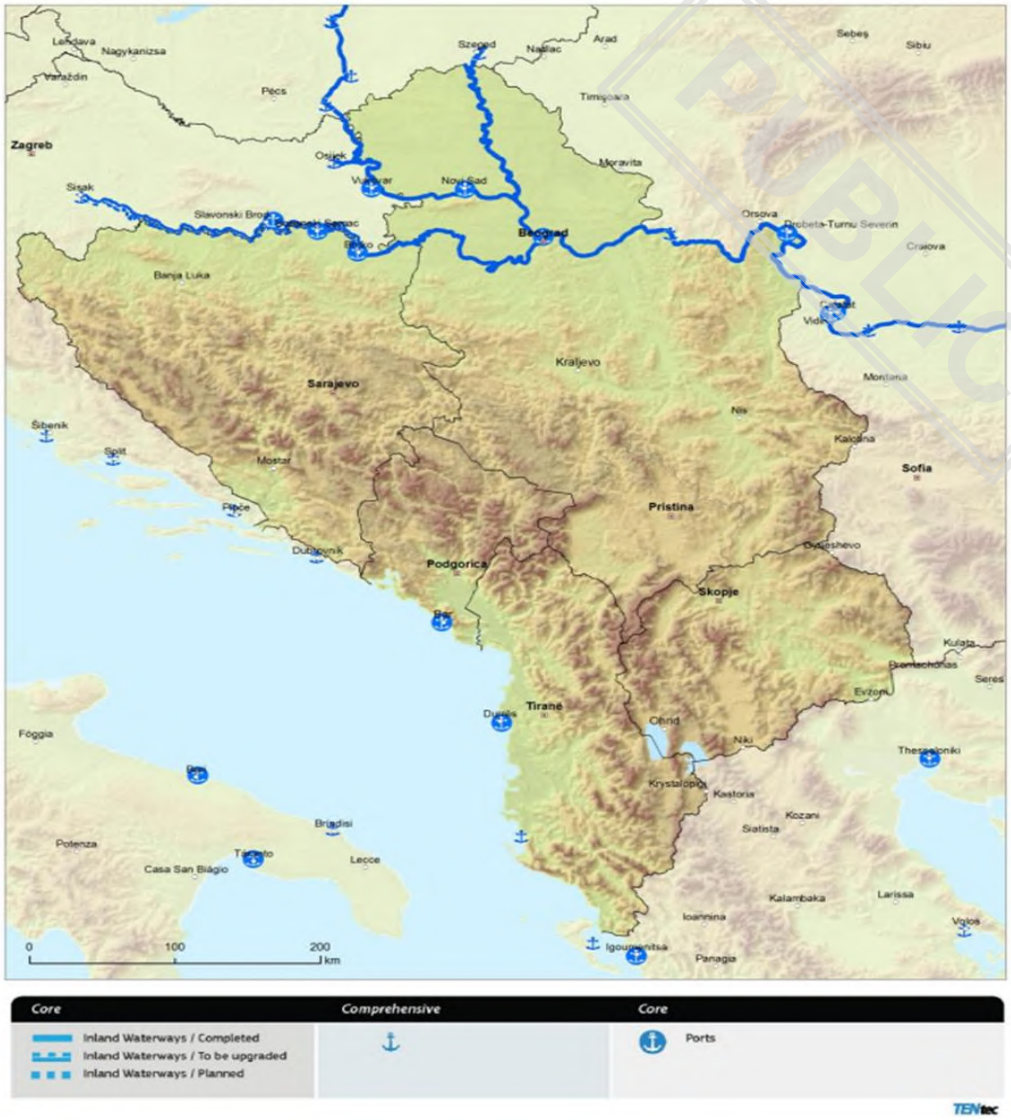


Figure 10. TEN-T extension to IWW and Ports

According to the findings of the TCT Secretariat Annual Report, 2020 related to compliance of core inland ports of the extended TEN-T to the Western Balkans, the 4 IWW WB ports are compliant with all requirements apart from clean fuels availability. Regarding the Port of Samac, though fully privately owned, according to data obtained from port representatives, it does comply with the required availability of at least one freight terminal open to all operators in a non-discriminatory way and application of transparent charges. All ports comply with the requirements of railway connection, road connection, CEMT connection and terminal availability. The following is shown in the table below:

Table 2. IWW Ports Compliance indicators

Port name	Rail connection	Road connection	CEMT Connection	Clean fuels availability	Terminal availability
Belgrade	YES	YES	YES	NO	YES
Novi Sad	YES	YES	YES	NO	YES
Brcko	YES	YES	YES	NO	YES
Bosanski Samac	YES	YES	YES	NO	YES

Source: Transport Community Permanent Secretariat, based on direct inquiry to Regional Partners and ports

According to the findings of TCT Secretariat Annual Report 2020, related to Inland waterways compliance indicators, the only unfulfilled indicator is the draught on the Sava on network section km 210.8 - 178.0 on the Serbia - Bosnia and Herzegovina border, which is less than 2.5 m, and compliance with RIS on the Tisa River, where RIS has not yet been deployed. All other indicators are compliant, which overall gives a very good state of play in terms of compliance fulfilment of inland waterways, especially in comparison to other modes.

2.4. Maritime transport

The TEN-T Regulation 1315/2013 sets out the maritime transport infrastructure components requirements and priorities for maritime infrastructure development.

As regards the Maritime Ports of the extended TEN-T network to the Western Balkans, there are two Core Maritime Ports, namely the Port of Bar in Montenegro and the Port of Durres in Albania. In addition, the port of Vlore in Albania is defined as the only comprehensive maritime port of the extended TEN-T network to the Western Balkans.

Maritime transport infrastructure components are defined within Article 20 of the TEN-T Regulation, whereas the Art. 22 and 23 define the maritime transport infrastructure requirements and priorities for maritime infrastructure development.

The Infrastructure components related to Maritime transport according to the TEN-T Regulation comprise of maritime space; sea canals; maritime ports, including the infrastructure necessary for transport operations within the port area; the connections of the ports to the other modes in the trans-European transport network; dykes, locks and docks; navigational aids; port approaches and fairways; breakwaters; motorways of the sea; associated equipment; telematic applications, including e-Maritime services and VTMIS.

The maritime transport infrastructure requirements according to TEN-T Regulation must ensure that maritime ports are connected with railway lines or roads and, where possible, inland waterways of the comprehensive network, except where physical constraints prevent such connection. Maritime ports should offer the availability of alternative fuels and any maritime port that serves freight traffic should offer at least one terminal which is open to users in a non-discriminatory way and which applies

transparent charges. Furthermore, it is stipulated that sea canals, port fairways and estuaries connect two seas, or provide access from the sea to maritime ports and correspond at least to inland waterway class VI.

In addition, the maritime transport infrastructure requirements according to TEN-T include equipment necessary to assist the environmental performance of ships in ports, in particular, reception facilities for ship-generated waste and cargo residues in accordance with Directive 2000/59/EC[10] and in compliance with other relevant Union law.

It also defines the implementation of VTMIS and SafeSeaNet as provided for in Directive 2002/59/EC[11] and deployment of e-Maritime services, including in particular maritime single window services, as provided for in Directive 2010/65/EU.

In the TEN-T Annual report for the year 2020 produced by the TCT secretariat, the Maritime ports in the Western Balkans were assessed according to the compliance with the above-mentioned indicators as defined by TEN-T regulation.

According to the findings of the TCT Secretariat Annual Report 2020, the compliance of core Maritime ports of the extended TEN-T to the Western Balkans is satisfactory as shown in the table below.

Table 3. Maritime Ports Compliance indicators

Port name	Rail connection	Road connection	CEMT Connection	Facilities for ship generated waste	Clean fuels availability	Terminal availability	VTMIS
Durres	Partially	YES	N/A	YES	NO	YES	NO
Bar	YES	YES	N/A	YES	NO	YES	Partially

Source: Transport Community Permanent Secretariat, based on direct inquiry to Regional Partners

As seen in the table, Non-compliance for the port of Durres relates to the partial railway connection, because currently only the eastern port terminal is linked to the national railway network, therefore its multimodal dimension at the moment is very limited. As for compliance with VTMIS, according to the available data, VTMIS has not yet been fully implemented in Albania. Regarding compliance with clean fuel availability, the Port of Durres is non-compliant and at the moment there are no planned projects to address this. The Port of Durres is currently compliant in road connection, facilities for ship-generated waste and terminal availability. CEMT connection to inland waterways is not applicable for the Port of Durres or Port of Bar.

Regarding Port of Durres and Port of Vlore in Albania, it is important to mention that according to the National Sectoral Plan of Maritime Transport and Port Infrastructure it was decided that the actual Port of Durres and Port of Vlora, would be converted into modern large marinas.

The actual commercial ports of Durres will be transferred to the Integrated Commercial Port of Durres in Porto Romano (9 km to North West from Durres) and the actual Port of Vlora will be transferred to the Integrated Commercial Port of Triport, Vlora (11 km to North from Vlora).

[10]*Source: https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex:32000L0059*
[11]*Source: https://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX%3A32002L0059*

The Port of Bar is compliant with the indicators for railway connection, road connection, facilities for ship-generated waste and terminal availability. Non-compliance for this port concerns clean fuel availability, while VTMIS is partially compliant as it has been partially implemented in Montenegro. Currently, the Port of Bar is also non-compliant with the availability of clean fuels, and currently, no planned projects have been reported to address the failure to comply with this indicator.

As for the comprehensive maritime Port of Vlore in Albania, it is compliant with the indicators: facilities for ship-generated waste, road connection and terminal availability, while for railway connection and VTMIS, it is not compliant, as Albania has not yet implemented VTMIS at national level. The indicators CEMT connection and clean fuels availability are not applicable, as no inland waterways connection exists and being the comprehensive port, the clean fuels availability requirement does not apply to Port of Vlore.

2.5. Airports

Currently, ten airports (Tirana, Sarajevo, Banja Luka, Pristina, Podgorica, Skopje, Ohrid, Belgrade, Kraljevo, Nis) are part of TEN-T Comprehensive in Western Balkans, out of which six are located on the Core Network (Tirana, Sarajevo, Pristina, Podgorica, Skopje, Belgrade). Figure 11

Figure 11. Indicative extension of the TEN-T Comprehensive and Core Airports to the Western Balkans Region[12]

[12] *Source: COMMISSION DELEGATED REGULATION (EU) 2016/758 of 4 February 2016 amending Regulation (EU) No 1315/2013 of the European Parliament and of the Council as regards adapting Annex III thereto*

The compliance indicators for airports are derived from the TEN-T Regulation 1315/2013 where they are mentioned as infrastructure requirements, and they are as follows:

- Railway connection;
- Clean fuels -Only applicable for the Core Network Airports;
- Terminal availability - At least one terminal is open to all operators in a non-discriminatory way and applies transparent, relevant and fair charges.

Connection to other modes - A key condition to ensure interoperability of the airports of TEN-T Network is their connection to the railway network. Currently, no airports have direct railway connections.

Availability of alternative fuels - Currently, no fixed storage tank facilities for aviation biofuel are reported to be in use in Podgorica, Belgrade, Skopje and Pristina. It has to be pointed out that this criterion is to be applied according to the market needs and that airports need to be prepared to make available alternative clean fuels when needs arise as cited in the regulation, 'for air transport infrastructure: capacity to make available alternative clean fuels.' Regarding the availability of alternative clean fuels for airport ground services (e-mobility, hydrogen, CNG, LPG); Bosnia and Herzegovina and Serbia reported usage of alternative fuels to some extent for running the airports and airport ground services in Sarajevo, Belgrade, Nis and Kraljevo airports. Data is not available for other Regional Partners.

Terminal availability- All airports are open to international traffic and have foreign air carriers flying from/to them. Some of the airports such as Sarajevo reached/were close to reaching their capacity limits before the COVID-19 pandemic. However, since the COVID-19 pandemic impacted severely air transport, actual capacity limits and utilisation will be able to be better assessed after the recovery of the air market.

Table 4. Compliance indicators- airports

Regional Partner	Airport	Connection to Railway	Connection to Motorway/ Expressway	Availability of alternative fuels		Terminal availability
				tank facilities for aviation biofuel	availability of alternative fuels for airport ground services	
Albania	Tirana	No	Yes	Data not provided	Data not provided	Yes
Bosnia and Herzegovina	Sarajevo	No	Yes	Data not provided	Yes	Yes
	Banja Luka	No	Yes	Data not provided	Data not provided	Yes
North Macedonia	Skopje	No	Yes	No	Data not provided	Yes
	Ohrid	No	Yes	Data not provided	Data not provided	Yes
Kosovo	Pristina	No	Yes	No	Data not provided	Yes
Montenegro	Podgorica	No	Yes	No	Data not provided	Yes
Serbia	Beograd	No	Yes	No	Yes	Yes

	Nis	No	Yes	Data not provided	Yes	Yes
	Kraljevo	No	Yes	Data not provided	Yes	Yes

Source: Transport Community Permanent Secretariat own assessment

3. PRIORITY PROJECTS

3.1. Methodological aspects

The current network status in terms of compliance with TEN-T standards has formed the object of the TEN-T Annual Report and has been presented in brief under Section 2. The current section will include the following:

- an overview of the region's plans on network development, to estimate future compliance rates by 2030 (the deadlines set-up under the EU Regulation 1315/2013 for Core Network completion)
- a project ranking exercise aimed at identifying the top priorities for the region in terms of TEN-T network development;
- a list of concrete actions and milestones for the Regional Partners to focus upon in the coming years in order to ensure the proper implementation of the priority projects.

For the scope of the analysis, a common approach was followed on all transport modes dividing projects in three categories:

- **On-going projects** – projects with funding ensured and for which construction is either ongoing or under tendering/preparation.
- **Priority projects eligible for funding** – **mature projects** for which a comprehensive evaluation is available based on a completed feasibility study, and if available, additional full set of project documentation, in accordance with EU procedures for Programming and Procurement Rules.
- **Priority projects for preparation** – **non-mature projects** which require full project preparation and project evaluation to determine their feasibility. These projects are not ready for implementation but funding is required to carry out the necessary preparatory work.

Should be noted that the main criterion against which the projects were split refers to the securing (or potential for securing) funding. "On-going" doesn't automatically mean that works are under execution for all the projects, for some of projects it means that the funding arrangements have been secured. Likewise, "maturity" doesn't necessarily equal to readiness for implementation (technical status of projects defined as "mature" could vary significantly) but preparedness for safeguarding financial resources.

3.2. Overview of TEN-T development plans in the region

Transport corridors as coordinated transport networks that enable the movement of people and goods **serve to facilitate faster, smoother and more efficient transit and enhance regional connectivity**. This section provides a detailed overview of TEN-T development plans in Western Balkans for all transport modes. To highlight the trans-boundary focus of the document, information has been grouped around the major transport axes in the region. Also, to facilitate projects' identification, denomination of former Pan-European Corridors and SEETO Routes was kept.

3.2.1. Railway projects

Railway projects are described as per respective Corridors and Routes, to make it easier for the readers to geographically locate the project. The summary table and project fiches will provide detailed information on all the projects.

3.2.1.1. Former Pan-European Corridor Vc

The Mediterranean Corridor (Corridor Vc) connects Bosnia and Herzegovina to Central Europe in the north and the Port of Ploce on the Adriatic coast in Croatia in the south and therefore is part of the Indicative extension of the Trans-European Transport Network (TEN-T) Core and Comprehensive Network to the Western Balkan with a length of 428 km.

Since this Corridor passes Bosnia and Herzegovina as the only regional partner the Overhaul and modernization of the railway section Doboj – Rasputnica Miljacka (Sarajevo) - 172 km is the only project which is also identified as a **Flagship 2 in the EU's Economic and Investment Plan for the Western Balkans (EIP) 2021-2027**. This project, together with the already ongoing project for modernisation (Samac – Doboj)[13], will cost more than EUR 0.5 billion EUR and it will improve the condition of the whole railway corridor.

The project will result in savings in vehicle operating costs, transport time, maintenance costs and will enhance the capacity and reliability of the railway sections and traffic safety. It is expected to contribute to the modal shift from road to the railway and, thereby, present environmental and road safety benefits. Thus, the project also contributes to climate change mitigation.

3.2.1.2. Former Pan-European Corridor VIII

The hinterland connection between the east and west, between the Black and the Ionian Sea, is done via Corridor VIII, which is passing through Albanian, Bulgarian and Macedonian territory. The eastern part of Corridor VIII (from Skopje to the Black Sea) is part of the indicative extension of the TEN-T Core Network and the western part from Skopje to the Ionian Sea is part of the Comprehensive Network.

The railway Corridor VIII is only partly complete, at present there is a single-track line in Albania and a single-track line in parts of North Macedonia. The Corridor is mostly completed in Bulgaria comprising both single and double track lines. The line is already in existence in Albania from Durres - Lin, although upgrading and modifications will be needed. From Lin to Kičevo (66 km) new construction will be required, and reconstruction in the almost whole stretch from Skopje to Kičevo (103km) in

[13] *Source: Development of indicative TEN-T extensions of the Comprehensive and Core Network in Western Balkans*

North Macedonia. Implementation of this project will start after the significant progress on the eastern part of Corridor VIII. However, the expected completion of Corridor VIII in North Macedonia is 2030.

Therefore, the importance of the construction of new railway lines on this corridor, mainly in North Macedonia is crucial together with the modernisation of part of the existing railway lines which are in bad shape, mainly in Albania.

For this corridor to serve its purpose it needs at least the following mature projects planned to be executed:

- Corridor VIII Railway Albania: Reconstruction of Railway Line Durres to Rrogozhine.
- Corridor VIII Railway North Macedonia: Construction of the railway section of corridor VIII Kumanovo – Beljakovce – Kriva Palanka – Deve Bair border with Bulgaria[14]. These sections are recognised as priorities and as a part of **Flagship 1 project in the EIP**;
- Corridor VIII Railway North Macedonia: Construction works of the railway section along the corridor VIII Kicevo – Border with Albania

Also, the following projects which are under preparation will contribute to improved connectivity for the region:

- Corridor VIII Railway Albania: Rehabilitation of Durres - Pogradec - Lin Railway Line and Construction of New Line Lin - Border with North Macedonia.
- Construction of the new railway Pogradec – Korca – border to Greece.

When all these projects worth EUR **1.95 billion** will be finished, 170 km of railway lines will be reconstructed and 210 km will be built. All projects mentioned above are planned to be finished by 2030 when Corridor VIII can be fully functional.

3.2.1.3. Former Pan-European Corridor X

Railway Corridor X is one of the most important and most utilised Corridors in the region. Corridor X is part of the indicative extension of the TEN-T Core Network and is stretching from north to south across Serbia and North Macedonia on the Western Balkan segment. This corridor is the natural land connection between central Europe and the Middle East, and a natural transportation route in different historical periods. The total length of the Corridor through Serbia is 750 and 210 through North Macedonia.

With the finalisation of the already ongoing projects (Belgrade – Novi Sad-Subotica, Nis -Brestovac, Negotino - Nogaevci[15]) and the following modernisation and reconstruction projects:

- Stara Pazova-Sid-border with Croatia;
- Belgrade – Nis;
- Brestovac - Presevo – Macedonian border;
- Single operational centre for railway traffic management on the railway network;
- Construction works on the Main Railway station - phase 2;

Serbia will dramatically improve the situation on approximately 90% of its part of Corridor X by investing circa EUR 4.8 billion in modernisation and new infrastructure. This improvement will include

[14] *Ibidem*
[15] *Ibidem*

fulfilling all TEN-T standards: ERTMS (Level 1 and 2), Electrification, Line speed at least 100 km/h for freight transport, train length of 740 meters and normal track gauge.

New investments on the distance Belgrade – Nis – border with MKD are in alignment with EIP. There they are recognised as a part of the **Flagship 1 project within EIP**;

While on the Macedonian side there is one mature projects for reconstruction of the railway infrastructures on Corridor X and two mature projects for construction of new facilities at BCP Tabanovce and construction of new alignment between Dracevo and Veles.

- Reconstruction of railway section along with the Corridor X, Kumanovo - Deljadrovce.
- Construction of Joint Railway Border Crossing Station (JRBS) and access road at Tabanovce between Republic of North Macedonia and Republic of Serbia (**Flagship 1 project in the EIP)**.
- Construction of new alignment of railway section along with the Corridor X, Dracevo – Veles.

The beforementioned projects are in total length of 52 km which is approximately 25% of the Macedonian stretch of Corridor X. While the project for capacities increasing at Tabanovce will allow fully functioning of this BCP according to the mutual agreement between North Macedonia and Serbia.

3.2.1.4. SEETO Railway Route 2

Railway Route 2 represents the Core network connection between Albania and Montenegro and its ports Durres and Bar. Railway Route 2 connects to Railway Route 4 which afterwards via Corridor X represents the only existing hinterland connection of Albania to Central Europe. Also, this route is recognised as a part of **Flagship 3 within EIP**.

In this regard, both regional partners have planned reconstruction projects to improve the conditions on this railway route of high importance, especially for Albania. The project in Montenegro is in the preparation phase, while the Albanian project is in the mature phase.

Therefore, the Rehabilitation of Vlore - Han i Hotit Railway Line (123 km) and the Reconstruction and modernization Railway Line Podgorica – Tuzi (25 km) - Cross Border Albania covering 148 km and almost the whole Route 2 and both partners have plan to invest EUR 295 million. With executing of both projects, the only international railway hinterland connection of Albania will be on an acceptable operational level.

3.2.1.5. SEETO Railway Route 4

The extension of the Orient/East-Med Railway Corridor into the Western Balkans along Route 4 is approximately 580 km long and runs from Vršac (Serbia – Romania border) to Belgrade (Serbia) and then to Podgorica and Bar (Montenegro).

Bar – Vrbnica (the latter at the Montenegro – Serbia border) is the most important section of the Montenegrin railway network, carrying about 20% of all passengers and about 60% of the cargo.

Montenegro secured EUR 246 million for the rehabilitation of the railway line Bar – Vrbnica[16]. The project has been identified as a **Flagship 2 in the EIP** for the Western Balkans 2021-2027.

[16] *Ibidem*

Besides the above-mentioned ongoing projects, there is one project under preparation: the reconstruction and modernisation railway line Podgorica – Tuzi – Albanian border. The length of the line is 25 km and the estimation of cost is around 35 mil EUR.

On the Serbian side two major projects under preparation on this route are foreseen:

1. Pancevo – Vrsac and
2. Valjevo – Vrbnica.

The project considers works on the superstructure and substructure of the railway line for speed up to 120 km/h. Completion of the technical documentation is expected by September 2022. The estimation for the construction works is mid of 2023.

With the execution of both projects, 285 km of the railway line will be reconstructed with the value of EUR 1.25 billion and it will surely improve the operational conditions on this important route that secures the hinterland railway connection of Montenegro and Albania with Serbia and Central Europe.

3.2.1.6. SEETO Railway Route 7

The Railway Route 7 (Fushë Kosovë – Prishtinë - Podujevë - CCP with Serbia) branches from Corridor X at Nis (Serbia), between Belgrade and Skopje, and forms a shorter connection between Corridor X and Railway Route 10. It was constructed in 1949 and connects the stations Fushë Kosovë, Prishtinë, Bardhosh and Podujevë. After 1999, the section from Prishtinë to the CCP with Serbia is not operational.

Railway Route 7 represents a connection between SRB and KOS and between Route 10 and Corridor X. The purpose of this Project worth EUR 67.3 million for 45 km is to re-establish the railway connection which will fulfil the TSI criteria (Technical Specifications on Interoperability), ETCS (European Traffic Control System) Level 1 and ERTMS (European Traffic Management System).

3.2.1.7. SEETO Railway Route 9a

Railway Route 9a Novi Grad - Banja Luka–Doboj–Tuzla–Zvornik is of exceptional significance for international traffic and exchange of passengers and goods between BiH and the Republic of Croatia and the Republic of Serbia. Also, this railway section represents a potential alternative direction to Corridor X. In this regard, BiH plans to execute the Modernisation of the railway section Novi Grad - Banja Luka – Doboj –Tuzla- Zvornik – border with Serbia. This project for modernisation covers the whole Railway Route 9a as a part of the indicative extension of the Comprehensive TEN-T railway Network to the Western Balkans. The total length is 280 km and the cost estimation are around 323 mil EUR. In accordance with the Single Project Pipeline the expected deadline for completion is 2030.

3.2.1.8. SEETO Railway Route 10

The Orient/East-Med Corridor crosses Kosovo from the north to the south on Route 10, from the border with North Macedonia to the one with Serbia and constitutes Kosovo's connection to the wider region by railway. Route 10 is part of the indicative extension of the Core TEN-T railway Network to the Western Balkan. It has a total length of 256 km long, out of which 149 km are in Kosovo and 107 in Serbia.

The investment of EUR 245 million in the mature project for General Rehabilitation of 149 km of Railway Route 10[17] (Common Crossing Point with Serbia - Leshak –Fushe Kosove – Hani i Elezit – Border with Macedonia) divided into three phases will improve track poor condition, with serious structural constraints that limit traffic to 60km/h. The project is a part of the **Flagship 2 project within the EIP**.

Additionally, there is one more project contributing to the Core network connections which involve the Construction and modernisation of a Railway Line Pristina – Fushe Kosove – Pristina Airport "Adem Jashari". This project under preparation worth EUR 40.2 million will enable reliable and green connections between major transport hubs.

While on the Serbian side on Route 10, there is one project under preparation for Reconstruction and modernization of the railway line Kraljevo – Rudnica. This project for 77 km line will cost almost EUR 300 million and shall provide the adequate condition of the railway line towards Corridor X.

3.2.1.9. SEETO Railway Route 11

The connection of both Core Corridors/Routes (Route 10 with Corridor X) is established via one segment of Route 11 (Stalac – Kraljevo). Exactly this railway line is planned for reconstruction and modernisation with a value of EUR 180 million for 72 km of single-track railway line within the project which is under preparation by the Serbian Authorities.

3.2.1.10. SEETO Railway Route 13

The shortest Railway route: Subotica – Horgos – state border with Hungary (Segedin) on the Comprehensive network is planned for modernization and reconstruction. With this mature project, the full length of the railway line (26 km) will be improved by investing EUR 100 million.

Railway line Subotica-Segedin is single track, unelectrified regional rail link which connects the north of Serbia with the south of Hungary. The project considered reconstruction of 26 km for the 120 km/h speed included interventions on the substructure and superstructure, telecommunications and signal system devices.

3.2.2 Road projects

Road projects will be described as per the respective Corridors and Routes, to make it easier for the readers to geographically locate the project. The summary table and project fiches will provide detailed information on all the planned road projects.

3.2.2.1. Former Pan-European Corridor Vc

Corridor Vc passes through Bosnia and Hercegovina connecting it to Croatia. Its current alignment starts in the north in Bosanski Samac, the border with Croatia, runs through Sarajevo, Mostar ending in the south in Bijaca, the border with Croatia. The total length of the corridor is 400 km.

Corridor Vc is the most important road infrastructure development in Bosnia and Herzegovina, and as such is included in the Economic and Investment Plan for Western Balkans[18], Flagship 2 – Connecting

[17] *Ibidem*
[18] *Source: https://ec.europa.eu/commission/presscorner/detail/en/qanda_20_1819*

North to South, Project 1. As per the indicative planning provided therein, 75% of the Corridor should be completed to motorway standards by 2027. All the planned projects on Corridor Vc amounting to almost €2bn are mature.

3.2.2.2. Former Pan-European Corridor VIII

Corridor VIII is connecting Port of Durres (Albania) with Deve Bair (Bulgarian border) passing through North Macedonia. The total length of the corridor is 645 km (403 km in Albania and 242 km in North Macedonia).

The importance of investment in Corridor VIII is identified in strategic documents such as the Albanian Transport Sectorial Strategy and National Transport Plan (2018 – 2038) and North Macedonia Transport Strategy (2018-2030).

Albania plans consist of improving approx. 100km such as widening of Tirana to Durres highway and the connection from Elbasan - Qafe Thane (border with North Macedonia). These projects are still under preparation. North Macedonia is planning to invest approximately €500 million, in approx. 120 km focusing on the western sections towards Albania while on-going rehabilitation works are currently performed on its eastern branch.

3.2.2.3. Former Pan-European Corridor X and its branches

Corridor X is the longest and busiest road transport corridor in the Western Balkans. It starts in Batrovci (Croatian border) through Serbia to continue through North Macedonia until Bogorodica (border with Greece). The total length of the corridor is 726 km (531 km in Serbia and 195 km in North Macedonia).

Corridor X is entirely completed at motorway standards but the infrastructure condition alongside its path varies significantly. Currently, several small sections in North Macedonia are scheduled for rehabilitation such as section Gevgelija-Greece border (Bogorodica), Negotino – TEC Negotino and 44 km from Bitola to Prilep.

Corridor Xd as a branch of Corridor X connects North Macedonia with the EU neighbouring country Greece. Total length 179km. One of the most important projects planned is the deployment of ITS along with the Corridor Xd. Furthermore, there mature priority projects planned to improve the whole Corridor Xd starting from Veles to Prilep and continuing further towards Bitola and Medzitlija (Greek border).

3.2.2.4. Blue Highway (SEETO Route 1, SEETO Route 2)

The Blue Highway is a strategic project that stretches along the coast of the Adriatic and Ionian Seas, from Croatia to Greece passing through Albania and Montenegro.

The project is identified of strategic importance in Albania's and Montenegro's documents, such as in the Albanian Transport Sectoral Strategy, National Transport Plan and in the Montenegrin Spatial Plan, Transport Strategy. Furthermore, it is included in the Economic and Investment Plan for Western Balkans under Flagship 3 – Connecting the Coastal Regions.

The expressway along the Montenegrin coast passes through its hinterland. It starts near the border with Croatia, in the area of Herceg-Novi, and it extends further onto the following sections: Herceg Novi - crossing over the Bay of Kotor - Tivat - Budva - Bar - Ulcinj - Sukobin (border with Albania), total length is approximately 110 km with an estimated cost of interventions €1 billion.

In Albania it will start in the Muriqan / Sukobin area (border crossing point) and from Lezha will continue south towards Vora-Durres-Lushnje-Fier-Levan-Gjirokastra ending at Kakavija cross-border with Greece. The total length is approximately 340 km, out of which 296 km are planned to be upgraded to 4 lanes, as well as new alignments, with an estimated cost of interventions of € 2.6 billion.

The feasibility study for the Blue Highway has been completed with the support of WBIF through a joint application of Albania and Montenegro.

3.2.2.5. SEETO Route 2a

Route 2a runs from the Croatian border/Gradiska towards Banja Luka and connects with Corridor Vc at Lasva, with a total length of 228km. Bosnia and Herzegovina has included in the Single Project Pipeline two sections with a total length of 137km from Banja Luka – Jajce – Lasva as a project under preparation and Lasva –Nevic Polje as a mature project, with a total value of €641 million.

3.2.2.6. SEETO Route 2b

Route 2b connects Sarajevo with Podgorica and ends up in Vora, Albania, with a total length of 395km. The northern part of Albania is included in the Blue Highway. Sarajevo to Podgorica connection is identified as an important link for the region and included in the Economic and Investment Plan under Flagship 2 – Connecting North to South (Project 3).

The Memorandum of Understanding between Bosnia and Herzegovina and Montenegro was signed on 5th of July, Kranj, Slovenia for the construction of the interstate bridge over Tara, at Scepan Polje/Hum. This bridge will be financed by the Parties in equal amounts (50%), according to the schedule determined by the contract to be signed by both Parties.

3.2.2.7. SEETO Route 3

Route 3 runs from Sarajevo to Uzice, Serbia, at the connecting point with Route 4. The total length is 185 km. The Serbian Spatial Plan and Strategy for development of the railway, road, water, air and intermodal transport includes the construction of the section from Bosnia and Herzegovina Border-Kotroman-Uzice-Pozega, length of 74km. A pre-feasibility study is already completed. Furthermore, Bosnia and Herzegovina has planned the continuation of the link from the Serbian border towards Sarajevo, through Visegrad with an estimated cost of €1.2 billion.

Bosnia and Herzegovina has included in their Single Project Pipeline, the construction of the section from Hrenovica to Gorazde, with an estimated amount of €150 million.

3.2.2.8. SEETO Route 4

Route 4 passes across Serbia and Montenegro, starting in Vrsac, next to the Romanian border to continue through Belgrade and Podgorica and ending in Bar, Montenegro. The total length is 580 km (180 km in Montenegro and 400 km in Serbia). It also includes Project no. 2 (Belgrade – Bar motorway) of Flagship no. 2 – Connecting North to South.

In Serbia, approx. 120 km between Belgrade and Preljina are completed at motorway standard, while works are currently ongoing on the Preljina – Pozega section.

The Serbian Spatial Plan and Strategy for development of the railway, road, water, air and intermodal transport includes the construction of the Pozega-Boljare road. The project will run in almost new alignment and the pre-feasibility study is already completed. On the northern section of the route, sections Belgrade – Pancevo – Vrsac are currently under preparation.

Bar – Boljare highway is the biggest investment project in Montenegro. It is included in all relevant strategic documents like Montenegro Spatial Plan and Transport Strategy. The efforts are focused to advance projects for sections from Smokovac – Tološi – Farmaci – Djurmani and Andrijevica – Boljare.

3.2.2.9. SEETO Route 6a

Route 6a connects Prishtina with Route 4 in Montenegro and with Corridor X through Skopje. The total length of the route is 259 km. The section Prishtina – Skopje, 84km, is part of the Core TEN-T Network, the remaining sections are part of the Comprehensive Road Network.

The section from Prishtina to Hani e Elezit in Kossovo is currently completed at motorway standard, while the continuation is in North Macedonia (section Blace – Skopje/Interchange Stenkovec in total length of 12.5km is currently ongoing. North of Prishtina, approx. 20 km of the route to Mitrovica are currently under rehabilitation.

3.2.3. IWW and Maritime projects

3.2.3.1. IWW Projects on Sava river

Demining of the right bank of the Sava river from the river mouth of the Drina river to river mouth of the Una river

Demining along the right bank of the Sava River in BiH **is a mature projec**t which is expected to have a huge regional impact. This project is a part of the Economic and Investment Plan for the Western Balkans as a part of the FLAGSHIP 1 – CONNECTING EAST TO WEST.

Preparation for the demining is being undertaken by BHMAC (Bosnia and Herzegovina Mine Action Center). This will include resurveying and technical preparation, which are needed to update the existing documentation for the detailed designs prepared in 2014. The total amount of the project will be 8.160.000 EUR. Responsible beneficiary country authority for the Grant Agreement is the Ministry of Finance and Treasury of Bosnia and Herzegovina and for the implementation, the Ministry of Communications and Transport of Bosnia and Herzegovina.

The project activities had to wait for the activation of the World Bank trust fund, which was obtained in July 2021. The start of the works is expected in the year 2022, with a total duration of approximately 12 months for finishing all the envisaged activities.

River Training and Dredging Works on Critical Sectors on the Sava River

This project is under preparation and the process of obtaining necessary studies and documents has been taking place for many years on different levels. The project involves both Serbia and Bosnia and Herzegovina.

The Sava River is 945 km long and flows through four countries: Slovenia, Croatia, Bosnia and Herzegovina, and Serbia. According to the European Agreement on Main Inland Waterways of International Importance – AGN (Geneva, 1996, ratified by the Republic of Serbia in 2013), the Sava River is the main inland waterway designated E 80-12 in the European waterway network.

The Serbian stretch of the Sava River is 211 km long, out of which 33 km is a common stretch between Serbia and Bosnia and Herzegovina. By implementing this project, sections that do not fulfil the minimum requirements for navigation and are identified as “bottlenecks” will be eliminated and safe and efficient river traffic navigation enabled.

A feasibility Study for navigation on the Sava River from Belgrade (km 0) to Sisak (km 585) has been prepared in 2008, funded by the International Sava River Basin Commission. This study is prepared based on data from 001-2004 and needs to be updated. This is the subject of the currently ongoing project funded under IPA funds from Bosnia and Herzegovina, for which the Directorate for Inland Waterways is defined by the Government of the Republic of Serbia as the investor for the Republic of Serbia, according to national Law on spatial planning and construction.

The Project includes (1) Construction of river training structures and dredging works and (2) Supervision and environmental monitoring of works.

All the available documents confirm the economic viability of upgrading the Sava river within Serbia to Class Va. This regionally important infrastructure project will contribute to the economic welfare of the region and the Sava riparian countries. In 2013 Ministry of Communications and Transport from Bosnia and Herzegovina has commissioned project "Preparatory works, Detailed designs and Tender Documentation for Civil works to restore the River Sava to Class Va from Belgrade to Brčko (km 0.0 - km 234.0), including designs and EIA Study, financed from EU IPA funds. The primary objective of this project is to prepare the necessary design documentation for the civil works interventions to permit safe and efficient navigation on the section of Sava River from the river mouth at Belgrade to Brčko. Documentation for river training and dredging works between Belgrade (rkm 0) to Brcko (rkm 234), including designs and EIA Study, has been under preparation under IPA funds from Bosnia and Herzegovina. Documentation was supposed to be ready by the end of 2015. Unfortunately, this project has been cancelled in the mid of 2014.

Project costs are roughly estimated in the 2008 Feasibility study (7 mil EUR), while costs of supervision and environmental monitoring (EUR 1.3 million) are an estimation of PLOVPUT. Additional costs for technical documentation preparation is 1 mil.EUR.

Based on the aforesaid information and comments, from the perspective of implementation, the following key documents are missing or need to be updated: Conceptual design, Feasibility study, Preliminary design, Environmental impact assessment study, Design for a construction permit, Construction permit, Design for the execution of works, Tender documentation.

3.2.3.2. IWW Projects on Danube river

River training and dredging works on critical sectors on the Serbian-Croatian joint stretch on the Danube River

This **project is under preparation** and the process of obtaining the necessary studies and documents dates back to 2010. This project is a part of the Economic and Investment Plan for the Western Balkans as a part of the FLAGSHIP 1 – CONNECTING EAST TO WEST.

Implementation of the project River training and dredging works on critical sectors on the Serbian-Croatian joint stretch on the Danube River will eliminate navigation "bottlenecks" on this part on the Danube and allow deeper loading and larger ships. The especially important one is at Apatin, where from 2001 many problems including ship accidents and suspension of navigation during prolonged low water periods were encountered.

After implementation of the Project, IWT on the Danube river will become faster, cheaper and more reliable. It will make this mode of transport more attractive for all riparian countries in TC and EU. The number of passengers and goods transported on inland waterways will increase. Generally,

implementation of this Project will create long term perspectives for the future development of inland waterway transport on the whole Danube River.

Within the IPA 2010 "Project Preparation of documentation for river training and dredging works on critical sectors on the Danube River in Serbia", 24 critical sectors have been identified between the Hungarian border and Belgrade, 17 of them being located at the Serbia - Croatia joint stretch of the river (km 1433 - km 1295) and 7 sectors on Serbian territory (km 1295 - km 1170).

Preparation of river training and dredging works for 6 critical sectors (critical sector Novi Sad is excluded, it will be solved by the construction of the New Žeželj Bridge) is in the design phase. Detailed designs and tender documentation are almost finished. It should be noted that here conceptual designs are finalized based on both hydrodynamic and morphological modelling (results of morphological modelling over rode hydrodynamic modelling), which led to a finding of good and economical solutions.

For the 17 critical sectors at the common Serbia - Croatia stretch of the Danube River, preliminary designs were based on results of only hydrodynamic modelling were prepared. Morphological modelling is pending for this Project.

Financial analysis is carried out for a total investment of EUR 122.4 million. However, in Phase 3 of the IPA 2010 project, after morphological modelling for 6 critical sectors on the Serbian stretch, preferable options were changed and investment significantly reduced. After morphological modelling and re-examination of solutions for 17 bottlenecks on the common SRB-CRO Danube section, investments will be lower with an approximate cost of EUR 48.5 million.

To reach maturity, the following key Spatial Planning documents are missing: General design, conceptual design, preliminary design, Environmental Impact Assessment Study, update of the Feasibility study, design for the construction permit (separately for each critical sector), construction permits, design for the execution of works, tender documentation.

3.2.3.3. Project in IWW Core Ports

New Port of Belgrade and Free Trade Zone

This **project is under preparation** and the main idea of the project is the construction of a new and modern port on the location outside of the Belgrade town centre and in the vicinity of the main transport corridors. Currently, Port of Belgrade is situated in the downtown of Belgrade on the Danube river. Further to that, due to many reasons, the port is not functioning properly which lead to a relocation of the water transport in other ports close to Belgrade, primarily Pancevo.

One of the main goals of the Project "New Port of Belgrade" is to develop this port as one of the most important multimodal hubs in the South-East Europe Region. In that regard in a close hinterland of the Port new Free Trade Zone has been planned for establishment and construction. Having in mind that the location for the new Port of Belgrade is in the vicinity of Pupin Bridge, shall enable connection of the Port Area with several Serbian main roads axis (E-70, E-75, regional road Beograd-Zrenjanin and Belgrade-Vršac) as well as railway connection with railway Belgrade-Kelebija, the New Port of Belgrade shall improve and facilitate complete transport connectivity of this Region.

The construction of the New Port of Belgrade shall enable phased cessation of work of the existing Port of Belgrade which is located in the urban area of the City of Belgrade thus representing a bottleneck that disables the development of this part of Belgrade, as well as of the Port itself.

Construction of the New Port of Belgrade shall facilitate phased diminution of dangerous goods carriage through the Belgarde City Center.

Within the project for the construction of the New Port of Belgrade, it is predicted that the new Port shall include General and Bulk Terminal, Container Terminal, Ro-Ro Terminal and Oil&LNG Terminal. The Feasibility Study shall confirm whether all of the proposed terminals are approved for construction.

Currently, the following documentation is missing: A feasibility study (with CBA according to the EU requirements) with Preliminary design, Environmental impact assessment study, Design for a construction permit, Construction permit, Design for Execution of works, Tender documentation.

The preparation of the Pre-Feasibility Study for Construction of the New Port of Belgrade is ongoing. After the adoption of the Pre-Feasibility Study, adoption of the technical documentation for the construction of the New Port of Belgrade shall be initiated in accordance with the Law on Planning and Construction, as well as the Special Purpose Area Plan "New Port of Belgrade and Free Trade Zone" and Regulation on determination of Port Area of the Port of Belgrade. After the adoption of the mentioned documentation, the procedure for awarding of port concession shall be initiated.

According to the preliminary estimates, the total value of the construction of the port of Belgrade is around EUR 180 million, of which EUR 90 million is the value of the port infrastructure.

3.2.3.4. Maritime Projects

Vessel traffic monitoring, information and managing system, phase II (hereinafter referred to as VTMIS) in Montenegro

It is important to stress that this project is a continuation of phase I, in which the following activities have been finalized: VTMIS sensor equipment (radar, VHF transceivers, radio goniometer, AIS equipment, meteorological equipment, radio links, diesel generators) at locations Mavrijan (Ulcinj), Crni Rt (Bar) and Obosnik (Herceg Novi).

Phase II of the project is considered as a **project under preparation,** for which the Conceptual idea, Pre-feasibility study and Conceptual design have been finalized. The Feasibility study including CBA has not yet been finalized. Phase II will encompass installation of the missing sensors (cameras) at locations from Phase I as well as installation of new equipment to Kotor Bay (radars, cameras and radio links) and Lake Skadar (radar, cameras, VHF transceivers and radio links).

Within the project, Maritime Single Window will be also implemented, new response equipment on oil spills from a vessel and offshore oil will be procured, revitalization of existing and installation of new marine lights will be done as well as maintenance and revitalization of main inland and sea waterways. The total amount is the investment is estimated at 3.8 mil EUR

Upgrading infrastructure in the port of Bar

Since no Feasibility study has been undertaken, this project as a whole (including its 4 components) is **considered a project under preparation**. At the moment it is not known when and if the feasibility study will be done. The overall objective of the project is to develop new port capacities in the sphere of intermodal transport as well as passenger transport in accordance with the Urban Plan for the Port of Bar area and the Port of Bar development plans, respecting real market requirements and principles of the sustainable development. The total cost of the investment (including all 4 components) is 22.5 Mil Euros.

The project will contribute to an increase in capacity of the Passenger Terminal in the Port of Bar, enabling safe receiving of medium/large passenger, ro-pax and cruise ships. With the implementation of this project (all 4 components), the preconditions will be fulfilled to improve the market position of the Port of Bar. It will become more competitive compared to other ports in the Adriatic-Ionian region and will thus contribute to maximal utilization of potentials of the Port of Bar. The 4 components are the following:

Project component 1: Extension of the quay at Volujica Terminal for 166 m (30 m in width), includes necessary civil works, design and installation of the system of cathodic protection, and all other related infrastructure at the newly built part of the quay (drainage system, railway tracks). The project will contribute to increasing the overall intermodal capabilities of the Port of Bar, especially related to the links between the railway and maritime transport and thus will enable establishing the adequate capacity of the Port of Bar to optimally absorb all current and expected demands of the customers from the port hinterland (connected with intermodal transport). The cost of component 1 is estimated at 5,5 Mil Euro.

Project component 2: Extension of the quay at the Passenger Terminal for 432 m (30 m in width), including civil works, design and installation of all other related infrastructure at the newly built part of the quay (drainage system). Realization of the project aims to: eliminate existing limitations related to shallow depth with existing operative berths at the Passenger terminal (maximum water depth is currently at berth 54 and is 5,9 m) and allow reception of middle and large passenger, Ro-Pax ships and cruises; overcome existing space limitations for the reception of modern passenger ships, thus enabling an increase in a number of passengers on ferry lines. The cost of component 2 is estimated at 12,5 Mil Euros.

Project component 3: Dredging a part of the Port of Bar water area – includes necessary civil works in accordance with prepared technical documentation, fully respecting all principles of sustainable development. The cost of component 3 is estimated at 3 Mil Euros.

Project component 4: Rehabilitation of railway network in the area managed by the Port of Bar includes: realization of works in accordance with prepared technical documentation. The rehabilitation of the existing railway infrastructure which connects the port with the hinterland (with the railway Bar – Belgrade), represents one of the basic prerequisites for developing Port intermodal capabilities and full valorisation of potentials of Port of Bar. The cost of component 4 is estimated at 1,5 Mil Euros.

3.2.4. Airport projects

Sarajevo International Airport is the main international airport in Bosnia and Herzegovina. It is serving Sarajevo, the capital of Bosnia and Herzegovina, as well as the rest of the country. The Airport is located in the vicinity of Sarajevo, at only 6,1 km southwest of the Sarajevo railway station. The Airport has a stable level of traffic as well as a stable structure of air carriers that use the airport in their operations[19]. The runway length is 2600 m while its width is 45 m[20]. Sarajevo has a large issue with operations during the winters when traffic is blocked for days, sometimes weeks. The Sarajevo Airport is the only capital

[19] *Study on Mediterranean TEN-T Core Network Corridor 2nd Phase Final Report on the related Core Network in the Western Balkan countries Mobility and Transport, January 2018*
[20] *Ibidem*

airport in the region, which does not have a 24-hour possibility of landing and take-off, according to ICAO rules of noise restriction[21].

"Increase of operational airport capacities for International Airport Sarajevo" Data not provided, data needed on Project description; Maturity; Strategic importance etc.

The airport of Podgorica is the main international airport of Montenegro. It has one runway, a length of 2500m. Montenegro has a significant number of tourists who are using this airport. In December 2020, Montenegro Airlines went into liquidation, leaving the airport without a home carrier. Air transport is a very important segment in the positioning and development of Montenegro. Investments in airport infrastructure should contribute to long-term improvement of the level of service delivery, as well as increase the level of safety and security in air transport, in order to improve the accessibility and competitiveness of Montenegro, particularly in the field of tourism.

Projects under preparation

"Podgorica Airport Development" project is a part of several strategic documents: Transport Development Strategy of Montenegro (2010), Tourism Development Strategy of Montenegro until 2020 (2008), Master Plan for airport development until 2030 (2010), Single Project Pipeline, Pre-accession Economic Program for Montenegro 2012-2015 (2012) and the draft of the National Development Plan 2013-2016 Montenegro (2012). The project is in an early phase of preparation and so far, only a conceptual idea was developed.

The proposed project aims to maintain the safety level of air transport and to meet the demands and standards of national and international regulations. As a part of the project new terminal building in a capacity of 12,500 m2 should be constructed and manoeuvring areas and apron expanded and reconstructed. Additionally, new fuel depot and parking and ground support facilities (including shelter) should be constructed as well. The airport of Podgorica is located on the Core Network and the total project cost is 94.84 million euros.

It has to be pointed out that according to the European Green Deal and EU Sustainable and Smart Mobility Strategy no investment in airport capacity are envisaged to be supported by EU funds and more focus should be placed on greening the airports.

3.3. Summary of mature and non-mature projects in the region

On-going projects in the region have been reviewed and presented in detail in the TEN-T Annual Report. Based on the scheduled completion date of these projects, the Annual Report included also a forecast of the TEN-T compliance rate for the year 2027.

Summary tables of mature and non-mature TEN-T projects in the region have been centralized and are hereby presented, with details on location, cost and expected completion timeframe. It's worth underlining that, given the projects' maturity stage, the expected completion date is purely indicative, under the assumptions that financing shall be a) timely obtained and b) not critical for projects' advancing. The less mature the projects currently are, the higher the odds for delays in completion to occur, this being one of the reasons why projects are separately presented (as mature and non-mature)

[21] *SEETO/RCC, "Cost-benefit study for enhancing the Air Transport Connectivity in SEE, 2016 Transport Connectivity in SEE"*

and compliance forecasting for the 2030 horizon has been done based on mature projects only. Due to such uncertainties, expected completion date will be presented only for mature projects.

While delays are rather common in infrastructure projects and should definitely be expected, no risk allowance in this regard has been considered, which result in the scheduled completion dates and the compliance forecasts prepared on such basis being the best case (and not entirely realistic) scenario.

There are a total of 74 projects out of which 41 for roads, 23 for the railway, 4 for IWW , 2 for maritime and 2 for airports. The total amount of investments needed is €22.6 billion, €7.7 billion for mature projects and €14.9 billion for projects under preparation.

Separate Project Fiches for mature projects are included in Annexes.

Table 5. Mature Priority Projects

Corridor / Route / Node	TEN-T Network	Regional Partner	Project Name	Project cost (M€)	Expected Completion
ECONOMIC AND INVESTMENT PLAN FOR WESTERN BALKANS FLAGSHIP 1 - CONNECTING EAST TO WEST					
Inland Waterways					
Sava	Core	BiH	Demining of the right bank of the Sava river from the river mouth of the Drina river to river mouth of the Una river	8.1	2023
Railway projects					
Corridor X	Core	MKD	Construction of Joint Railway Border Crossing Station (JRBS) and access road at Tabanovce between Republic of North Macedonia and Republic of Serbia	5.5	2024
TOTAL in M€					**13.6**
ECONOMIC AND INVESTMENT PLAN FOR WESTERN BALKANS FLAGSHIP 2 - CONNECTING NORTH TO SOUTH					
Road projects					
Corridor Vc	Core	BIH	Construction of the Corridor Vc motorway section: Ivan – Konjic (Ovcari) – exit from tunnel Prenj (Salakovac)	686	2027
Corridor Vc	Core	BIH	Construction of the Corridor Vc motorway section Exit from Tunnel Prenj (Salakovac) - Mostar North	130	2027
Route 2b	Comprehensive	MNE	Reconstruction of the main way Šćepan Polje-Plužine (border crossing with Bosnia and Hercegovina)	60	2027
Route 2b	Comprehensive	BIH	Improvement and construction of the road route Sarajevo - Foca (Brod na Drini) - Hum (Scepan Polje) with the interstate bridge at the border BIH/MNE	300	no data provided
Railway projects					
Corridor Vc	Core	BIH	Upgrade and reconstruction of the Corridor Vc, rail line Doboj-Rasputnica Miljacka	500	2030
TOTAL in M€					**3,128**
ECONOMIC AND INVESTMENT PLAN FOR WESTERN BALKANS					

FLAGSHIP 3 – CONNECTING THE COASTAL REGION					
Railway projects					
Route 2b	Core	ALB	Rehabilitation of Vore - Han i Hotit Railway Line	260	2028
Route 2b	Core	MNE	Reconstruction and Modernization Railway Line Podgorica - Tuzi - Cross Border Albania	84	2030
Road projects (BLUE HIGHWAY)					
Route 2b	Core	ALB	Construction of Adriatic- Ionian Section 1: Murriqan - Balldren	295	2030
Route 2b	Core	ALB	AIC Section 2: Balldren (starting from Lezha Bypass) - Milot	147	2028
Route 2b	Core	ALB	Construction of Adriatic- Ionian Section 3: Milot-Thumane	35	2028
Route 2b/part CVIII	Core	ALB	Construction of Adriatic- Ionian Section 4+5: Thumane-Kashar-Rrogozhine	730	2028
Route 2c	Core	ALB	AIC Section 6+7: Konjat-Fier bypass	169	2030
Route 2c	Core	ALB	AIC Section 9A-2: Fier bypass (Levan)-Pocem	167	2040[22]
Route 2c	Core	ALB	AIC Section 9B-2: Pocem-Memaliaj	623	2040
Route 2c	Core	ALB	AIC Section 10: Memaliaj-Subashi Bridge	271	2035
Route 2c	Core	ALB	AIC Section 11: Subashi Bridge-Gjirokaster bypass	68	2040
Route 2c	Core	ALB	AIC Section 13A: Gjirokaster-Kakavije	144	2028
TOTAL in M€					**4,006**
OTHER PRIORITY PROJECTS					
Railway projects					
Corridor VIII	Comprehensive	ALB	Corridor VIII Railway Albania: Phase 1, Reconstruction of Durres to Rrogozhine	78	2025[23]
Corridor VIII	Comprehensive	MKD	Construction works of the railway section along the corridor VIII Kicevo – Border with Albania	426	2030
Corridor X	Core	MKD	Construction of new alignment of railway section along the corridor X Dracevo – Veles	550	2027[2025]
Corridor X	Core	MKD	Construction of railway section along the corridor X Kumanovo-Deljadrovce	50	2026[2025]
Route 13	Comprehensive	SRB	Modernization and reconstruction of the existing railway line Subotica – Horgos – state border with Hungary (Segedin)	100	2023
TOTAL in M€					**1.209**
Road projects					

[22] *Despite the level of maturity, due to financial constraint sections of Blue Highway will not be able to be completed by 2030*

[23] *With the assumption the project to start with construction in 2022.*

Corridor VIII	Core	MKD	Reconstruction and rehabilitation of road section Tetovo-Gostivar	50	2024
Corridor VIII	Core	MKD	Construction of road section Trebeniste-Struga	45	2023
Corridor VIII	Core	MKD	Construction of road section Struga- Kjafasan	80	2025
Corridor VIII	Core	MKD	Construction of new express road Romanovce – Stracin	88	2025
Corridor VIII	Core	MKD	Construction of road section Gostivar-Kicevo	280	2025
Corridor Xd	Comprehensive	MKD	Construction of road section Prilep-Raec Bridge	8.8	2022
Corridor Xd	Comprehensive	MKD	Construction of expressway Bitola – Medzitlija, with interchange Bitola	50	2022
Corridor Xd	Comprehensive	MKD	Construction of motorway Veles – Prilep	295	2025
Corridor X	Core	MKD	Rehabilitation of road section Gevgelija-Greece border (Bogorodica)	1.5	2022
Corridor X	Core	MKD	Rehabilitation of road section Negotino – TEC Negotino	8	2022
Corridor X	Core	MKD	Rehabilitation of road section Gradsko - Stobi	4.5	2022
Corridor X	Core	MKD	Construction of motorway Bitola – Prilep	130	2025
Corridor X	Core	MKD	Construction and supply of ITS on Corridor X	19	2023
Route 2a	Core	BIH	Construction of the expressway section Turbe – Nevića Polje -Lašva	641	2027
TOTAL in M€				**803**	
Airports					
Sarajevo	Core	BIH	Increase of operational airport capacities for International Airport Sarajevo	43.6	

This list does not cover eleven ongoing rail projects mentioned in TEN-T Annual Development Report[24]. Some important rail project like Belgrade-Budapest or Nis – Dimitrovgrad on Corridor X are described in detail there. Same rule is applicable for the other modes of transport.

These mature projects are expecting to improve the connectivity within the region and with the EU Member States, by creating more efficient transport systems. They will provide economic and social opportunities and benefits that will result in positive multiplier effects such as better accessibility to markets, employment, and additional investments. Investments in rail and inland waterways will contribute further to the decarbonisation efforts of the region by increasing the competitiveness of these modes of transport. Improving road infrastructure will shorten the travel time and reduce travel cost for business and people while at the same time contributing to safer roads in the region.

Table 6. Priority Projects under preparation

Corridor / Route / Node	TEN-T Network	Regional Partner	Project Name	Project cost (M€)

[24] *https://www.transport-community.org/wp-content/uploads/2021/08/TEN-T-report-2020.pdf*

Railway projects				
Corridor VIII	Comprehensive	ALB	Construction of the new railway Pogradec – Korca – border to Greece	240
Corridor VIII	Comprehensive	ALB	Rehabilitation of Rrogozhone - Pogradec - Lin Railway Line and Construction of New Line Lin - Border with North Macedonia	220
Corridor X	Core	SRB	Reconstruction and modernization of the railway line Brestovac – Preševo – border with North Macedonia	400
Corridor X	Core	SRB	Construction of a single operational centre for railway traffic management on the railway network of the Republic of Serbia	120
Corridor X	Core	SRB	Construction works on the Main Railway station - phase 2	25
Corridor X	Core	SRB	reconstruction and modernization of the two-track railway line Stara Pazova – Šid - border with Croatia and section Golubinci – Inđija	400
Corridor Xc	Core	SRB	Reconstruction and modernization of single-track railway Belgrade-Nis	1,800
Route 10	Core	KOS	Construction and modernisation of a Railway Line Pristina - Fushe Kosove – Pristina Airport “Adem Jashari”	40.2
Route 10	Core	SRB	Reconstruction and modernization of the railway line Kraljevo – Rudnica	299
Route 11	Core	SRB	Reconstruction and modernization of the railway line Stalać – Kraljevo	180
Route 2b	Core	MNE	Reconstruction and Modernization Railway Line Podgorica - Tuzi - Cross Border Albania	35
Route 4	Core	SRB	Reconstruction and modernization of the Belgrade Podgorica railway line (section Valjevo – Vrbnica)	980
Route 4	Core	SRB	Reconstruction and modernization of the railway line Pančevo – Vršac	270
Route 7	Comprehensive	KOS	General Rehabilitation of the Eastern Railway line (CCP with Serbia – Podujevo – Fushe Kosove)	67.3
Route 9a	Comprehensive	BIH	Rehabilitation and Modernization of the railway section Banja Luka – Doboj –Tuzla- Zvornik – border with Serbia	323
Road projects				
Corridor VIII	Core	ALB	Widening of Tirane - Durres Motorway	205
	Core	ALB	Rehabilitation of Corridor VIII, connection with Northern Macedonia. Section Elbasan - Qafe Thane	935
Route 1	Core	MNE	Route 1: coastal variant of the Adriatic-Ionian Motorway-Expressway along Montenegro's coast	1013
Route 2a	Core	BIH	Betterment of the main road section (bypass) Banja Luka - Jajce - Lašva	169
Route 2a	Core	BIH	Betterment of the road section Banja Luka (Bypass) – Jajce – Lasva, part in FBiH Ugar – Jajce – Lasva	169

Route 2a	Core	BIH	Improvement (betterment) of the road route Banja Luka- entity border (Ugar), construction of Banja Luka Bypass and construction of the interstate bridge over Sava River in Gradiska	146
Route 2C	Core	ALB	Construction of Gjirokastra By-Pass	7
Route 3	Comprehensive	BIH	Construction of expressway Sarajevo – Visegrad - Border BiH/SRB	1145
Route 3	Comprehensive	SRB	Construction of highway E-761/ M-5/Bosnia and Herzegovina Border-Kotroman-Uzice-Pozega	832
Route 3	Comprehensive	BIH	Construction of expressway Sarajevo – Visegrad - Border BiH/SRB	1145
Route 4	Core	MNE	Highway Bar-Boljare -bypass Podgorica, section Smokovac – Tološi - Farmaci	280
Route 4	Core	MNE	Highway Bar-Boljare, section Djurmani - Farmaci	441
Route 4	Core	MNE	Highway Bar-Boljare, section Andrijevica – Boljare	731
Inland waterways projects				
Sava	Core	SER and BiH	River Training and Dredging Works on Critical Sectors on the Sava River	9.3
Danube	Core	SER	River training and dredging works on critical sectors on the SRB-CRO joint stretch on the Danube River	48.5
Belgrade	Core	SER	New Port of Belgrade and Free Trade Zone	180
Maritime projects				
MNE	N/A	MNE	Vessel traffic monitoring, information and managing system, phase II (hereinafter referred to as VTMIS) in Montenegro	3.8
Bar	Core	MNE	Upgrading infrastructure in the port of Bar	22,5
Airport projects				
Podgorica	Core	MNE	Podgorica Airport Development	94.84

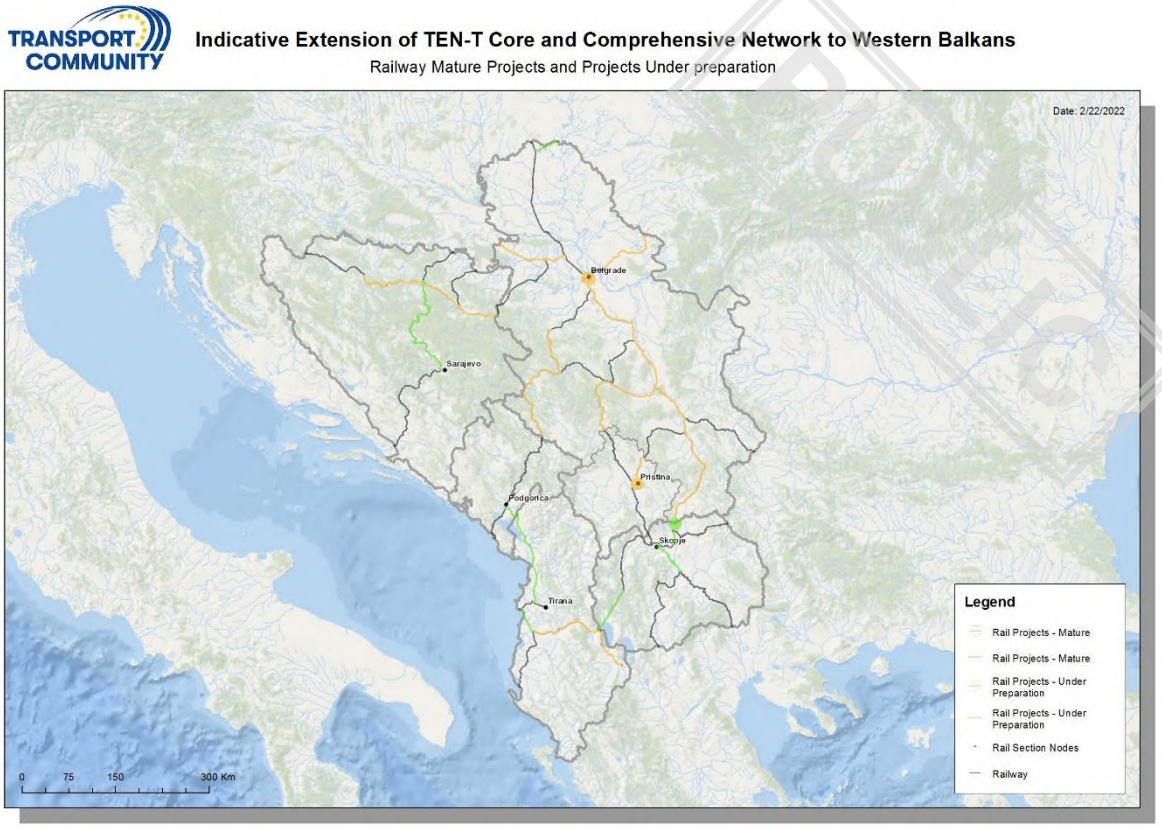


Figure 12. Railway Mature Projects and Projects Under preparation

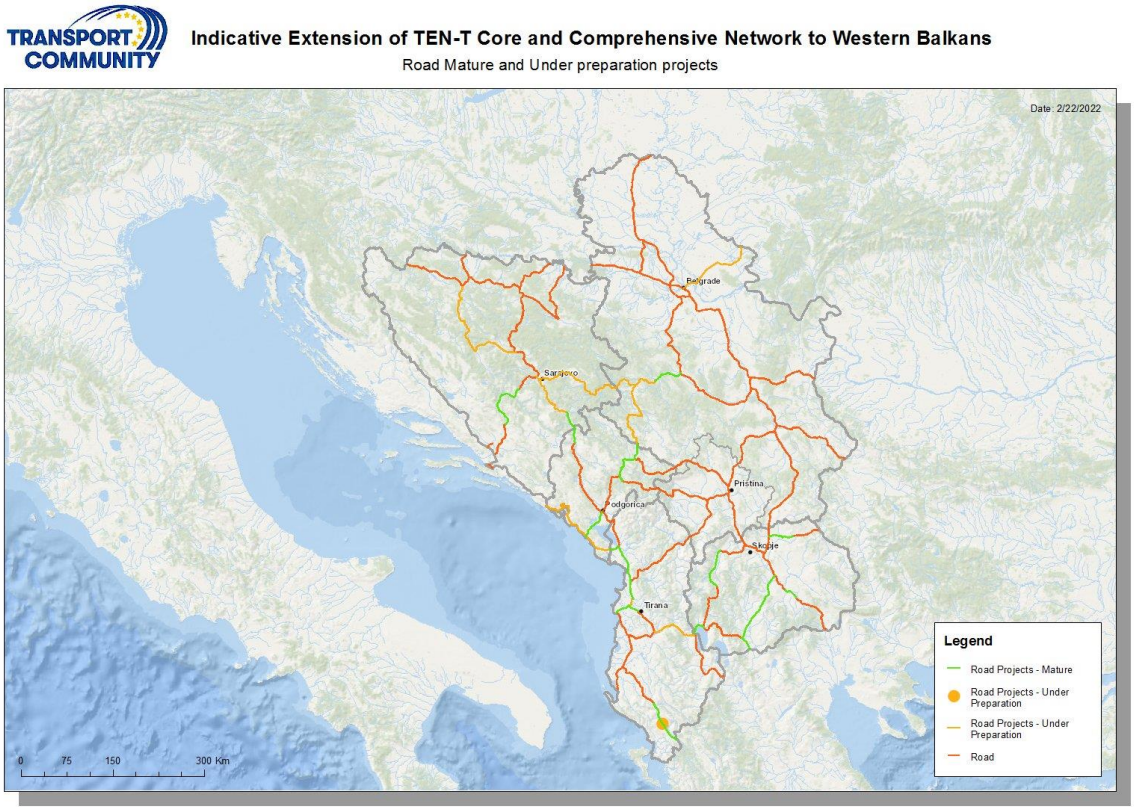


Figure 13. Road Mature Projects and Projects Under preparation

3.4. Priority Projects

The starting point of the exercise were the Regional Partners' SPPs, considering that projects included therein have already been prioritized and ranked based on unitary and sound criteria and practice. The assessment was done based on two main pillars, namely strategic relevance and project' readiness/maturity. The strategic relevance evaluation and scoring were made on basis of projects' compliance with European, national and sectoral strategies, demand/supply and origin/destination analysis, relation with other transport corridors and routes, traffic safety and economic impact. Short-listed projects were further assessed in terms of maturity/readiness for implementation so that to identify gaps in terms of quality and completeness of project documentation.

The list of all priority projects identified by the Regional Partners in their SPPs as shown under section 3.4 provides a broad picture of the overall effort the region needs to undertake to bridge the TEN-T compliance gap. However, there are several issues that need to be further addressed to bring SPPs closer to their basic role of providing strong projects' prioritization tools and a consistent link between infrastructure and budgetary planning.

- While the region's infrastructure gap is well documented and acknowledged, the overall number and cost of projects included in SPPs is clearly unachievable under any scenario.
- Projects could easily climb in rank by simply progressing in terms of maturity, which might ultimately circumvent the prioritisation mechanism.
- The extent to which priority projects in the SPPs are considered by Regional Partners for the scope of establishing their mid-term budgetary framework and public debt management is unclear.
- The immediate consequence of the above is that Technical Assistance resources could be unnecessarily spent on projects standing little chances of being implemented on a mid-term perspective. Moreover, there were also documented cases of defective budgetary and fiscal planning resulting in approved priority projects being put on hold.

Overcoming the shortcomings above should be accompanied by better coordination at regional level to make sure that focus remain high on priority links and projects of common interest progresses even on both sides of the borders. Setting-up a list of key priorities the region should focus on in the coming years is an important step in this regard. The list of top rank priority projects shall be further refined to reflect new information becoming available via Transport Observatory, but also eventual legislative changes (like TEN-T revision), progress achieved on different projects, etc.

In due consideration of the methodological constraints mentioned in the background section, identification of the most critical projects in terms of priority for the region was done based on the following:

- The dual-layer nature of the TEN-T Network, with Core sections being given priority over Comprehensive links.

- The pre-identified Flagship transport projects included in the Economic and Investment Plan for the Western Balkans[25].
- Quick wins likely to produce positive results with only fraction of costs and time that large infrastructure projects usually take;

3.4.1. Flagship Projects

Referring at Flagship projects as the key prioritization criterion between competing TEN-T Network sections is fully justified considering that:

- These projects are the expression of well-documented connectivity needs and have been identified as priorities in previous studies undertaken at regional level;
- Flagships' selection is the outcome of an extended consultation process between the European Commission and the Regional Partners, reflecting both the region's and the EU's priorities and benefiting from a broad political consensus;
- Such projects shall be prioritized in terms of grant funding allocation. Considering the gap between needs and resources, availability of grant funding becomes critical for implementation and thus a prioritisation criterion by itself.

The list of the pre-identified Flagship transport projects in the EIP are provided below:

Flagship	Sector	Project	EIP 2027 milestones
Flagship 1 - Connecting East to West	Road	Nis – Prishtina "Peace Highway"	Prishtina – Medare (Kosovo section): completed Nis – Merdare (Serbia section): substantially advanced
	Railway	Railway Corridor X modernization	Nis Railway bypass: completed Belgrade Main Railway Station: completed Belgrade – Sid (HR border): substantially advanced Nis – Presevo: substantially advanced Joint Railway Border Crossing Station Tabanovce: completed
		Railway Corridor VIII modernization	Skopje – Bulgarian Border: substantially advanced
	Inland Waterways	Improving the navigation conditions on Danube and Sava rivers	Demining of the Sava river: advanced Addressing bottlenecks on the Danube river: in preparation/advanced
Flagship 2 - Connecting North to South	Road	Corridor Vc Motorway	75% of the Corridor completed at motorway standards
		Belgrade – Boljare – Bar Motorway	Podgorica bypass: substantially advanced

[25] *Source:* https://ec.europa.eu/neighbourhood-enlargement/system/files/2020-11/economic-and-investment-plan-brochure.pdf

		Sarajevo – Podgorica connection	Enhanced
	Railway	Railway Route 4 Belgrade – Podgorica – Bar	Serbian border – Port of Bar: fully rehabilitated
		Railway Corridor Vc Ploce – Samac	Upgraded/ substantially advanced
		Railway Route 10 Prishtina – Kraljevo – Stalac	Pristina – Mitrovica: construction works Serbian side: preparation of the technical documentation
Flagship – 3 Connecting the Coastal Regions	Road	The "Blue Highway"	Tirana bypass: completed Two road sections in Albania and Budva bypass in Montenegro: substantially advanced
	Railway	Railway Route 2 (Podgorica – Tirana – Durres)	Vora - Hani Hotit: construction works Tirana – Durres - completed Podgorica - Tuzi - Cross Border Albania: preparation of the technical documentation

As the technical maturity degree of projects vary significantly, reaching the 2027 milestones request quick, well-targeted and coordinated action from Regional Partners. This is all the more important as the amount of available grant financing might be increased, should Flagship projects progress well.

A detailed analysis of all Flagship projects including technical and administrative status per each section, actions needed, and key implementation milestones is provided In **ANNEX 1**. For the scope of providing a full list of concrete pending actions, the analysis was made based on individual sections.

3.4.2. Small scale projects (Common/Border Crossing Points, Road Safety, Level Crossing, smart mobility)

While the region's well-documented infrastructure gap could only be bridged through large investments, significant connectivity, economic and social benefits could be also achieved through small-scaled and well-shaped interventions targeting specific policy themes or punctual network shortages. Considering that the overall investment needs largely exceed the available resources, small scale projects are likely to be one of the region's winning cards for achieving quick wins and bringing tangible improvements to citizens' lives.

Such interventions include a mix of infrastructure improvements and policy/institutional reforms covering the following areas:

- **Removing non-physical barriers to transport and trade** (common/border crossing points related projects and horizontal reform measures as highlighted in previous studies undertaken at regional level and synthetized under the TCT Transport Facilitation Action Plan).
- **Addressing TEN-T Network critical safety issues** (well-targeted interventions aiming to increase safety level on certain road sectors and at the rail level-crossings)
- **Moving towards a smart, sustainable, green and resilient TEN-T Network** (deployment of the priority measures encompassed in the Sustainable and Smart Mobility Strategy Western Balkans)

In terms of priority, such projects rank high under any scenario, given their positive economic outcome stemming from relatively low investment cost and high potential benefits. However, such schemes should not be competing for funding under similar conditions with "traditional" infrastructure projects. Dedicated financing scheme should be set-up instead to prevent small scale projects being simply de-prioritized. A concrete political commitment was made in this regard (*Poznan pledge*), and technical discussions on the matter are currently on-going. Framing-up such mechanism would substantially increase the Regional Partners' appetite for these initiatives, providing strong impetus for smart and green mobility transition in the region.

More details on (some of) the concrete projects already considered in this regard are provided below.

Project Name: Improvement of Safety on Level crossings (LCs)

Description: LCs are identified as one of the most critical points regarding railway safety. Almost 40% of all accidents and incidents in railway traffic happen on LCs.

Objectives: Decreasing fatalities and serious injures for the 50% in the entire region

Estimated amount: 60 million (included 400 LCs for upgrade)

Expected benefits: Decreasing number of fatalities and serious injuries for the 50%

Expected completion: soft phase – December 2022, Procurement/Installation – 2024

Project Name: Modernization and infrastructure capacity improvements of selected road border crossing points (BCP) on the extended TEN-T Network in the Western Balkans

Description: According to the findings and cost-estimates of the CONNECTA regional study on BCP facilitation, the type of physical interventions, as well as traffic technology and equipment, are including, but are not limited to:

- Construction of additional truck lanes
- Installation of weigh bridge in other lanes so the truck can use more than one lane
- Installation of herringbone truck parking, thereby eliminating the front trucks delaying trucks behind and/or extra lane to be used for priority passage
- Installation of automatic number plate recognition (APNR) system
- Installation of electric lane signs and slip lanes diverting trucks do dedicated inspection facility
- Construction of secondary vehicle inspection facility and consolidated Police/Customs booths
- Construction of dedicated bus passenger facility
- Procurement of mobile X-ray scanners, closed-circuit television (CCTV) and other necessary detection equipment

Objectives: To increase the capacity throughput at the BCPs and reduce the waiting and queuing time

Estimated amount: around 20 mil EUR for priority BCPs on the TEN-T Network

Expected benefits:

- Time savings - shorter waiting and procedural times for heavy good vehicles;
- More streamlined operations on-site and increased performance by border agencies;
- Improved checking methods leading to reduced truck queue lengths;
- More secure cargo and improved trade and logistic performances;
- Enhanced road safety and less air pollution.

Expected completion: Design phase end 2022 (for a set of two pairs of BCPs)- end 2023 (for the others); construction 2024/2025

Project Name: Improvement of high-risk road sections

Description: Detailed Designs for 10 high-risk road sections with a length of 298 km are finalized by CONNECTA in February 2021. Upon completion of the detailed designs road safety inspection reports for each road section shall start the works for improvements of road safety infrastructure and seek financing for investments.

Objectives: The reduction of fatalities and serious injuries by eliminating identified high-risk sections along with the indicative TEN-T extensions in Western Balkans.

Estimated amount: 16,843,962 Eur

Expected benefits: Reducing road traffic crashes and saving lives.

Expected completion: Poznan pledge implementation. Discussion still ongoing with DGNEAR

Project Name: Deployment of Sustainable and Smart Mobility solutions in the Western Balkans

Description: Making transport cleaner and sustainable has become one of the key drivers of transport policy in the European Union and the Western Balkans Region. Several documents adopted on the highest-level place green and sustainable transport on top of the list of priorities. sets ambitious goals for digitalization of transport, smart mobility and increased usage of environmentally friendly modes such as Railways, IWW and Short Sea Shipping.

Objectives: Decarbonization and digitisation of the transport sector with smart and sustainable mobility options**.** Reducing the Co2 emissions by adding green elements as well as increasing the usage of smart equipment/digitalization

Estimated amount: To be determined

Expected benefits:

Ensure economic efficiency & adaptation

- Existing assets safeguarded and adaptation measures applied
- Multimodal transport developed and digitalized with established interoperability
- Transport components digitalized and transport/ traffic database centres established

Respect the environment and the climate

- Transport networks compatible with cleaner vehicles and alternative fuel infrastructure deployed
- Sensors and data processing capabilities to measure pollution, climate impacts, etc. installed
- Biodiversity protection enabled (e.g. allow free passageways for mammals)

Promote social wellbeing

- Transport network connectivity investments
- Pollution reduced (noise, dust, etc.)
- Provision of a system resilient to shocks

Expected completion: Discussion still ongoing with DG NEAR for a new instrument to support green and digital transition.

4. TRANSPORT POLICY

4.1. Sustainable and Smart Mobility Strategy for Western Balkans

The **Western Balkans** region is affected by the changing climate and has already seen the **severe consequences of climate change**. This region is one of the most affected by climate change in Europe with **estimated temperature increases of 1.7 – 4.0°C** and predicted to exceed 5.0°C by the end of this century[26], depending on the global effort in greenhouse gases emissions reduction[27]. **The main sources of greenhouse gas emissions** in the region are the **energy and transport sectors**, encompassing two-thirds of the overall share. The **Transport[28]** sector represented a **12 per cent share** of these **emissions in 1990** and its share increased to **16 per cent in 2018**[29]. **The overall share of transport emissions has been dominated by the share of CO_2 emissions from road transport (above 90 per cent in Regional Parties[30]),** most evident in the larger urban areas in the region, which suffer from extremely high pollution[31].

Permanent Secretariat together with Ad-hoc group members has developed a Sustainable and Smart Mobility Strategy for Western Balkans and corresponding GAP analysis. The purpose of developing the Transport Community Permanent Secretariat's (TCPS) Sustainable and Smart Mobility Strategy for the Western Balkans is to mirror the European Union`s Sustainable and Smart Mobility Strategy and to adjust goals, milestones, and actions of the EU to the realities in the Western Balkans region, as well as to provide a roadmap for digitalisation and decarbonisation of the transport sector in the region.

Additionally, TCPS has developed GAP analysis that helped to identify the current situation regarding greenhouse emissions, deployment of alternative fuel infrastructure, multimodal systems, digitalisation of the sector, safety levels, single market challenges and the rights of passengers and transport workers.

The Transport Community Permanent Secretariat's strategic vision is to assist the Regional Parties to make the transport in the Western Balkans cleaner, safer, smarter, greener, resilient, competitive, and sustainable.

> Making **transport** in the Western Balkans **cleaner, safer, smarter, greener, resilient, competitive, and sustainable.**

We structured the strategy and corresponding gap analysis around ten EU flagships and three objectives:

- Sustainable mobility challenges
    - Flagship 1 - boosting uptake of zero-emission vehicles, renewable & low-carbon fuels and related infrastructure
    - Flagship 2 - creating zero-emission airports and ports

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[26] Compared to the baseline period of 1986-2005
[27] Vuković, A. and Vujadinović Mandić, M., "Study on Climate change in the Western Balkans", 2018
[28] Includes road transport, non-road transport, domestic aviation, and inland waterways for each Regional Party
[29] Banja M., Đukanović G., Belis C.A., "Status of air pollutants and greenhouse gases in the Western Balkans: Benchmarking the accession process progress on environment", 2020
[30] Defined under Transport Community Treaty as Albania, Bosnia and Herzegovina, North Macedonia, Kosovo, Montenegro, Serbia..
[31] Transport Community Permanent Secretariat, "GAP Analysis - STRATEGY FOR SUSTAINABLE AND SMART MOBILITY IN THE WESTERN BALKANS", 2021

    - Flagship 3 - making interurban and urban mobility more sustainable and healthier
    - Flagship 4 - greening freight transport
    - Flagship 5 - pricing carbon and providing better incentives for users
- Smart mobility challenges
    - Flagship 6 - making connected and automated multimodal mobility a reality
    - Flagship 7 - innovation, data and ai for smart mobility
- Resilient mobility challenges
    - Flagship 8 – working towards the single market
    - Flagship 9 - making mobility fair and just for all
    - Flagship 10 - enhancing transport safety and security

This strategy outlines how the Western Balkans transport system can achieve its green and digital transformation and become more resilient to future crises. The result is predicted to substantially cut transport emissions by 2050 and contribute to the EU goal of climate neutrality, delivered by a smart, competitive, safe, accessible, and affordable transport system. This is also in line with policy initiatives indicated in the Western Balkans Green Agenda and Economic and Investment Plan for the Western Balkans.

To facilitate this transition, the Strategy **proposes a set of measures framed in a roadmap to help the region move towards a sustainable, smart, and resilient mobility system** and to direct it to the structural changes required to achieve climate neutrality and its Green Agenda goals as stated in the Sofia Declaration signed by the Western Balkans leaders in November 2020[32].

The roadmap contains a list of actions per each flagship aiming at jumpstarting the process of making transport sustainable and smart in the region. It has been envisaged as a guiding document for the region in the preparation of the national strategies. **The Transport Community Permanent Secretariat will facilitate and support this process and assist the Regional Parties in achieving sustainable and smart mobility.**

The implementation of some of the measures requires a strong financial component. To implement the proposed actions in the proposed timeline, external financial assistance will be necessary. According to the Economic and Investment Plan for the Western Balkans, up to €9 billion of funding will be mobilised to boost economic growth and support reforms. Approximately, € 5 billion (out of which € 2 billion in grants) will be concentrated on upscaling transport connectivity, on the green transition – in particular, the decarbonisation – and on digital transformation, which the region should fully utilise to make its transport smarter and more sustainable. The strategy was presented and welcomed by the 4th Ministerial Council of the Transport Community, held in Slovenia, 5th July 2021.

- ***Policy expectations for the next 5 years***

To achieve green and digital transition in the next 5 years the region should focus on:

- Including sustainable and smart elements in the national transport strategies and prioritizing `green` investments;
- Including sustainable and smart elements in the preparation of project documentation from early start (design, CBA, climate-proofing etc.);
- Transposing and implementing relevant EU transport acquis to support the green and digital transition.

[32] *Source: https://www.rcc.int/docs/546/sofia-declaration-on-the-green-agenda-for-the-western-balkans-rn*

4.2. Railway

As the first set of connectivity reform measures agreed back in 2015, the railway market opening is one of the most important measures and an integral part of the Transport Community Treaty. **With four out of six regional partners having opened their railway marked** at the domestic level, the region has progressed, and there are nine private Railway Undertakings in three Regional Partners. Their market share is around 15% in Serbia, and 40% in Albania and Kosovo, whereas in Bosnia and Herzegovina, Montenegro, and North Macedonia, there are no private railway undertakings. It is worth mentioning that in Montenegro, the first private railway undertaking provided a licence and safety certificate. However, this undertaking still did not apply for path reservation and it is not operating yet. The only two Regional partners stepping behind are **Bosnia and Herzegovina** and **North Macedonia**, which according the Rail Action Plan should remove the obstacles for market opening until **Q4 2022** and **Q4 2021** respectively. Unfortunately, **North Macedonia** didn't open the market as per the the action plan.

All Regional Partners agreed that the railway market opening is treated with a priority. The aim is a **full implementation of the EU legislation on Interoperability** and improving the overall governance of the railways. Restructuring of national railway companies is an ongoing activity among all regional partners. This process should be finalised before passing into the second transition period (as defined in Annex I of the Transport Treaty).

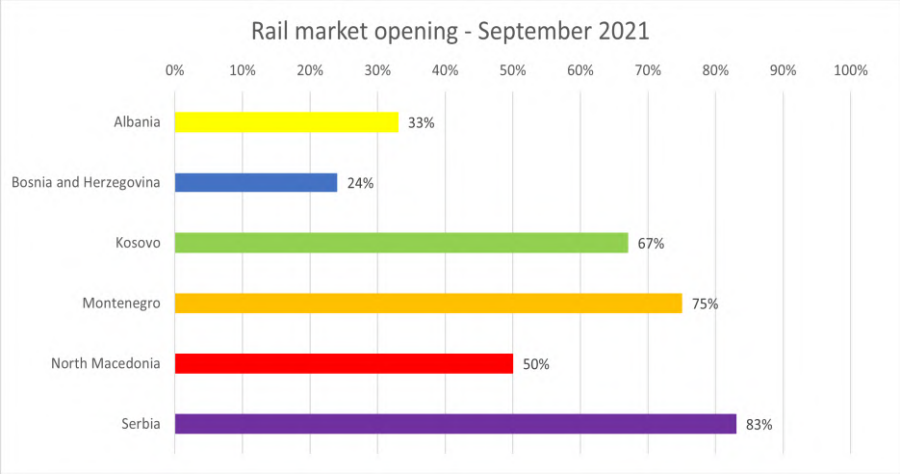

Figure 14. Railway market opening status in September 2021

Further efforts are needed in the area of passenger rights. Most of the regional partners have taken actions to transpose certain parts of the regulation related to passenger rights, and **Serbia and North Macedonia** prepared a draft of the Law covering this issue. However, full implementation is still lagging.

In terms of coordination and communication among all partners (Infrastructure Managers and Railway undertakings) and other stakeholders, there is still space for further improvement. Amongst the most significant achievements in this regard is the signing of **MoU** by all **Infrastructure Managers from the**

Western Balkans[33] region and the signing of **Dedication to the railway by the Ministers**[34]. These two important documents will also positively impact governance.

Since the integration of the whole regional railway markets is not likely to happen very soon and cannot be achieved without ensuring safe and interoperable national railway systems, the mutual recognition of operating licenses, train driver licenses, safety certificates, vehicle authorisation is crucial for the time being.

In terms of the implementation of the technical pillar of the **4th Railway package** by all Regional Partners, there is limited progress but there is still work to be done by all Regional Partners. Full details for the progress of each Regional Partner are given in the Annual Monitoring Report of the Rail Action Plan[35].

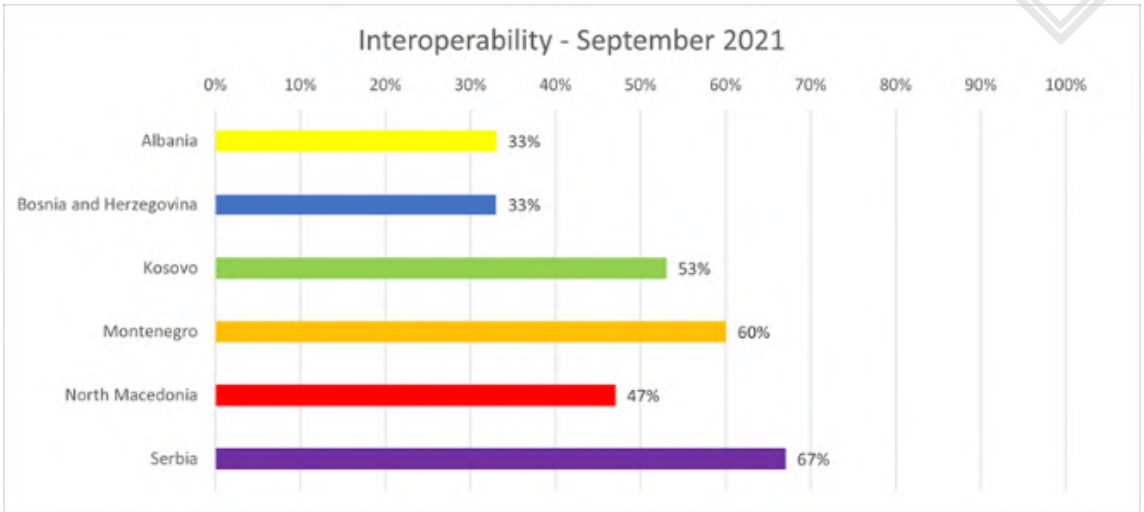

Figure 15. Interoperability status in September 2021

Besides the railway reforms, the most visible improvement in the railway transport efficiency can be achieved by reducing the waiting times at the borders/common crossing points by improving and digitalising services as well by removing the physical and non-physical barriers. In this regard, there was some progress made where **Serbia** initiated new border crossings agreements with its bordering EU members states (**Bulgaria, Croatia, Romania, Hungary**), however, the procedures are still ongoing and may need further support. Also, there is a tender procedure for construction works in Tabanovce BCP (**between Serbia and North Macedonia**) which is expected to finish by 2025, according to the progress so far it is evident that the project will not reach the deadline.

Joint border/common crossing point checks (one-stop-shop) of all relevant authorities (border police, inspection, customs, and railway authorities) in joint stations will reduce the waiting times by half.

The current situation related to the agreements is shown in the figure given here below:

[33] *Source: https://www.transport-community.org/wp-content/uploads/2021/09/MoU-of-Infrastructure-Managers-WB6-10092021.pdf*

[34] *Source: https://www.transport-community.org/wp-content/uploads/2021/09/Dedication-to-Rail-09092021.pdf*

[35] *Source: https://www.transport-community.org/wp-content/uploads/2021/10/One-year-progress-report-on-implementation-of-TCT-Action-Plans-14-10-2021-14-50.pdf*

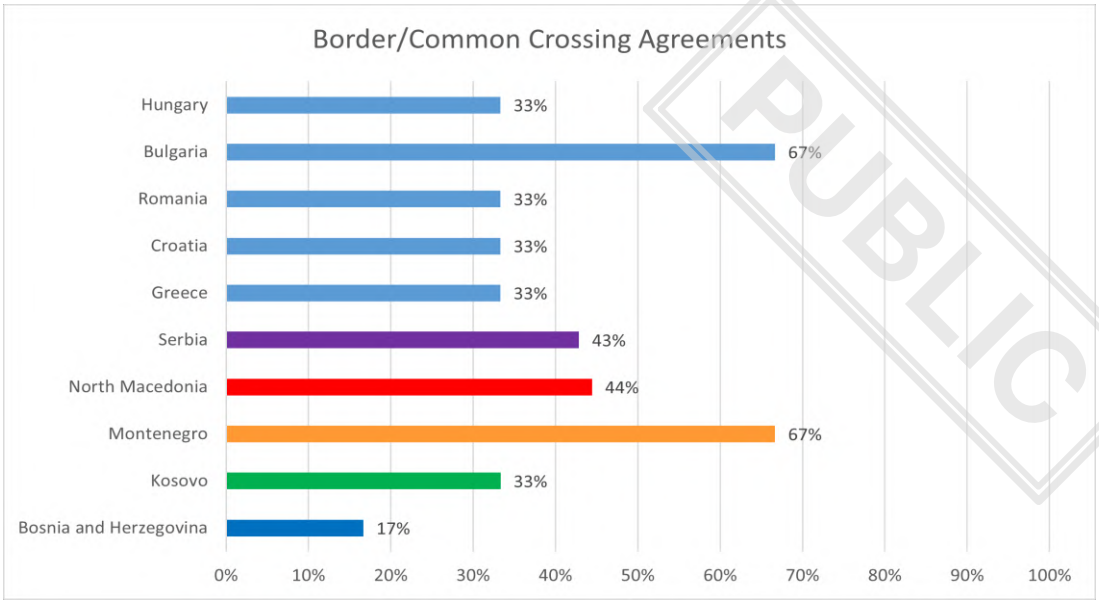

Figure 16. Improvement border/common crossing operations

Due to the current condition/situation, improving the services offered by the railway sector remains a challenge. Key reasons are conditions of the railway infrastructure (not reached satisfactory level), low speed and poor quality of services, which makes the journeys take much longer. One of the primary reasons is the lack of proper maintenance (there are no multiannual maintenance plans) in the last three decades. Additional focus on improving the multiannual maintenance plans and developing a proper maintenance system is crucial. In this view, adopting a multiannual maintenance plan with a clear budget structure is a solid base for ensuring better, more reliable, and more sustainable services in the region.

Considering that the lack of proper maintenance plans is the major reason for slow and unreliable services, all regional partners should increase the focus on putting in place adequate multiannual maintenance plans with sufficient financial resources.

Policy expectations for the next 5 years:

- Overcoming challenges related to the opening of the railway market, aiming to fully implement the EU legislation on Interoperability and improve the overall governance of the railway sector. The expected deadline for the railway market opening in all six WB parties at the national level is Q4 2022. Also, there is a possibility for Serbia and Montenegro to pass to the next phase of the market opening at the regional level by 2023.
- Initiate the work activities of the Regional Network of Infrastructure Managers in 2022.
- Level crossing safety improvement Project to be implemented by 2024.
- Ensuring the sustainability of infrastructure managers in the region by the creation of a contractual relationship between Infrastructure Manages and relevant government authorities for the maintenance and operation of the public railway infrastructure by Q4 2022.
- Mutual recognition of the key railway documents: operational licenses, safety certificates, driver's licenses and vehicle permits by 2022.
- Publishing Network Statement regularly as well as Network Statement for the service facilities (terminals, sea and river ports) by 2022.

- Adjust national legislation related to the public procurement procedures in line with Regulation 1370/2007[36] concerning public transport services by railway by 2022.
- Start applying the passenger rights regulation (EC Regulation 1370/2007) by 2023.
- Transposition and implementation of EU Technical Specifications for Interoperability (TSIs) by 2022.
- Establishing an electronic register of vehicles, taking into account the European Register of Vehicles or/and membership to the European Electronic register of vehicles by 2023.
- Establishing a Railway Infrastructure and Asset Management System by 2023.
- Cleaning up the national railway technical and safety rules in line with EU Railway Acquis and prerogatives of the European Railways Agency (ERA) will be a permanent task in the coming years.

Annex 1

Market access (Directive 2012/34/EU[37] establishing a single European railway area and Directive (EU) 2016/2370[38] on the opening of the market for domestic passenger transport services by railway and the governance of the railway infrastructure) is the basic part of EU *acquis* from Annex 1 that was expected to be transposed and for the moment, it has been transposed in the majority of the Regional Partners, except **North Macedonia** that plans the adoption of new Railway Law in the 4th quarter of 2022. With the adoption of this Law, North Macedonia will open the railway market at the domestic level. **Bosnia and Herzegovina** still needs to continue working on the transposition. Work on changes of Railway Law is ongoing in Bosnia and Herzegovina.

Interoperability Directive (Directive (EU) 2016/797[39]) on the interoperability of the railway system within the European Union) transposition is advanced and it is partially transposed in all the Regional Partners except for **Bosnia and Herzegovina**, however, work on implementation of technical specifications for interoperability (TSIs) is still needed to be done to achieve a real impact on the railway network.

Railway Safety Directive (Directive (EU) 2016/798[40] on railway safety) is still to be transposed in the region. The Directive ensures that railway safety is maintained and continuously improved, taking into consideration the development of EU *acquis* and international rules as well as technical and scientific progress and giving priority to the prevention of accidents. Especially critical for accident prevention is the future deployment of the European Railway Traffic Management System (ERTMS) on the railway networks of the Regional Partners as this modern technology will contribute to improving safety levels, as train control and signaling systems play a critical role in ensuring railway safety.

EU *acquis* on passenger rights (Regulation (EC) No 1371/2007[41] on railway passengers' rights and obligations) has to be fully transposed and implemented. It is partially transposed in all Regional Partners and is an ongoing implementation in **Serbia**. The main challenge for the Regional Partners is compensation for delayed, cancelled or overbooked international and domestic trains.

Transport Community Permanent Secretariat will continuously monitor the implementation of the legislation comprised in the Railway Action plan and will offer support according to its mandate for

[36] Source: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32007R1370
[37] Source: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32012L0034
[38] Source: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32016L2370
[39] Source: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3AOJ.L_.2016.138.01.0044.01.ENG
[40] Source: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32016L0798
[41] Source: https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A32007R1371

Regional partners to comply with the deadlines set therein. In cooperation with DG NEAR and DG MOVE, capacity building exercises will be organised. Moreover, Transport Community Permanent Secretariat will cooperate with the European Union Agency for Railways and Shift2Rail in order to find the best tailored solutions for regional partners in developing their railway legislation.

4.3. Road transport

The Road Action Plan is guiding the authorities for the development of a climate-resilient, intelligent, and resource-efficient TEN-T road network in the Western Balkans by incorporating green and smart elements in road investments. The outcome is to stimulate innovative, low emission and fit for digital age road transport. Road Action Plan was endorsed by the Regional Ministerial Council on the 26th of October, covering a timeframe from 2020 till 2023.

The overall pace of progress varies from **slow to moderate**. **Moderate progress** is reported mainly regarding **road maintenance**, where almost all Regional Partners have put a three-year maintenance framework in place. A Road Asset Management System is already in place in North Macedonia, with progress reported in Albania, Bosnia and Herzegovina and Serbia.

Preparation of **ITS Strategy** is progressing at a **different pace across the region**. **Progress** has been achieved **in Albania** that has already been approved by the Order of the Minister of Infrastructure and Energy, date 18.06.2020, the ITS strategy for the road sector. **North Macedonia and Serbia experienced some delays in the kick start** of the World Bank assistance and are expecting to finalise the respective strategies by 2022. **Montenegro** as part of the EU Technical Assistance on legal approximation is expecting to finalise the ITS strategy by the **March 2022**. **Bosnia and Herzegovina and Kosovo** will be **supported** for the preparation of their ITS strategies by **EU CONNECTA**, the assignment is expected to start by March 2022. Albania and Serbia are frontrunner in the region with the adoption of EU ITS standards.

Improving road transport **climate resilience and the use of alternative fuels** is proving to be **challenging**, reflected in the lack of progress on measures related to improving the resilience and creating the infrastructure needed for the shift towards less polluting vehicles. Several reasons can be summarised as mainly due to the lack of appropriate level of awareness on the importance of actions to be taken now from different stakeholders coupled with lack of capacities. The Western Balkans authorities will need bigger support from all the stakeholders, Transport Community Permanent Secretariat, EU Commission, and IFIs in order to leapfrog in the race towards more sustainable and resilient road transport development.

Albeit in general, there are activities carried out mainly in the road maintenance and preparation of a strategic framework for the deployment of ITS, clearly visible in the chart provided in Figure 17, there are **delays accumulated** to achieve the **Road Action Plan deadlines**.

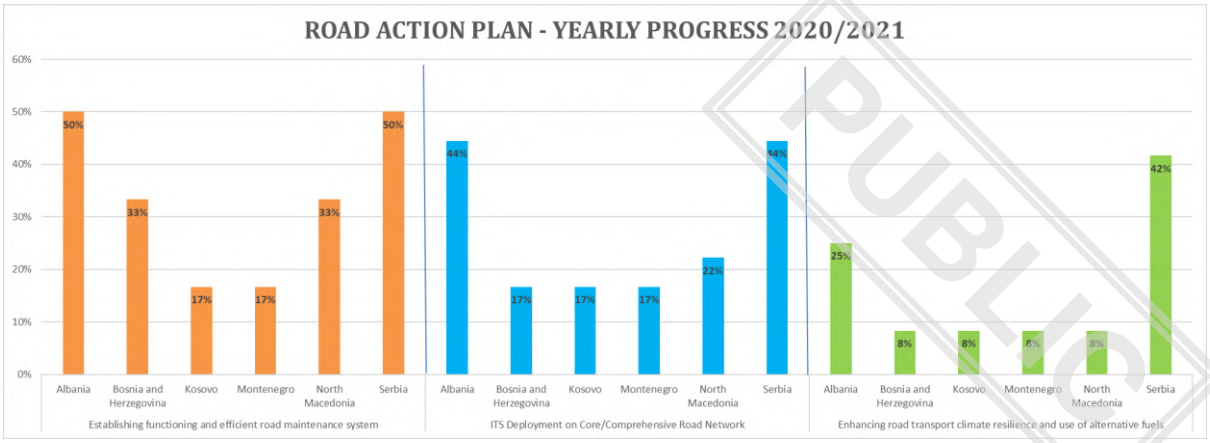

Figure 17. Overall progress Road Action Plan

Policy expectations for the next 5 years

Road transport policy should act as complementary to the development of the TEN-T network in the Western Balkans and should follow closely EU policies. Green and digital transition of the road transport in the Western Balkans will focus on the deployment of ITS as an important demand management of the road traffic, boosting the uptake of recharging infrastructure in a regional coordinated approach more specifically aligned with the Alternative Fuel Directive. Sustainability interpreted in terms of maintenance and climate resilience should be an important part of the Regional Partner's strategies, to preserve the infrastructure and to ensure a better future. Expected results in the next period can be summarised as follow:

- In the coming 5 years, Kosovo and Montenegro should strengthen their efforts to establish Road Asset Management Systems as a crucial stone in setting up efficient maintenance systems. The most practical way to finance this activity should be through IFIs support. In case this option will not be feasible by the authorities, the budget will need to be secured through the state budget.
- Service Level Agreements remains one of the biggest challenges in establishing efficient maintenance systems. Albania and Serbia with the support of World Bank should finalise and sign their respective Service Level Agreements (SLA) within 2022, the rest of Regional Partners will need additional support to prepare SLAs potentially by IFIs within their loan agreement. Furthermore, capacity building activities can be provided by TC PS through dedicated workshops within the remits of Road Technical Committee.
- By the end of 2022, all the Regional Partners should have finalised the preparation of strategies for the deployment of ITS. Institutional structures should be put in place for the implementation alongside monitoring instruments.
- Transposition of ITS Directive 2010/40/EU[42] should be finalised by Bosnia and Herzegovina, Kosovo, Montenegro and North Macedonia by 2023.
- Transposition of Directive (EU) 2019/520[43] — on the interoperability of electronic road toll systems and facilitating cross-border exchange of information on the failure to pay

[42] Source: https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:207:0001:0013:EN:PDF
[43] Source: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019L0520&rid=10

road fees in the EU should become a priority, to be completed by all Regional Partner by the end of 2023.

- A regional framework to be agreed amongst all Regional Partners on the e-tolling interoperability by 2022.
- Climate resilience and deployment of alternative fuels require a regional approach as climate change and pollution are not confined by borders. The region should have in place by 2023 the Regional Guidelines on assessing the existing infrastructure climate resilience as complementary actions to the designing of new road infrastructures.
- A regional plan on the deployment of e-charging stations along the TEN-T road network will be finalised by the end of 2022. Afterwards, the efforts should be focused on making it a reality to ensure a continuous flow of electric vehicles in the Western Balkans roads.

Annex 1

Road transport legislation encompasses around 30 directives and regulations that are partially transposed in the Regional Partners but need further work. This part of the EU *acquis* addresses several aspects pertaining both to professional as well as individual road transport. The legislation addressing the professional road transport hauliers has been changed by the recent Mobility Package, published on 31st July 2020 and so far none of the Regional Partners transposed the new legislation fully although preparatory works are ongoing and there is awareness on the part of the Regional Partners of the importance of this part of EU *acquis*. The basic EU *acquis*, related to access to the occupation of road transport operator (Regulation (EC) No 1071/2009[44] and Regulation (EU) 2020/1055[45]), social provisions on road transport (Directive 2006/22/EC[46], Directive (EU) 2020/1057[47], Commission Decision 2007/230/EC[48] and Directive 2002/15/EC[49]), including driving time, rest periods (Regulation (EC) No 561/2006[50], Commission Regulation (EU) No 581/2010[51] and Regulation (EU) 2020/1054[52]) and tachographs (Regulation (EU) No 165/2014[53], Commission Implementing Regulation (EU) 2016/68[54], Commission Implementing Regulation (EU) 2016/799[55], Commission Implementing Regulation (EU) 2018/502[56], Council Regulation (EEC) No 3821/85[57] and Regulation (EU) 2020/1054[58]) is mostly transposed across the region (apart from the Mobility Package), however, the enforcement is insufficient, as the by-laws are not developed and the inspection services do not have the capacity.

Road Transport Enforcement Workshop, conducted by TCT and the Polish Road Transport Inspection in Belgrade for Bosnia and Herzegovina, Montenegro and Serbia in December 2021 will have a second

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[44] Source: https://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX%3A32009R1071.
[45] Source: https://eur-lex.europa.eu/legal-content/EN/TXT/?toc=OJ%3AL%3A2020%3A249%3ATOC&uri=uriserv%3AOJ.L_.2020.249.01.0017.01.ENG.
[46] Source: https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A32006L0022.
[47] Source: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3AOJ.L_.2020.249.01.0049.01.ENG&toc=OJ%3AL%3A2020%3A249%3ATOC.
[48] Source: https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32009D0959#:~:text=Commission%20Decision%20of%2014%20December%202009%20amending%20Decision,NL%2C%20PL%2C%20PT%2C%20RO%2C%20SK%2C%20SL%2C%20FI%2C%20SV%29.
[49] Source: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32002L0015.
[50] Source: https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32006R0561.
[51] Source: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32010R0581.
[52] Source: https://eur-lex.europa.eu/eli/reg/2020/1054/oj.
[53] Source: https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32014R0165.
[54] Source: https://eur-lex.europa.eu/eli/reg_impl/2016/68/oj.
[55] Source: https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32016R0799.
[56] Source: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32018R0502.
[57] Source: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A31985R3821.
[58] Source: https://eur-lex.europa.eu/eli/reg/2020/1054/oj.

edition in Skopje in 2022, addressed to Albania, Kosovo and North Macedonia. The Workshop focused on explaining the application of EU *acquis* in the field of roadside checks and all the relevant EU acquis (Mobility Package driving and resting times and tachographs). Subsequent training is planned for all Regional Participants in Poland in 2022.

Moreover, Transport Community Permanent Secretariat will assist all Regional Partners into implementing the relevant road transport policy and provide support in cooperation with the relevant Commission services, DG NEAR and DG MOVE, in order to ensure that the administrations acquire the necessary know-how. Dedicated follow-up is currently ongoing via the Road Transport Committee.

Policy expectations for the next 5 years

The major recommendation for the subsequent 5 years is to focus on the full transposition of the EU *acquis*, including the Mobility Package and facilitating the work of the inspection services. The possible recommended actions to take:

- Fine-tuning the work of the inspection services in order to align the procedures with requirements of the EU *acquis* including capacity building and financing of the additional posts within the inspection services. Currently, the inspection services are roughly 2/3 understaffed and do not possess sufficient, basic equipment (this varies across the Regional Partners). This is a precondition – without establishing professional and fully functional inspections services, a profound control of vehicles during roadside checks or periodical technical inspections are not possible. It is suggested to look into possible ways of financing additional posts of inspectors, e.g., through the IFIs as a way of financing purchasing specialist equipment for performing the checks, including the Mobile Offices (e.g. from IPA).
- Transposition and implementation of the Directive 96/53/EC[59] of 25 July 1996 laying down for certain road vehicles circulating within the Community the maximum authorized dimensions in national and international traffic and the maximum authorized weights in international traffic.
- Type approval regulations (Regulations No 2018/858[60], No 167/2013[61] and No 168/2013[62]) have to be transposed and implemented. Works are ongoing in the Regional Partners.
- Directives on roadside checks (Directive 2014/47/EU[63]) and periodical technical inspection (Directive 2014/45/EU[64]) have to be transposed and implemented and the by-laws have to be in place. They are partly transposed in certain Regional Partners, while in the others works are planned but they have to be closely correlated to the reforms of the inspections.

4.4. Road Safety

[59] Source: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A31996L0053.
[60] Source: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018R0858.
[61] Source: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32013R0167.
[62] Source: https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex%3A32013R0168.
[63] Source: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:JOL_2014_127_R_0005.
[64] Source: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32014L0045.

In 2020, Western Balkans Regional Partners reported 1,171[65] fatalities. In comparison with figures in the last 10 years, the number of fatalities has reduced by 625. Every year, there was a slight reduction in fatalities. Based on reports received from our regional partners, Western Balkans' rate for the year 2020 is 64 people killed per 1 million inhabitants, this figure is still high in comparison to the EU's rate of 42 people killed per 1 million inhabitants.

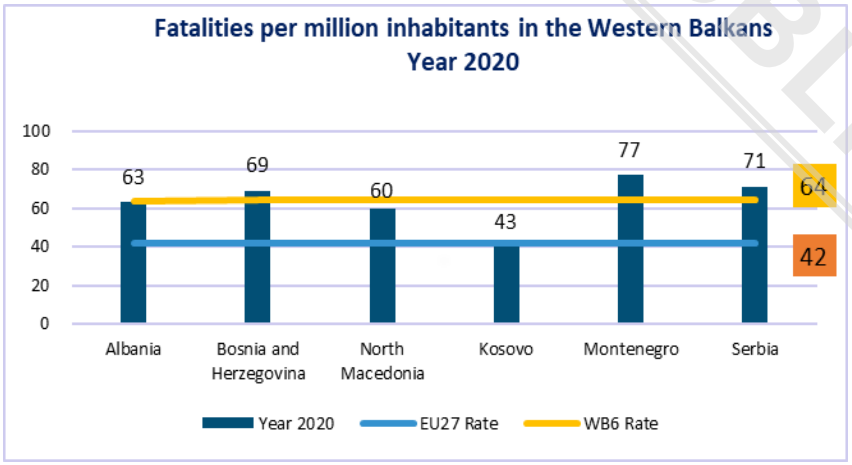

Figure 18. Fatalities per million inhabitants in the Western Balkans 2020

Road Safety Action Plan provides a list of short- and medium-term activities. Some of the proposed measures are already taken commitments by the relevant authorities of the SEE parties under the Western Balkans Six process, monitored earlier through the Connectivity Reform Measures Management Plan, and broadened in the view of the recent studies and assessment needs which have been carried out in meantime. Hence, they have their sound basis in already established legal and coordination mechanisms.

Overall progress is slow; however, some Regional Partners have achieved a moderate level of progress. All Regional Partners have embraced the new goals of the Second Decade of Action 2021-2030 with aspirational targets of halving serious injuries and road deaths by 50%. Their vision is aligned with that of the UN and EU for introducing the Safe System approach (Vision 0) in their new Road Safety Strategies linked to the implementation of their Action Plan.

Road Safety remains a priority for the region, and collaboration with other road safety stakeholders is a key to success. The highlight of 2021 achievements is the establishment of the Western Balkans Road Safety Observatory which brings together the Transport, Police and Health sectors in a unified platform aiming to put forward tailored solutions, monitor road safety targets and improve harmonised road safety data in the region.

Policy expectations for the next 5 years

Road Safety Policy for the next period will align with the Stockholm Declaration, Global Plan for the Decade of Action as well as the EU Road Safety Policy Framework 2021-2030. It shall emphasize the importance of a holistic approach to road safety and call on continued improvements in the design of roads and vehicles; enhancement of laws and law enforcement; and provision of timely, life-saving

[65] *Fatality counts reported from Police. There is still a discrepancy between the total reported data by Regional Participants and the WHO estimates: https://apps.who.int/gho/data/view.main.51310?lang=en*

emergency care for the injured. The policy and Road safety actions also will reflect the Stockholm Declaration's promotion of policies to promote walking, cycling and using public transport as inherently healthy and environmentally sound modes of transport.

There are a lot of developments in the region and the current state of play is as follows. With UNDP's support**, Bosnia and Herzegovina** has drafted a new Road Safety Strategy at the state level, **Montenegro** already has a Road Safety programme for 2000 – 2022 and Serbia has secured financing and is in process of finalising the Draft Road Safety Strategy. Regarding improvements to the level of coordination, new developments are ongoing in **North Macedonia** to establish the Road Safety Agency, and a proposal on the revised structure of the National Coordination Authority has been prepared and is set to be approved in 2021. **Kosovo** has started work on establishing a Road Safety Agency, while **Albania** and **Serbia** have made progress with the transposition of the Road Infrastructure Safety Management Directive 2008/96 and with establishing the Road Safety Inspection and Audit licencing system. **Serbia** leads the way in terms of Road Safety and is one of the best examples to be followed throughout the region.

The policy expectations for the next period are:

- Drafting and adoption of the New Road Safety National Strategy and set road safety targets for the next decade 2021-2030 (reduce with 50% fatalities and serious injuries by 2030) linked to the implementation of the National Action Plan- foreseen by end of 2021 (deadline is not met). Technical Assistance and funding are needed for Albania, North Macedonia and Kosovo to start drafting the new Road Safety Strategy.
- Aligning legislation with EU Directive 2008/96/EC[66] on Road Infrastructure Safety Management is still an ongoing process for most of the Regional Partners. Furthermore, the relevant authorities need to continue identifying the high-risk road sections (dangerous roads and road sections), as well as adopt and start implementing the three-year Road Safety Inspections and Road Safety Audits Plans- by end of 2022
- Collection of Key performance Indicators using the new EU Methodology released in May 2021 – by end of 2022
- Develop specific programmes for the safety of vulnerable road users and in particular for motorised two-wheel vehicles – by end of 2021
- Capacity building remains a challenge throughout the region. In that respect, the Transport Community Permanent Secretariat plans to offer support/workshops via TAIEX with topics focused on road safety legislation.

Annex 1

The EU *acquis* on road transport does not address the issue of road safety directly. As such, the legislative efforts concerning improving the safety of road transport came later than in the case of railway transport or aviation and improving road safety is still an ongoing effort to reach "Vision Zero". The only act explicitly related to road safety is the Directive facilitating cross-border exchange of information on road-safety-related traffic offences. This act aims to ensure a high level of protection

[66] *Source: https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex%3A32008L0096*

for all road users in the European Union by facilitating the cross-border exchange of information on road safety-related traffic offences and thereby the enforcement of sanctions, where those offences are committed with a vehicle registered in a Member State other than the Member State where the offence took place. In the case of the Western Balkans, joining this system of information exchange would contribute to road safety through potential identification and elimination of dangerous drivers as well as would allow executing the legal consequences about the offence under the law of the territory where the offence was committed.

4.5. Transport Facilitation

Transport Facilitation is one of the key policy areas of the Transport Community, based on Article 11 of the Transport Community Treaty.

The Action Plan on Transport Facilitation endorsed in October 2020 envisages actions for road/railway BCPs/CCPs and ports and multimodal facilitation. It is designed to address inefficiencies and delays and improve/modernise/digitalise the operations along with the indicative extension of the TEN-T Network in the Western Balkans.

The overall pace of progress in the implementation of the Transport Facilitation Action Plan has been moderate. However, there is significant progress in some measures. The signing of the Agreement for Joint Border and Customs Control between Albania and North Macedonia, as well as completing the implementing agreements for joint railway border crossing between Kosovo and North Macedonia, are landmark achievements in line with the Action Plan.

Policy expectations for the next 5 years

Transport facilitation policy in the next period shall remain centred around the establishment of an advanced model of integrated border crossing points, by functionally integrating the operations of the border agencies to be able to complete all exit and entry border formalities upon one-stop at the border (called joint border crossing points JBCP), both in the road and railway transport.

To effectively put the JBCP concept into practice, the Regional Partners need to implement an array of complex trade facilitation measures, including:

1. the organisation of the preferred mode of operation of the joint controls,
2. harmonisation of working hours of the border agencies,
3. redesign/simplification of border procedures,
4. equipment-sharing arrangements, and
5. necessary infrastructure investments.

In addition, successful JBCP implementation and operation require a comprehensive ***legal framework***, sound ***institutional structure*** enabling regular cooperation and coordination at all levels, efficient ***capacity building,*** and an effective system ***for monitoring and evaluating*** progress.

Most of these elements are identified as separate actions within the Action Plan for Transport facilitation, but their implementation is interconnected as they are elements of the same process, so the fulfilment of the overarching aim and the benefits from introducing the new concept of border management will fall short if implementing just one or few from the set of actions.

Connecting all these pieces, be it of the road or railway JBCP puzzle, is a demanding task as it entails active involvement, a pragmatic approach, strong operative capacity and concurrent efforts of multiple border authorities, and the private sector in all parties. It is already certain that further progress in the Action Plan implementation will depend on continuous and concentrated administrative efforts, constant improvement of the technical knowledge and expertise, financial support, but above all, unequivocal political commitment, and an environment conducive to mutual confidence and good neighbourly relations.

TCT Secretariat is supporting relevant authorities in providing guidance, agreement templates and offering technical assistance in setting the legal background for the intra-Western Balkans JBCPs.

With regards to external BCPs, the proposed solution is to obtain a firm political commitment by all concerned partners based on clear guidelines to be set by the European Commission on the non-derogation of the EU Customs and Schengen rules in cases of establishment and operation of joint railway/road border controls between EU and non-EU member states. Another helpful tool might be the organisation of joint working meetings and training events for the road and railway border authorities between the EU and Western Balkans, to get a better understanding of the benefits and requirements for operating joint railway/road border controls and to serve as confidence-building exercises.

The efficiency of the JBCP operation depends to a large extent on the appropriate infrastructure setting at the BCPs, available modern equipment and unimpeded functioning of all ICT applications, including new digital instruments. The corresponding actions in the Action Plan are supported by the EC through the CONNECTA mechanism, as well as the World Bank's Trade and Transport Facilitation Project in some Regional Partners. The TCT Secretariat will continue to coordinate the assistance provided by CONNECTA, while the investments could be then followed up by WBIF. This assistance is usually conditioned by having certain track records in legal arrangements for one-stop/joint controls.

The JBCP concept encompasses radical changes in organising and performing border operations that significantly differ from the traditional two-stop border crossings. Hence, its implementation will require some fundamental changes, not only in the mode of operation but also in the mindset of the national administrations and border staff members. To effectively manage the upcoming changes, the Regional Partners must design and implement a targeted training program aimed at strengthening the capacity of the personnel involved in all stages of operation and at all levels. The training activities must start early in the process and continue permanently to address the ongoing modifications and improvements of the JBCP model. TCT assistance in cooperation with CEFTA and EC would remain crucial in this respect.

Finally, to measure the JBCP impact, it is vital to put in place an appropriate system for monitoring and evaluating the performance results. The current system for monitoring waiting times at BCPs is not sustainable, and the TCT Secretariat aims to introduce real-time monitoring. The TCT Transport Observatory and its underlying data collection procedures should be fully operational in 2022 as well as the deployment of dedicated tools for tracking border waiting times as the Galileo initiative developed by the European GNSS (Global Navigation Satellite System) Agency are expected to address such challenges shortly.

4.6. IWW and Maritime transport

Policy development in the Inland and waterway sector and Maritime sector is highly connected with the reform measures concerning acquis transposition. The Action Plan for Waterborne Transport and Multimodality defines a set of measures related to acquis transposition and infrastructure components with the focus on green and digital elements, especially in core IWW and Maritime Ports.

4.6.1. Inland Waterway transport

Transport policy development in the domain of Inland waterway transport is especially important for the Danube and Sava riparian Countries, Serbia and Bosnia and Herzegovina. The Action Plan from Waterborne Transport and multimodality which was approved in the Ministerial Council in July 2021 defines ambitious measures and milestones for improvement of the Inland waterways sector. The Action Plan defines two pillars; Legislative and infrastructural, while the legislative one is based on Annex 1 of the Transport Community treaty and in particular the Regulatory areas defined for Inland Waterways. In line with the Action Plan, the regional partners are required to prioritize the transposition of the required legislation applicable to inland waterways, in the short to medium term, to align their systems with the required European acts. The Infrastructural part is related only to Serbia and Bosnia and Herzegovina as they have the IWW Core ports in which the investments should be made.

During the drafting of the Action Plan, an analysis of the level of harmonization of the EU Acquis has been made for each regional partner in Inland waterways. The best performing regional partner in that respect is by far Serbia, having transposed almost to the fullest all Directives and Regulations stipulated in Annex 1 related to IWW.

On the other side, the 2nd important riparian country, Bosnia and Herzegovina is lagging being in terms of EU *acquis* transposition, and one of the main reasons is the non – existence of the Law on State level on IWW. Therefore, as mentioned also in the Action Plan, for Bosnia and Herzegovina, the development of the legislative and regulatory frameworks is rudimentary and further efforts are needed to develop the institutional, legal and regulatory setup of waterway transport in Bosnia and Herzegovina. To ensure the safety of navigation on inland waterways, it is advised to adopt the law on the state level regarding Inland waterways transport, as a precondition for transposition of the mentioned legislation. Even though IWW transport is not a priority for regional partners which do not have navigable rivers, acquis transposition is mandatory for all regional partners.

Policy expectations for the next 5 years

- Regional partners should focus on acquis transposition according to the relevant regulatory areas in Inland waterways, as defined in Annex 1 of the Transport Community Treaty and the Action Plan for waterborne transport and multimodality according to the deadlines indicated in the Action Plan
- Special focus should be given in cooperation with the EU Members States, in terms of best practices, sharing of experiences in IWW management, this should be an ongoing activity within the next five years
- Attention should be given to active participation in relevant forums on the EU level, including an effort to obtain observer status in the working groups of CESNI-European Committee for drawing up standards in the field of inland navigation - 3 working groups on CESNI/PT (technical requirements), CESNI/QP (professional qualifications) and CESNI/TI (information technology) as well as obtaining observer status in the European Commission Expert groups related to Inland waterway transport policy issues: NAIADES, Social matters, Technical

requirements for vessels, DINA/ RIS. This should be done in line with the deadlines stipulated in the Action Plan.

- To the extent possible, the regional partners which have navigable Waterways should strive to undertake appropriate analysis and developing concepts and studies for greening of IWW ports, including possibly shore-side power supply and alternative clean fuel supply facilities (e.g. LNG) The decision on the location of the LNG refuelling points at ports should be based on a cost-benefit analysis including an examination of the environmental benefits. In this view, action towards the realistic assessment of the demand and prospects of the utilization of LNG-powered vessels is strongly recommended, following a cost-benefit and environmental analysis. It is advised that the regional partners engage in this process as soon as possible, at the latest by 2025, in line with the Action Plan,
- To the extent possible, the regional partners which have navigable Waterways should closely follow the newest developments in terms of transition to zero-emission Waterborne transport. This should be an ongoing exercise within the next five years.

Annex 1

IWW legislation is transposed only in Serbia, while the works in the other Regional Partners are ongoing concerning the scope and timeframe for the transposition. Bosnia and Herzegovina has a substantial number of IWW legislation in the entities, however, it has to be decided whether national-level legislation will be developed, possibly based on the previous draft laws. Montenegro is working on drafting new IWW legislation as until recently, it has applied maritime legislation to the IWW sections. Transposing EU *acquis* on IWW will be beneficial for the Regional Partners for several reasons, including access to the market (Council Regulation (EC) No 1356/96[67], Council Regulation (EEC) No 3921/91[68], Council Regulation (EC) No 718/1999[69] and Council Directive 96/75/EC[70]) and access to the profession (Council Directive No 87/540/EEC[71], Directive (EU) 2017/2397[72], Commission Delegated Directive (EU) 2020/12[73], Commission Delegated Regulation (EU) 2020/473[74] and Commission Implementing Regulation (EU) 2020/182[75]) as well as EU *acquis* on boatmasters' certificates (Council Directive 91/672/EEC[76]).

Montenegro is developing a draft Law on Inland Navigation, to finalise works by the end of 2022, transposing Directive 2009/100/EC[77] on reciprocal recognition of navigability licenses for inland

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[67] Source: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:31996R1356.
[68] Source: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:31991R3921.
[69] Source: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:31999R0718.
[70] Source: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A31996L0075.
[71] Source: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A31987L0540.
[72] Source: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32017L2397#:~:text=Directive%20%28EU%29%202017%2F2397%20of%20the%20European%20Parliament%20and,Directives%2091%2F672%2FEEC%20and%2096%2F50%2FEC%20%28Text%20with%20EEA%20relevance%29.
[73] Source: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3AOJ.L_.2020.006.01.0015.01.ENG&toc=OJ%3AL%3A2020%3A006%3ATOC.
[74] Source: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32020R0473.
[75] Source: https://eur-lex.europa.eu/legal-content/EN/TXT/?toc=OJ%3AL%3A2020%3A038%3ATOC&uri=uriserv%3AOJ.L_.2020.038.01.0001.01.ENG#:~:text=COMMISSION%20IMPLEMENTING%20REGULATION%20%28EU%29%202020%2F182%20of%2014%20January,qualifications%20in%20inland%20navigation%20%28Text%20with%20EEA%20relevance%29.
[76] Source: https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A31991L0672.
[77] Source: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32009L0100.

waterway vessels and Directive (EU) 2016/1629[78] laying down technical requirements for inland waterway vessels, as well as Directive (EU) 2017/2397[79] on the recognition of professional qualifications in inland navigation, and Directive 2013/53/EU[80] on recreational craft and personal watercraft.

Transport Community Permanent Secretariat is monitoring the progress of its Regional Partners via the Action Plan, the activities of the dedicated Technical Committee. The Committee issues an yearly report on the activities performed. With the help of the experts from the Regional Partners attending the Technical Committee projects for capacity building will be identified and organised in cooperation with DG NEAR. Moreover, cooperation is ongoing with other relevant EU bodies, such as European Maritime Safety Agency (EMSA) in order to identify the best approaches to capacity building and support provided to the administrations of the Regional Partners.

4.6.2. Maritime transport

Transport policy development in the domain of Maritime transport is especially important for the Maritime Regional Partners, Albania and Montenegro. The Action Plan from Waterborne Transport and multimodality which was approved in the Ministerial Council in July 2021 defines ambitious measures and milestones for improvement of the Maritime sector. The Action Plan defines two pillars; Legislative and infrastructural, while the legislative one is based on Annex 1 of the Transport Community treaty and in particular the Regulatory areas defined for Maritime Transport. In line with the Action Plan, the regional partners are required to prioritize the transposition of the required legislation applicable to Maritime transport, in the short to medium term, to align their systems with the required European acts. The Infrastructural part is related only to Albania and Montenegro as they have the Maritime core ports[81] in which the investments should be made.

During the drafting of the Action Plan, an analysis of the level of harmonization of the EU Acquis has been made for each regional partner in Maritime Transport. In terms of the comparison of the two maritime regional partners (Albania and Montenegro), Montenegro is performing better in acquis transposition having transposed approximately 70 % of the required legislation[82], while for Albania this percentage is much lower. Hence, it is crucial to mention that huge efforts are undertaken by Albania in the last year to speed up the process of EU *acquis* transposition, in various areas, especially in terms of Flag state control and Port state Control.

Even though Maritime transport is not a priority for regional partners which do not have access to the sea, EU *acquis* transposition is mandatory for all regional partners. In that respect, it is also important to mention that Serbia has already transposed almost to the fullest all the required legislation related to Maritime transport. The other regional partners are yet to follow that example.

Policy expectations for the next 5 years

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[78] Source: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32016L1629.
[79] Source: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32017L2397#:~:text=Directive%20%28EU%29%202017%2F2397%20of%20the%20European%20Parliament%20and,Directives%2091%2F672%2FEEC%20and%2096%2F50%2FEC%20%28Text%20with%20EEA%20relevance%29.
[80] Source: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32013L0053.
[81] Albania has also one Port defined as comprehensive Port, which is the Port of Vlore in the south of Albania.
[82] According to the Transport Development Strategy – Montenegro 2019-2035

- All regional partners should intensify their efforts in transposing and implementing the relevant directives and Regulations as defined in Annex 1 of the Transport Community treaty and The Action Plan for Waterborne Transport and Multimodality
- In the future set up of the Port of Durres, Albania should pay particular attention to the planning of the possibility of availability of alternative fuels, as Durres is the core Port of the extended TEN-T network
- Planning of investment needs in critical resilience of maritime port infrastructure due to climate change is inevitable and should be considered in future port planning
- In line with the Action Plan, Ports of Bar and Durres should strive in continuing the process of "greening of the port", which means much more than greening the transport side. All industry players in the port should have their agendas, goals and plans aligned to maximise the impact of any greening initiative.
- It is very important that in the process of the greening of the Ports, the actions and plans which will be done are taken in the broadest term possible because even small changes and investments can make a difference on the path of transforming the Ports to energy and multimodal hubs
- Active participation in existing EU platforms (e.g. EUSAIR), as well as diversification of funding sources (IPA, INTERREG83, CEF, HORIZON, WBIF, EIB, EBRD, WB), will be crucial in the port Grening Process of the Western Balkan Maritime Ports
- Both Montenegro and Albania should prioritize adoption of legislation and necessary investments for Maritime Single Window
- All regional partners should strive to digitalize freight transport according to the Regulation (EU) 2020/1056[84] of the European Parliament and of the Council of 15 July 2020 on electronic freight transport information

Annex 1

Montenegro is working on 2 draft laws that will aim to transpose the crucial EU acts from Annex 1 on maritime transport until the end of 2022 in the following manner:

1. Law on Ports, which will attempt to transpose Directive (EU) 2019/883[85] on port reception facilities for the delivery of waste from ships, Directive 2001/96/EC[86] on harmonized requirements and procedures for the safe loading and unloading of bulk carriers and Regulation (EU) 2017/352[87] on the provision of port services and common rules on the financial transparency of ports.

2. Law on Protection of the Sea from Pollution from Maritime Facilities, including transposition of Directive 2005/35/EC[88] on ship-source pollution and the introduction of penalties, including criminal penalties, for pollution offences, Regulation (EU) No 530/2012[89] on the accelerated phasing-in of

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[83] *Interreg is one of the key instruments of the European Union (EU) supporting cooperation across borders through project funding.*

[84] *Source: https://eur-lex.europa.eu/eli/reg/2020/1056/oj.*
[85] *Source: https://eur-lex.europa.eu/eli/dir/2019/883/oj.*
[86] *Source: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32001L0096.*
[87] *Source: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32017R0352.*
[88] *Source: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32005L0035#:~:text=DIRECTIVE%202005%2F35%2FEC%20OF%20THE%20EUROPEAN%20PARLIAMENT%20AND%20OF,PARLIAMENT%20AND%20THE%20COUNCIL%20OF%20THE%20EUROPEAN%20UNION%2C.*
[89] *Source: https://eur-lex.europa.eu/eli/reg/2012/530/oj#:~:text=REGULATION%20%28EU%29%20No%20530%2F2012%20OF%20THE%20EUROPEAN%20PARLIAMENT,or%20equivalent%20design%20requirements%20for%20single-hull%20oil%20tankers.*

double-hull or equivalent design requirements for single-hull oil tankers, Regulation (EU) No 1257/2013[90] on ship recycling and Regulation (EC) No 782/2003[91] on the prohibition of organotin compounds on ships.

The remaining elements of the EU *acquis* from Annex 1 on maritime transport will be transposed in the period after 2022.

Serbia has transposed all the maritime acquis from Annex 1, while Bosnia and Herzegovina is preparing to draft the national level maritime law (there exists an old draft law for both IWW and maritime law, however, it was not enacted). Kosovo and North Macedonia still need to start working on the transposition of the maritime acquis. Albania is focused on transposing Directive 2009/21/EC[92] on compliance with flag State requirements and Directive 2009/16/EC[93] on port State control. Further commitment is needed to transpose the remaining elements of the EU *acquis*.

4.7. Transport of dangerous goods

Transport of dangerous goods is an ongoing economic activity and the part of transport that keeps engines running. Transposition and implementation of the file will be continued in the next 5 years, with a special focus on adaptation to the technical and scientific progress of Directive 2008/68/EC on the inland transport of dangerous goods[94] every second year. Application to domestic transport of the international agreements, i.e:

- the Agreement concerning the International Carriage of Dangerous Goods by Road (ADR);
- Regulations concerning the International Carriage of Dangerous Goods by Railway (RID) - Appendix C to the Convention concerning International Carriage by Railway (COTIF);
- the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN); requires that the updated annexes are translated into all languages of the region.

Further work will be carried out in order to ensure implementation of the legal provisions, in particular with a focus on professional training of the safety-related functions in the agreements, i.e. dangerous goods safety advisers, ADR drivers, ADN experts etc.

Cross-disciplinary aspects of the administrative life will also be in focus, and a coherent approach will be developed to ensure coherence with developments in general railway, road and inland waterways safety. Where synchronised capacity building will be possible, TCPS will assist regional partners in the development of appropriate projects. Moreover, regional cooperation will be further developed for punctual areas where it is efficient to do so.

TCPS will continue organising the Transport of Dangerous Goods Technical Committee that will function as the main exchange platform for capacity building in the Region. Further than that, support can be provided via dedicated conferences, studies and other exercises of raising awareness.

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[90] Source: https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:330:0001:0020:EN:PDF.
[91] Source: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32003R0782.
[92] Source: https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:131:0132:0135:EN:PDF.
[93] Source: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32009L0016#:~:text=DIRECTIVE%202009%2F16%2FEC%20OF%20THE%20EUROPEAN%20PARLIAMENT%20AND%20OF,European%20Community%2C%20and%20in%20particular%20Article%2080%282%29%20thereof%2C.
[94] Source: http://data.europa.eu/eli/dir/2008/68/oj

Particular attention will be paid to the implementation of Directive 95/50/EC on uniform procedures for checks on the transport of dangerous goods by road[95], in close connection with the other areas of roadside enforcement. Both roadside checks and checks at the premises of road transport carriers of dangerous goods will need to be performed more systematically to ensure appropriate road safety.

To stimulate cooperation of the enforcement officials, regional partners will be invited to organise joint checks within the region, which could include also the neighbouring EU Member States if willing.

Directive 2010/35/EC on transportable pressure equipment[96] is to be transposed by the regional partners by 2025 according to the Key Performance Indicators of the Guidelines on the transport of dangerous goods.

Taking into consideration that the transposition of this Directive is dependent on EU Acquis comprised in other Chapters under negotiation, the TCPS will assist to the limit of its competencies the regional partners in the implementation of this legislation facilitating to the largest extent possible cooperation with the relevant EU institutions and bodies. The development of domestic market surveillance will be facilitated by exchanges with the relevant authorities from the EU Member States. Cooperation with European Accreditation (EA), European Committee for Standardization (CEN) will be enhanced via the events organised by the TCPS.

Transposition of Waste legislation, in particular for those wastes which are classified as dangerous goods according to the annexes of ADR, RID and ADN will also come into focus in the near future.

TC PS will assist the regional partners in developing their domestic waste policies in order to ensure the safe disposal of dangerous wastes.

Cooperation with industry will also be enhanced, and projects will be envisaged in order to reduce the amount of pollution generated by the existing ageing fleet in the regional partners.

By 2027, at least one project with an impact on greening transport of dangerous goods in the region will be achieved.

TC PS will continue working in cooperation with the Commission and EU Delegations/Office in the region in order to ensure smooth implementation and planning of financial assistance for the transport of dangerous goods sector and for environmental purposes.

[95] *Source: http://data.europa.eu/eli/dir/1995/50/oj*
[96] *Source: http://data.europa.eu/eli/dir/2010/35/oj*

5. OVERALL CONCLUSIONS

Compliance with the **TEN-T standards** within the **timeframe imposed by Regulation 1315/2013** remains a **challenging goal** requiring systematic and coordinated effort on the part of all Regional Partners, backed by substantial financial resources.

Significant funding has already been mobilized for major projects likely to bring dramatic improvements of TEN-T Network by 2027. According to the Transport Community Annual Report on the development of TEN-T Core and Comprehensive Network, almost **€12 billion have been committed for ongoing projects targeting Core and Comprehensive Network**. The biggest share of investments is focused on roads with almost €8 billion, followed by railway with €3.7 billion.

Planned projects included in the Regional Partners' SPPs are aiming to contribute further to reaching compliance with the TEN-T Standards. The total number of transport projects in SPPs is 78, of which 44 for roads, 24 for the railway, 2 for ports, 4 for IWW and 2 for airports. The total amount of investments needed is €22.6 billion, €7.7 billion for mature projects and €14.9 billion for projects under preparation. Regulation 1315/2015 requires completion of the Core network by 2030. This deadline is reflected in planning instruments of the Regional Partners aiming at the improvement of the indicative extension of the TEN-T Core Networks to the Western Balkans.

Flagship Projects should be at the core of future TEN-T development planning for the next years. Progress is yet uneven and the region should ensure more efforts and coordination to make best use of available grant funding and achieve the broader economic benefits these projects are likely to bring. There should be greater focus on priority actions needed to advance each individual project, as laid down in the current document.

Apart of investing in large infrastructure projects aiming to close the development gap and ensure compliance with TEN-T criteria, **smaller-scaled interventions** targeting specific network and policy shortages, promoting smart and sustainable mobility and likely to bring quick wins should be also prioritized.

Railway projects are covering 162 km of new constructions of railway lines, 127 km of rehabilitations and 1385 km of upgraded and reconstructed railway lines. All these Railway projects are divided into two maturity groups, each of them valued as given below:

- 7 mature projects with a total amount of EUR 869 million;
- 16 projects under preparation with estimation cost around EUR 5.4 billion.

Considering the amounts necessary for the completion of both groups, it`s more than visible that there is a lack of mature projects compared to the projects in preparation. However, these seven mature railway projects together with already identified eleven railway projects in the Annual TEN-T Report are covering 1331.5 km for modernisation, reconstruction, overhaul or new construction with a total value of EUR 4.56 billion which will be executed in the near future.

Just like in the case of on-going investments, **road transport still holds the lead in terms of both number and overall value of planned and mature projects**. This is a proper reflection of the current modal imbalance in the region and a serious warning that achieving green mobility requires more than just simple political statements.

Implementation of on-going and mature projects will increase TEN-T compliance in the region as described below.

After the implementation of the eleven ongoing **rail** projects indicated in the TEN-T Annual Report and seven mature projects described in this document, compliance with TEN-T standards will be increased in terms of electrification from 73% to 86.3%, ERTMS from 0% to 21% (still wait confirmation from some regional partners for this percentage) and axle load from 87.4% to 92.2%. However, train length will not be respected everywhere due to land acquisition issues.

As per the forecast provided under the TEN-T Annual Report, the **road** network compliance rate for the Core Network, will increase by 2027 after the completion of ongoing projects from 45% to 60% (infrastructure profile and condition criterion). The finalization by 2030 of the projects currently ranked as mature will likely result in the Core Network compliance rate reaching 77% under the best-case scenario. That would be both a significant achievement and not sufficient for meeting the deadlines in the TEN-T Regulation which renders the full dimension and complexity of the Regional Partner's pursued mission and efforts. Road Comprehensive Network compliance will also increase, though at a slower pace, reaching 57% in 2027 and 62% in 2030 from current 51,89%.

Moreover, such improvement is largely dependent on adequate **maintenance** of the network (newly built assets included) which appears to remain a challenge, given the current situation in the region. This is specifically evident in the **railway sector** that continues to suffer from insufficient investment (only 15% of overall investment), with existing investment directed towards isolated sections and not to overall network improvement. The reason why the greater part of the network is in poor or very poor condition is because of a lack of regular network maintenance and condition-based maintenance (CBM). A strong tool for overcoming the problem is regular condition-based maintenance based on multi-annual contracts between the Infrastructure Manager and the relevant authority, followed by appropriate on-time funding, solution that is a part of the Transport Community Railway Action Plan[97]. On top of regular maintenance, the application of EU Technical Specifications for Interoperability and TEN-T standards is of key importance.

Apart from investing in bridging the network's gaps, road maintenance will also need to be more systematic and performance-oriented in order to ensure assets preservation and proper road surface condition. Proper maintenance policies (identified as a priority and included in the Road Action Plan[98]) backed by adequate funding will be instrumental for ensuring long-term compliance with TEN-T standards in the region.

Overall compliance with Directive 2008/96/EC on **road safety** is required under Article 18. b of Regulation 1315/2013. This is a target yet to be achieved for the region, requiring full transposition of the Directive and implementation of the institutional set-up it provides. This is a long-term process currently being implemented within the framework of the Road Safety Action Plan steered by the Transport Community Permanent Secretariat. Given the deadlines included therein, 2030 road safety compliance is achievable but significant challenges still lie ahead and will have to be addressed once focus will shift from transposition to implementation of the related EU acquis.

Compliance with Directive no. 2004/54/EC is required by article 18. c of Regulation 1315/2013 for tunnels over 500 m in length. For tunnels in various stages of design or preparation, this is achieved on

[97] *Source: https://www.transport-community.org/wp-content/uploads/2020/11/Rail-Action-Plan.pdf*
[98] *Source: https://www.transport-community.org/wp-content/uploads/2020/11/Road-Action-Plan.pdf*

a project basis. In the case of tunnels now in operation, the adoption of risk-reduction measures has been accepted as an alternative to applying Directive requirements, where structural solutions could not be implemented at reasonable cost. Hazard reduction measures should be taken under an institutional framework that the region has yet to adopt.

Inland waterways transport has a satisfactory level of compliance, however, it is concerning that none of the core inland ports have planned projects to address the availability of clean fuels by 2030. Through the Action Plan for Waterborne Transport and multimodality, one of the measures relates to developing concepts and studies for the greening of ports, which should include exploring the options of alternative fuels availability in the future.

Maritime transport has a relatively high satisfactory level, but none of the core ports have plans to address the compliance with the availability of clean fuels. In terms of greening of the ports, Port of Bar has managed to initiate many small-scale projects which are emphasizing the sustainability of the port, which is a great step forward. Port of Durres in its future development and Reallocation to Porto Romano should pay particular attention not to downgrade the compliance level of the TEN-T standards, and in addition, start the Port greening process in the design phase of the new Port.

Airport- All Core and Comprehensive airports have satisfactory compliance with TEN-T standards. Due to the COVID pandemic and decrease in air traffic, all airports currently do not have problems with capacity. However, some of them like Sarajevo have been operating near the limit of their capacity before the crisis. None of the airports are connected by railway connections. Tirana airport will become the first airport with a railway connection once the ongoing project will be completed. Several airports (e.g Sarajevo, Belgrade, Nis and Kraljevo airports) reported the availability of alternative clean fuels for airport ground services. It has to be pointed out that this criterion is to be applied according to the market needs and that airports need to be prepared to make available alternative clean fuels when needs arise as cited in the regulation, 'for air transport infrastructure: capacity to make available alternative clean fuels.'

Looking to the TEN-T standards, axle weight, track gouge, electrification are respected in the majority of the mature projects. However, the involvement of ERTMS and train length as TEN-T standard are not recognised in the majority of the projects.

Increased public spending is a common element of fiscal stimulus programs designed to support economic recovery and future growth in times of crisis. This is most certainly a path that the EU and the Western Balkans region shall be also following in the years to come in order to tackle the economic effects of the Covid-19 pandemic.

However, there are few elements that should be given proper consideration to in order to make sure that the desired outcomes are being achieved. Apart of the immediate benefit they would likely bring by supporting consumption and employment during construction stage, large infrastructure projects could also boost the long-term growth, to the extent that they are being properly planned, designed and selected, in full observance of the existing and forecasted market demand. The flip-side of the coin is that increased government spending inevitably results in a growing public debt rate. Therefore, **securing the long-term impact of large infrastructure investments becomes critical for ensuring the overall success of the recovery program**, whereas the short-time economic impact during construction period cannot entirely compensate the negative effects of a growing debt rate. If the initially anticipated benefits fail to materialize, rather than supporting the long-term growth the **unproductive projects might end-up becoming drag on the region's brittle economies**. Enforcing the projects'

planning, selection and prioritization mechanisms should therefore be treated as a critical priority, to ensure the high quality of the investment programs and safeguard the anticipated long-term benefits.

Revision of the TEN-T Guidelines expected to be finalised by end of 2022 is aiming to make European network greener, more efficient and more resilient[99]. This change will be achieved based on four main principles - sustainability, cohesion, efficiency, increased user benefits. Sustainability is aiming to make transport greener by providing the appropriate infrastructure basis to alleviate congestion and reduce greenhouse gas (GHG) emissions and pollution of air and water by making each mode of transport more efficient and by enabling increased transport activity by more sustainable forms of transport. Cohesion, aiming to facilitate seamless and efficient transport, fostering multimodality and interoperability between the TEN-T transport modes and better integrating the urban nodes into the network. Efficiency, aiming to increase the resilience of TEN-T to climate change and other natural hazards or human-made disasters. It points at improving the efficiency of the TEN-T governance tools, at streamlining the reporting and monitoring instruments and at reviewing the TEN-T network design.

These principles should be also guiding the **TEN-T development in the Western Balkans** and will require among others that Regional Partners address transport investments **not only from their own isolated perspective but rather from a region-wide approach to maximise the network effects**.

Nevertheless, it should be noted **green and digital elements still remain to be addressed during the projects' planning phase in the region**. Regional Partners in cooperation with IFIs should reflect the needed shift during the implementation of mature projects and preparation of the documents for non mature projects.

Once the Transport Observatory shall be fully operationalised, Transport Community Secretariat in close cooperation with the structures set up by the Treaty **shall design and put in place a Prioritisation Methodology** for the planned projects, giving due weight to green and digital elements.

Resilience, sustainability, safety, connectivity and innovation are the keywords around which new transport and infrastructure planning policies and tools should build upon, ensuring transition from a quantitative-driven approach to a quality-centred one. Sustainable and Smart Mobility Strategy for Western Balkans mirrors the EU Strategy and strives to put the region on the path to achieving green mobility. This strategy outlines how the Western Balkans transport system can achieve its green and digital transformation and become more resilient to future crises. The result is predicted to substantially cut transport emissions by 2050 and contribute to the EU goal of climate neutrality, delivered by a smart, competitive, safe, accessible, and affordable transport system. This is also in line with policy initiatives indicated in the Western Balkans Green Agenda and Economic and Investment Plan for the Western Balkans.

To facilitate this transition, the region should be supported on the implementation of the set of **measures framed in a roadmap to help the region move towards a sustainable, smart, and resilient mobility system** and to direct it to the structural changes required to achieve climate neutrality and its Green Agenda goals as stated in the Sofia Declaration signed by the Western Balkans leaders in November 2020[100].

Last but not least, to achieve full benefits of the ongoing and planned investments, it is of **paramount importance to progress with the transposition and implementation of EU legislation** as per Annex 1

[99] *https://ec.europa.eu/commission/presscorner/detail/en/fs_21_6779*

[100] *Source: https://www.rcc.int/docs/546/sofia-declaration-on-the-green-agenda-for-the-western-balkans-rn*

of Transport Community Treaty. **Sectorial reforms in each sector should progress** as per the deadlines already agreed and the commitment taken for the implementation of **Action Plans** (road, railway, road safety, transport facilitation and waterborne and multimodality).

ANNEX 1 – FLAGSHIP PROJECTS

FLAGSHIP 1 - CONNECTING EAST TO WEST

Project 1: Nis – Pristina "Peace highway"					
Regional Partner: Kosovo					
Section: Pristina – Merdare					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Construction of a 27 km-long motorway section between Pristina and Merdare BCP/CCP, including 3 interchanges, 4 viaducts, 5 bridges and 5 overpasses	Feasibility Study and Preliminary Design have been updated.	EU grant has been approved since December 2020, but not signed yet. New grant request made to increase EU co-financing rate to 40% was positively assessed and in course of being approved. Kosovo has not yet started negotiations for the EBRD/EIB loan that should ensure the co-financing. Preparation of Tender Dossiers and Works supervision shall be ensured through JF grant.	From a technical maturity perspective, the project is fit for design-build tender launching. - start loan negotiation; - Urge the commencement of TA for DB tender dossier preparation	Financing fully ensured. Design-build contract signed and works started	Works completed
Regional Partner: Serbia					
Section: Nis - Plocnik					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**

Construction of approx. 33 km highway between interchanges Merosina and Belojin at semi motorway profile	Detailed Design approved (1 sector) and in advanced approval stage (3 sectors)	Financing fully ensured through EU grant and loans. This section has been divided in 4 lots. In case of one lot, the works contract has been awarded and execution has started. For 3 other lots the detailed design is in advanced review and approval stage.	Expedite design approval and launch procurement for works	Works on-going on all sectors	Works completed
Section: Plocnik - Merdare					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Construction of a 37-km long highway between Plocnik and Merdare including 3 interchanges, 137 bridges, 11 overpasses and 7 tunnels.	Preliminary Design in advanced approval stage	Grant financing for the next design stage has been ensured since December 2020. Detailed design preparation commencement was however delayed by the slow progress of Feasibility Study and Preliminary Design. Financing not yet ensured for the works execution stage.	Expedite approval of Preliminary Design and commence preparation of detailed design. Decide upon a project financing strategy and initiate action in this regard (loan negotiation, GAF preparation).	Detailed Design and Tender Documents ready. Financing for works fully ensured	Works on-going

Project 2: Modernisation of the Rail Corridor X					
Regional Partner: Serbia					
Section: (Belgrade) Stara Pazova - Sid					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Modernisation of 92 km between Stara Pazova and border with Croatia. Project covers reconstruction of double tracks, all station tracks as well as construction of second track between Indjija and Golubinci. Estimation amount is 400 mil EUR	Preliminary design, Feasibility Study and Environmental impact assessment are ongoing. It was funded by the WBIF grant – 3 mil EUR. This phase of designing should be completed by first quarter of 2023.	EU grant has been approved since 2020. First meeting with consultant (IPF9) was in July 2020. Currently, optional analyse is ongoing regarding the feasibility for 160 or 200 km/h.	From a technical maturity perspective, the project will be ready for design-build tender launching in mid of 2023. - In the coming period all land acquisition issues should be fixed. - After completion of the preliminary design Republic revision committee should give remarks in short period - Touch with IFIs should established as potential source for financing. - Preparation GAF for the round of WBIF in 2023	- Financing fully ensured. - Green light for the Preliminary design provided from the Republic Revision Committee - All legal issues solved - GAF submitted to the WBIF	Works completed
Regional Partner: Serbia					
Section: Nis Railway bypass					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2026**

Construction of approx. 17 km railway bypass around Nis (between Red Cross and PLocnik). This project is part of the bigger one: "Modernisation of the section Nis-Dimitrovgrad)	Detailed Design approved. Tender procedure is ongoing for the first phase of the whole distance Nis Dimitrovgrad	Financing fully ensured through EU grant and loans. Total amount for all 4 phases 267 mil EUR. (around 130 mil EUR is grant).	Completion of the procedure for the procurement, contract with best bidder, construction works	Civil works on-going on whole distance	Works completed
Section: Nis - Presevo					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Reconstruction and modernisation of the railway line Nis – Presevo in total length of 158 km.	Preliminary Design with EIA and FS as well as tender dossier for the section Brestovac – Presevo (135 km) is ongoing. Grant approved by WBIF in 2018. – 3,8 mil EUR	First meeting with consultant was in June 2020. Deadline for the completion - first quarter of 2023. Financing not yet ensured for the works execution stage. Estimation amount is 400 mil EUR	Project will be ready for the design and built approach in the 2023. - Republic revision committee should provide remarks and objections in short period after completion of this phase of designing. - Land acquisition issue should be solved in meanwhile - Negotiations with IFI should be in establish in coming period.	- Preliminary Design and Tender Documents ready. - Green light for the Preliminary design provided from the Republic Revision Committee - Financing for works fully ensured	Works on-going
Regional Partner: North Macedonia					
Section: Construction works in Joint border railway station-Tabanovce					

Project description	Technical maturity	Current stage	Actions needed	Key milestones	
				2023	2024
Project consists of building all facilities in the station Tabanovce for the common work Macedonian and Serbian border authorities (railway, custom, inspections and border police).	Detail design for the stations is done by 2018. Design for the road approaches are still missed	North Macedonia will launch the tender for the construction works together with tender for the construction works for the section Kriva Palanka – Deve Bair.	- Solving issues with EBRD regarding financing of the project as well as about timeline for the implementation.	- Financing fully ensured. - - All legal issues solved - Construction works started	Works completed
Project 3: Modernisation of the Rail Corridor VIII					
Regional Partner: North Macedonia					
Section: Skopje – Deve Bair (Bulgarian border)					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2026**
The project on the eastern part of Rail Corridor VIII involves three phases: - PHASE I (Rehabilitation of the Kumanovo – Beljakovce section) covers 30.8 km, will cost 48.9 million EUR - PHASE II (New Construction of the Beljakovce – Kriva Palanka section) covers 34 km, will cost 145 million EUR	Tender procedure is in final phase for the Phase 1 and 2. Detail design is ready for the Phase 3.	Expected deadline for the completion of the tender procedure is March 2022. Following this construction works could start by May 2022. Deadline for the completion first two phases is 2024. Estimated deadline for the completion of the third distance is 2026.	- Speed up procedure for the engagement construction company once tender procedure is over. - Finding source for the financing third part of the distance.	- Financing fully ensured for the third section. - Construction works is ongoing on the first two sections. - Finance secured for the third distance	Works completed in whole distance

- PHASE III (New Construction of the Kriva Palanka – Bulgarian Border section) covers 24km, will cost 420 million EUR					

Project 4: Demining of the right bank of the Sava river from the river mouth of the Drina river to river mouth of the Una river					
Regional Partner: Bosnia and Herzegovina					
Section: Right bank of the Sava River in BiH					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2022	**2023/2024**
Demining along the right bank of the Sava River in BiH is a mature project which is expected to have a huge regional impact. Preparation for the demining is being undertaken by BHMAC (Bosnia and Herzegovina Mine Action Center).	Resurveying and technical preparation needs to be updated, together with the existing documentation for the detailed designs prepared in 2014. The total amount of the project will be 8.160.000 EUR. Responsible beneficiary country authority for the Grant Agreement is	The project activities had to wait for the activation of the World Bank trust fund, which was obtained in July 2021. The start of the works is expected in the year 2022, with a total duration of approximately 12 months for finishing all the envisaged activities.	- Start of the works forseen in 2022	- Start of the works	Works completed

	the Ministry of Finance and Treasury of Bosnia and Herzegovina and for the implementation, the Ministry of Communications and Transport of Bosnia and Herzegovina.				

Project 5: River training and dredging works on critical sectors on the Serbian-Croatian joint stretch on the Danube River					
Regional Partner: Serbia					
Section: Danube River					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2024	**2025/2026**
The project should eliminate navigation "bottlenecks" on part on the Danube and allow deeper loading and larger ships. This is especially important due to the problems including ship accidents and suspension of navigation	This project is under preparation and the process of obtaining the necessary studies and documents dates back to 2010	For the 17 critical sectors at the common Serbia - Croatia stretch of the Danube River, preliminary designs were based on results of only hydrodynamic modelling were prepared. Morphological modelling is pending for this Project.	To reach maturity, the following key Spatial Planning documents are missing: General design, conceptual design, preliminary design, Environmental Impact Assessment Study, update of the Feasibility study, design	Obtaining all the technical documentation and permits (including EIA and construction permit)	Start of works

during prolonged low water periods.		After morphological modelling and re-examination of solutions for 17 bottlenecks on the common SRB-CRO Danube section, investments costs needed approximate to EUR 48.5 million.	for the construction permit (separately for each critical sector), construction permits, design for the execution of works, tender documentation		

FLAGSHIP 2 - CONNECTING NORTH TO SOUTH

Project 1: Corridor Vc Motorway					
Regional Partner: Bosnia and Herzegovina					
Section: Vukosavlje – Johovac					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Construction of a 36 km of motorway on the Republika Srspska part of Corridor Vc, including 4 large bridges across River Bosna, 3 interchanges, one rest area and one open tunnel.	Detailed Design completed in 2011, in course of revision	Grant application form for execution of works submitted but pending approval because of outdated technical studies and insufficient information. EIB loan negotiation is also progressing (appraisal on-goimg). CONNECTA TA has been mobilized to fill-in the haps in project	- Update the GAF based on the outcomes of CONNECTA TA; - EIB Loan contracting; - Start the tender for works	Financing ensured Works contract(s) signed	Works completed

		preparation (design revision and update, project's feasibility confirmation, road safety audit).			
Section: Johovac – Rudanka					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Construction of an approx. 6-km long motorway on the Svilaj to Doboj section of Corridor Vc, between Interchange Johovac, in Tovira, and Interchange Rudanka in Kostajnica	Works on-going	On-going works are close to completion, to be finalized by June 2022	N/A	Works completed	N/A
Section: Rudanka - Putnikovo Brdo					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Construction of a 5.2 km motorway section, including 2 tunnels, associated local access roads and a rest area	Works on-going	Execution of works commenced in late 2021.	Pro-active monitoring of on-going works (completion deadline appears difficult to observe because of the works' technical complexity)	Works completed (Q4)	N/A
Section: Putnikovo Brdo – Medakovo					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Construction of 8.5 km motorway section, including 6 bridges, 3 underpasses, 2 interchanges with ancillary	Detailed Design revision completed	EU Grant has been approved since December 2019, but its signature by the Beneficiary is still pending. Loan agreement with EBRD is effective.	- Finalise the administrative grant signature proceedings; - Expedite tender for supervision and works	Contracts signed, works on-going	Works completed

tolling facilities and a Centre for Traffic Management and Control		Tender for works and supervision (with pre-qualification) started in September 2020 and expropriations were approved in July 2021. Tendering process is considerably delayed (pre-qualification notice for works published in early February 2022).			
Section: Medakovo – Ozimice					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Construction of 21.7 km of Motorway, including the 2218 m long tunnel Crni Vrh, 7 long bridges with total length about 2.8 km, service station area, Galovac, interchange at Ozimice.	Detailed Design (completed in 2020)	Application for EU grant was positively screened in late 2021. EIB loan financing has been ensured since late 2020. Prior information notice for works was published in April 2021 but no contract notice followed (despite being anticipated for May 2021). Restricted tender for project management launched in January 2022.	- Accelerate tender launching for supervision and works (critical delays between the moment the project reached technical maturity, the moment financing was ensured and procurement launching). - Ensure close coordination with adjoining section Ozimice – Poprikuse whose timely inalization is critical for Medakovo – Ozimice operationalization.	Procurement finalised, works started	Works completed
Section: Ozimice – Poprikuse					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	

				2023	2027
The construction of about 12.8 km of Motorway, including: five tunnels with aggregate length of about 2.7 km, nine long bridges with aggregate length of about 2.1 km, one non serviced rest area and noise reduction barriers.	Preliminary Design (completed in 2014)	EIB loan financing has been ensured since late 2020. Grant application form submitted in 2021 but further withdrawn. Prior information notice for works was published in April 2021 but no contract notice followed. The Beneficiary is in course of preparing the Detailed Design (tender status to be confirmed)	- finalize the Detailed Design - decision on grant financing - launch procurement for works and supervision services once design is finalzied	Procurement finalized Works started	Works completed
Section: Poprikuse - Nemila					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Construction of a 5.5 km motorway section, including a 3.65 km twin tunnel at Golubinja, a mini Centre for Traffic Maintenance and Control, two viaducts, two bridges over the Bosna River and the Poprikuše interchange	Works on-going	Grant approved in late 2019, grant signature expected for Q1 2022. Loan agreements with EIB and EBRD signed. Design-build and supervision contracts were awarded in 2020. Preparatory works started in July 2021.	- Expedite INV grant signature. - Pro-active monitoring of on-going works	Physical progress > 50%	Works completed
Section: Nemila - Vranduk					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Construction of approximately 5.67 km of motorway, including Bosna River regulation works	Detailed Design	Financing ensured through Kuwait Fund for Arabic Economic Development. Pre-qualification invitation published in 2019.	- Expedite procurement process	Contracts awarded and physical works started on ground	Works completed

Section: Vranduk - Ponirak					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Construction of app. 5.3 km of Motorway, including 2 bridges, 1 tunnel and 3 viaducts	Works on-going	Financing ensured through OPEC Fund for International Development. Works contract awarded in 2019, time for completion is 24 months. There is considerable delay in execution.	Ensure close monitoring of works and quick solving of technical and contractual problems	Works completed	N/A
Section: Ponirak - Vraca					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Construction of a 2.8 km motorway section, including 2,4 km long Zenica twin tunnel, viaduct, and ancillary structures.	Works on-going	Works execution will most probably be extended with 12 months.	- Close monitoring and proactive contract management	Works completed	N/A
Section: Vraca (Tunnel Zenica) – Donja Gračanica					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
4.1 km of modern road, including: two tunnels, four viaducts, access road to Zenica, and interchange to Zenica North with tolling facilities.	Works completed	Works were mainly completed. On 15 July 2021, 2 km of motorway was opened to traffic as part of Zenica bypass. Use of the remaining part is conditioned by finalization of tunnel Zenica	N/A	Full section opened for traffic	N/A
Section: Tarčin – Ivan					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**

The project consists in approximately 6.9 of motorway, including 2 bridges and the 1.76 km-long Tarčin twin tunnel	Works on-going	Section has been split in two lots with EIB and EBRD co-financing. Both contracts have been signed and works are progressing.	Close monitoring and proactive contract management	Works completed	N/A
Section: Ivan - Ovčari					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Approximately 11.3 km of motorway in difficult mountainous terrain (70% of the highway route is located on bridges and tunnels)	Feasibility Study in course of revision	WBIF financed TA has been mobilized to bridge the project's maturity gap. Apart of Feasibility Study revision, it will entail Preliminary Design and ESIA (in phase 1) and main/detailed design, procurement plan and tender documents for works (phase 2). Works execution should be also financed through WBIF. Discussions are currently on-going for the entire Ovčari – Mostar North sector.	- Close monitoring of the TA progress in order to ensure high quality technical outputs - Decision on project's financing strategy; - Loan negotiation and GAF preparation start	Detailed Design completed; Financing ensured; Tenders for works and supervision started;	Works completed/close to completion
Section: Ovčari – Prenj					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Construction of a 22 km-long motorway section with 3 tunnels (including the 10 km-long Prenj tunnel), 6 bridges and an interchange	Feasibility Study/Preliminary Design (Prenj tunnel)	WBIF financed TA has been mobilized for Detailed Design and Tender Documents preparation. Pre-qualification started for consultancy services aiming to update Preliminary Design with	- Close monitoring of the TA progress in order to ensure high quality technical outputs; - Award TA services for Tunnel Prenj design and tender documents;	Preliminary studies completed; Financing ensured; Tenders for works and supervision started;	Works on-going on entire project length

		Detailed Design elements and tender documents for tunnel Prenj. Works execution should be also financed through WBIF. Discussions are currently on-going for the entire Ovčari – Mostar North sector.	- Decision on project's financing strategy; - Loan negotiation and GAF preparation start		
Section: Prenj – Mostar North					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Construction of an approx. 13.5 km-long motorway section including two tunnels and three bridges.	Preliminary Design	WBIF financed TA has been mobilized for bridging gaps in project preparation, as following: - ESIA and Gap analysis on Konjic – Mostar section; - DD for the entire project length	- Close monitoring of the TA progress in order to ensure high quality technical outputs - Decision on project's financing strategy; - Loan negotiation and GAF preparation start	Preliminary studies completed; Financing ensured; Tenders for works and supervision started;	Works completed/close to completion
Section: Mostar bypass					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Construction of approx. 15.4 km of motorway that will bypass the city of Mostar	Feasibility Study	Discussions on-going with the EBRD and commercial banks for project financing. EBRD loan assessment passed concept review, pending final review.	- Ensure project financing - Launch procurement for Preliminary and Detailed Design preparation	Detailed Design ready	Works completed/close to completion
Section: Mostar South – Tunnel Kvanj					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**

Cosntruction of 9.2 km of Motorway, including 1 tunnel, 1 overpass, 1 underpass, 2 bridges, 1 viaduct and 1 toll station	Preliminary Design	Financing ensured through EBRD loan. 2-stages procedures for design-build and works supervision were launched in late 2020	Expedite the selection of contractors and consultants	Contract awarded	Works completed
Section: Tunnel Kvanj – Buna					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Construction of 5.25 km of motorway, including the 2.6 km-long tunnel Kvanj and 1 bridge	Preliminary Design	Prolonged tendering process for works (procedure started in December 2019 and still on-going).	- Finalize the tendering process - Ensure efficient and proactive contract management	Design ready, works commenced	Works finalized
Section: Buna - Počitelj					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Construction of approximately 7.2 km of new motorway, including associated local access roads and a rest area	Works completed	Works completed	Section will only become operational upon completion of the subsections: Počitelj-Zvirovići (Q4 2022) and Tunnel Kvanj-Buna (Q4 2024).	N/A	Section fully operational
Section: Počitelj - Zvirovici					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Building of a 11.1 km-long motorway subsection, including four bridges, one tunnel, local roads, rest areas, and interchanges	Works on-going	Works contracts (2 lots) and supervision are signed. Works are delayed, the estimated extension of time is 12 - 15 months.	Ensure efficient and proactive management of the works contract to mitigate delay effects	Works completed	N/A

Project 2: Belgrade - Boljare - Bar					
Regional Partner: Serbia					
Section: Preljina - Pozega					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Construction of a 30.96 long motorway section on the Belgrade - Bar corridor	Works on-going	Financing ensured through Chinese loan; Works are currently on-going.	N/A	Works completed	N/A
Section: Pozega - Boljare					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Construction of a 107 km-long road section in a challenging terrain	Pre-feasibility Study	Project ranked 7th in Serbia's SPP (transport projects). A Memorandum of Understanding was signed with a Chinese company in 2018 for preparation of technical documentations. Another MoU was signed with China in April 2019.	- Fiscal space availability assessment under mid to longer term scenarios; - Decide upon project's technical implementation and financing strategy; - Progress with the priority actions decided upon.	Mid-term budgetary ceilings identified; Project's implementing strategy decided upon;	Works on-going on priority section(s)
Regional Partner: Montenegro					
Section: Boljare - Andrijevica					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**

Construction of a 52 km long motorway from SRB border to Andrijevica, part of the Bar - Boljare highway	Feasibility Study	Feasibility Study prepared in 2008, revised in 2009. New Feasibility Study with CBA revision has been performed under WBIF (almost completed).	- Fiscal space availability assessment on mid to long term; - Determine the implementation strategy for the entire corridor based on the outcome of the revised FS and the fiscal space availability.	Mid-term budgetary ceilings identified; Project's implementing strategy decided upon;	Works on-going on priority section(s)
Section: Andrijevica – Matesevo					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Construction of a 21 km-long motorway on Andrijevica - Matesevo section of the Bar - Boljare highway	Feasibility Study	Feasibility Study prepared in 2008, revised in 2009. New Feasibility Study with CBA revision has been performed under WBIF (almost completed). PD and ESIA currently under preparation with WBIF grant financing.	- Fiscal space availability assessment on mid to long term; - Determine the implementation strategy for the entire corridor based on the outcome of the revised FS and the fiscal space availability; - Close and pro-active monitoring of the on-going TA.	Mid-term budgetary ceilings identified; Project's implementing strategy decided upon; Financing ensured;	Works on-going
Section: Matesevo – Smokovac					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Construction of a 40.8 km long motorway on Matesevo - Somovac	Works completed	Section to be soon opened for traffic	Works commissioning	Section fully operational	N/A

section of the Bar - Boljare highway, including 20 km of tunnels and 4.5 km of bridges					
Section: Podgorica bypass (Smokovac - Tolosi – Farmaci)					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Construction of a 18 km motorway bypass of Podgorica, part of the Bar - Boljare highway	Feasibility Study	Feasibility Study prepared in 2008, revised in 2009. New Feasibility Study with CBA revision has been performed under WBIF (almost completed). PD and ESIA currently under preparation with WBIF grant financing.	- Fiscal space availability assessment on mid to long term; - Determine the implementation strategy for the entire corridor based on the outcome of the revised FS and the fiscal space availability; - Close and pro-active monitoring of the on-going TA.	Financing ensured; Tender for works finalized	Works completed
Section: Farmaci -Djurmani					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Construction of a 34 km long motorway on Farmaci - Djurmani section of Bar - Boljare highway.	Feasibility Study	Feasibility Study prepared in 2008, revised in 2009. New Feasibility Study with CBA revision has been performed under WBIF (almost completed).	- Fiscal space availability assessment on mid to long term - Determine the implementation strategy for the entire corridor based on the outcome of the revised	Mid-term budgetary ceilings identified; Project's implementing strategy decided upon;	Works on-going on priority section(s)

			FS and the fiscal space availability.		
Project 3: Sarajevo – Podgorica connection					
Regional Partner: Bosnia and Herzegovina					
Section: Sarajevo - Foca (Brod na Drini)					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Construction/improvement of road on route Sarajevo - Podgorica	Spatial documentation	Project ranked 18th in BiH SPP. Spatial documentation approved. No	- Fiscal space availability assessment on mid to long term - Determine the implementation strategy;	Mid-term budgetary ceilings identified; Project's implementing strategy decided upon;	Financing ensured for priority section(s)
Section: Foca - Hum					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Construction/improvement of 23,35 km of road on route Sarajevo – Podgorica, including the interstate bridge at the border BIH/MNE	Detailed Design	Feasibility Study prepared under WBIF with EBRD financing. Detailed Design made with EU grant. Ministers-level agreement between Bosnia and Herzeg and MNE for the on the construction of a bridge on the Tara River and the connecting road sections.	- Secure financing for execution of works	Financing secured	Works completed
Regional Partner: Montenegro					
Section: Scepan Polje - Pluzine					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**

The project includes reconstruction of the existing sub-section from Pluzine to Paklice and construction of a new sub-section from Paklice to Scepan Polje, including a border crossing bridge	Prelilinary Design	Feasibility Study completed in 2011. Detailed Design currently under preparation with WBIF grant for the sector Paklice to Scepan Polje (new alignment). The project is experiencing significant delay, overall timeline and priority level are unclear.	- Fiscal space availability assessment on mid to long term - Determine the implementation strategy; - Close and pro-active monitoring of the on-going TA	Mid-term budgetary ceilings identified; Project's implementing strategy decided upon;	Financing secured Works on-going

Project 1: Upgrade of the Rail Corridor Vc					
Regional Partner: Bosnia and Herzegovina					
Section: Samac – Doboj – Rjecica					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
This project is part of the initiative to complete Corridor Vc connecting the port of Ploce on the Croatian Adriatic with Budapest. Over 325 km of Corridor Vc runs through Bosnia and Herzegovina. The 85 km Samac – Doboj - Rjecica section is approved	Detail design from 2011.	Revision of the detail design is in final phase. There is JASPERS support in place. Estimation for the tender procedure is 2023.	To speed up work of consultant on the revision of the detail design To start negotiation with leading financial institution (EBRD) To draft Loan agreement in coming months	Tender procedure is ongoing	Completion of works

by the WBIF mechanism. Grant provided is 82 mil EUR Estimated amount is 162.5 million EUR.			To ratify Loan agreement in this year		
Section: Samac – Doboj – Rjecica					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
This Project of 172 km covers two main sections. The first one includes the 95 km Srpska Kostajnica – Doboj – Maglaj – Jelina double track and 77 km of Jelina – Zenica – Podlugovi – Rasputnica Miljacka single track section. It considers upgrade and reconstruction of the Doboj-Rasputnica Miljacka railway line, including the Zenica and Podlugovi freight and passenger stations, as well as the construction of doubled track along the existing one for sub-section Jelina – Zenica – Podlugovi – Rasputnica Miljacka.	Feasibility study	Preliminary design is ongoing	To finish preliminary design To submit GAF for the detail design	Detail design is ready	Construction works are ongoing

Project 2: Modernisation of the Rail ROUTE 4					
Regional Partner: Montenegro					
Section: Vrbnica – Bar					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Rehabilitation and modernisation of the Route 4, considers complete overhaul and modernisation of signal system and telecommunications. Design speed (from 80-100) should be achieved after the implementation. Length of distance is 159 km	Detail design is ongoing	Some sections are already done. In coming period MNE should put focus on distance Podgorica-Virpazar-Bar. Project for the electric power supply is ongoing.		- Preparation of all technical documentation for the Route 4 is done	Works completed
Reconstruction of the ten bridges on Route 4					
Reconstruction of ten bridges is urgent, particularly in view of a high risk of corrosion to steel structures.	Detail design is ready	Construction works are ongoing. Expected deadline for the completion is second half of 2022.		All works completed. Bridges are in operation	

Project 2: Modernisation of the Rail ROUTE 10					
Regional Partner: Kosovo					
Section: (border with MK)-Hani Elezit – Lesak (CCP with Serbia)					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2025**
Railway Route 10 in Kosovo is 148 km long, extending from the common crossing point with Serbia in the north of Kosovo (near Leshak station) to the border with North Macedonia (Hani i Elezit station) Full modernisation of the Route ten is divided in three parts: - Hani Elezit – Fushe Kosovo - Fushe Kosovo – Mitrovica - Mitrovica – Lesak Total estimated cost of the project is 245 million EUR	Detail design is done for the first two phases. Preliminary design is ready for third phase.	The general rehabilitation and modernisation of Phase One began in August 2019 and completed in 2021. Construction works are ongoing on distance Kosovo Polje – Mitrovica. Detail design is under preparation for the third section (Mitrovica-Lesak)	Completion of the detail design for the section Mitrovica – Lesak. Speed up construction works in section Kosovo Polje – Mitrovica.	Works completed on first two phases. Works are ongoing on third section	Whole line in operation

FLAGSHIP 3 – CONNECTING THE COASTAL REGIONS

Project 1: Modernisation of the Rail ROUTE 2					
Regional Partner: Albania					
Section: Vore – Hani Hotit (border with MNE)					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Vore – Hani Hotit is 120 km distance on Core Network. Project considers full rehabilitation of the line with design and operational speed between 80 and 100 km/h. Also, preparatory work for the electrification is predicted	Detail design is ready.	Project got green light from WBIF in December 2021. Leading financial institutions are EBRD and EIB.	Negotiation with EBRD/EIB should start asap in aim to prepare Loan agreement.	Tender procedure launched and construction works start in second part of 2023.	Completion of works
Section: Tirana - Durres					
Tirana Durres with direct connection to the airport is 41 km rail line.	Detail design is ready. Construction permit issued	The works are ongoing (30 January 2022).	Solving issues regarding the land acquisition	All legal issues solved	Completion of works
Regional Partner: Montenegro					
Section: Podgorica – Tuzi (border with Albania)					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**

Railway line Podgorica – Tuzi (24,70km), was opened to traffic in 1986. On stretched 5 bridges, 3 tunnels and 24 culverts. On the track there is one station Tuzi. The track was designed for speed of trains to 100 km /h. The railway is equipped with all the necessary automatic, safety and signalling and telecommunication devices, but it is not electrified. Full overhaul will be done with preparatory work for the electrification.	Feasibility study is done.	Current operational speed is 40 km/h. Detail design is in plan.	Completion of the technical documentation by 2023 because of the sustainability of the project. Albania is planning to start construction works in 2023, so MNE should follow this tempo. Source of financing should be looking for.	Project is finance secured. All documentation is done. Tender procedure is ongoing in second half of 2023.	Completion of the construction works

Project 1: The Blue Highway				
Regional Partner: Montenegro				
Section: HR Border - Bijela				
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**

				2023	2027
Construction of a 17 km section of the Adriatic Ionian Motorway, including bypass Herceg Novi and Herceg Novi - Bijela sections	Feasibility Study	FS for the entire AIH corridor completed in late 2020. Section was marked in MNE SPP as ready for preparation of the technical documentation (projects with gaps in spatial planning documentation and resolving of property-related issues ongoing or property-related issues unresolved.) It shall be implemented in 2 lots, of which Herceg Novi bypass is prioritized.	- Fiscal space availability assessment on mid to long term; - Determine the implementation strategy for the entire corridor based on the outcome of the revised FS and the fiscal space availability; - Set-up clear implementing strategy and timeline for Herceg Novi bypass	Clear implementing strategy and timeline for Herceg Novi bypass established	As per the agreed implementation timeline
Section: Boka Bay bridge					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Construction of a bridge over the Boka Kotorska Bay, viaducts and access roads	Feasibility Study	FS for the entire AIH corridor completed in late 2020. Detailed Design dated 2004, most probably in need for revision. The section was marked in MNE SPP dated 2019 as having "preparation of technical documentation ongoing".	- Fiscal space availability assessment on mid to long term; - Determine the implementation strategy for the entire corridor based on the outcome of the revised FS and the fiscal space availability; - Set-up clear implementing strategy	Clear implementing strategy and timeline established	As per the agreed implementation timeline

			and timeline for the project		
Section: Tivat bypass					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Construction of bypass Tivat (expressway route and access roads-connectors on the existing main roads)	Preliminary Design	Preliminary design prepared in 2009 - 2011. FS for the entire AIH corridor completed in late 2020.	- Fiscal space availability assessment on mid to long term; - Determine the implementation strategy for the entire corridor based on the outcome of the revised FS and the fiscal space availability; Set-up clear implementing strategy and timeline for the project	Clear implementing strategy and timeline established	As per the agreed implementation timeline
Section: Tivat - Sozina					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Construction of a high-quality connection between Tivat and Sozina on the Adriatic - Ionian corridor, (excluding Budva Bypass)	Feasibility Study	FS for the entire AIH corridor completed in late 2020.	- Fiscal space availability assessment on mid to long term; - Determine the implementation strategy for the entire corridor based on the outcome of the revised FS and the fiscal space availability; - Set-up clear implementing strategy	Clear implementing strategy and timeline established	As per the agreed implementation timeline

			and timeline for the project		
Section: Budva bypass					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Construction of a 13 km long bypass aroud the city of Budva, including 3 interchanges and 8.6 km of acces roads (connections to existing network)	Feasibility Study	FS for the entire AIH corridor completed in late 2020. Preliminary Design with ESIA and Detailed Design to be prepared with WBIF grant. WBIF financing for works ensured. Project is currently considering for postponing (including grant cancellation) for unavailability of national co-financing.	- Fiscal space availability assessment on mid to long term; - Set-up clear implementing strategy and timeline for the project; - Adapt on-going TAs to fit the agreed implementation startegy	Clear implementing strategy and timeline established	Financing ensured. Tender for works launched.
Section: Sozina – Bar					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Cosntruction of a high-quality connection between Sozina and the port of Bar on the Adriatic - Ionian corridor	Feasibility Study	FS for the entire AIH corridor completed in late 2020.	- Fiscal space availability assessment on mid to long term; - Determine the implementation strategy for the entire corridor based on the outcome of the revised FS and the fiscal space availability; - Set-up clear implementing strategy and timeline for the project	Clear implementing strategy and timeline established	As per the agreed implementation timeline

Section: Bypass Bar					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Construction of a bypass around city of Bar on the Adriatic Ionian Corridor	**Preliminary Design**	Preliminary design prepared in 2009 - 2011. FS for the entire AIH corridor completed in late 2020.	- Fiscal space availability assessment on mid to long term; - Determine the implementation strategy for the entire corridor based on the outcome of the revised FS and the fiscal space availability; - Set-up clear implementing strategy and timeline for the project	Clear implementing strategy and timeline established	As per the agreed implementation timeline
Section: Bar - Albanian border					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Construction of a high quality connection between Bar bypass and the Albanian border	Feasibility Study	FS for the entire AIH corridor completed in late 2020.	- Fiscal space availability assessment on mid to long term; - Determine the implementation strategy for the entire corridor based on the outcome of the revised FS and the fiscal space availability; - Set-up clear implementing strategy and timeline for the project	Clear implementing strategy and timeline established	As per the agreed implementation timeline

Regional Partner: Albania					
Section: Murriqan – Lezhe/Balldren					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Construction of a 41-km long highway, including 8 interchanges, 23 underpasses and 8 bridges	Feasibility Study	FS for the entire AIH corridor completed in late 2020. WBIF grant for Preliminary Design and ESIA approved in December 2020, activity started one year later. After the cancelling of the Millot – Fier concession, there have been public declarations of this section being included in a new single concession Muriqan – Fier to be allegedly launched in the coming period	- Close and pro-active monitoring of the on-going TA; - Project implementation strategy, in due consideration of all relevant constraints (including fiscal) and opportunities;	Preliminary Design and ESIA finalised. Decision on project implementing strategy taken and further steps implemented.	Works on-going
Section: Balldren - Millot					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Construction of a 17.3 km long motorway between the cities of Millot and Lezhe, including Lezhe bypass and one tunnel	Feasibility Study	FS for the entire AIH corridor completed in late 2020. After the cancelling of the Millot – Fier concession, there have been public declarations of this section being included in a new single concession Muriqan – Fier to be allegedly launched in the coming period	Set-up project implementation strategy, in due consideration of all relevant constraints (including fiscal) and opportunities;	Decision on project implementing strategy taken and further steps implemented.	Works on-going
Section: Millot - Thumane					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	

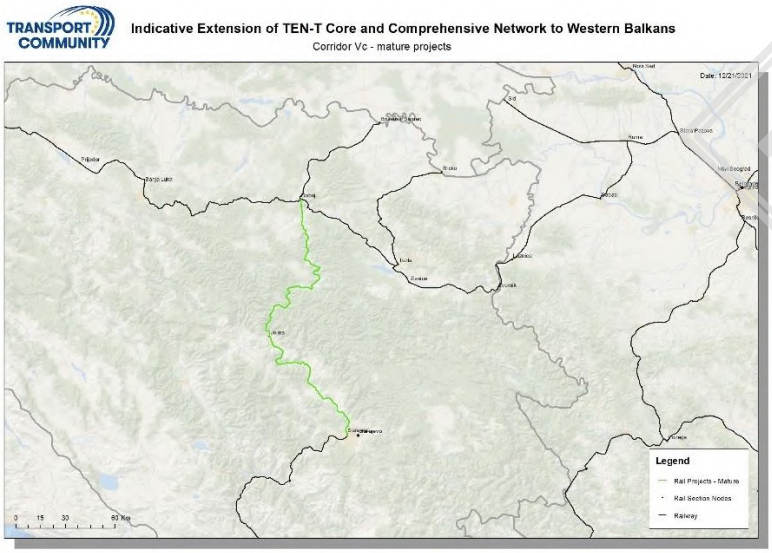
				2023	2027
Construction of a 13.5 km-long highway between Millot and Thumane on the Adriatic Ionian Corridor	Feasibility Study	FS for the entire AIH corridor completed in late 2020. Millot – Fier concession tender has been cancelled, it will allegedly be soon relaunched.	- Launch the concession procedure in due consideration of the resulting deficit and public debt impact (if any).	Concession contract awarded	Works on-going (Kashar Interchange finalised)
Section: Thumane – Kashar - Rrogozhine					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Construction of a 66.6 km-long highway between Thumane, Kashar and Rrogozhi9ne on the Adriatic Ionian Corridor	Feasibility Study	FS for the entire AIH corridor completed in late 2020. Millot – Fier concession tender has been cancelled, it will allegedly be soon relaunched.	- Ensure that the project's implementation strategy and timeline allows for the timely finalization of Kashar Interchange in order to ensure full functionality of Tirana bypass; - Launch the concession procedure in due consideration of the resulting deficit and public debt impact (if any).	Concession contract awarded	Works on-going (Kashar Interchange finalised)
Section: Tirana bypass (Kashar - Vaqarr – Mullet)					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Construction of a 21.5 km of dual carriegway road at motorway standards	Detailed Design	Delays in DD delivery caused by Covid. Detailed Design, ESIA and Tender Documents delivered under a WBIF financed TA.	Launch tender for works supervision and project management support.	Works contract signed, works commenced	Works completed

bypassing the capital city of Tirana on its western side		Grant for investment approved in December 2020. Additional EU financing up to 40% requested, in course of approval.			
Section: Konjat – Fier bypass					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Construction of a 28 km - long highway between Konjat and the bypass of Fier on the Adriatic – Ionian Corridor	Feasibility Study	FS for the entire AIH corridor completed in late 2020. Millot – Fier concession tender has been cancelled, it will allegedly be soon relaunched.	Launch the concession procedure in due consideration of the resulting deficit and public debt impact (if any).	Concession contract awarded	Works on-going
Section: Fier bypass - Pocem					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Construction of a 26.9 km - long highway between the bypass of Fier and Pocem on the Adriatic – Ionian Corridor	Feasibility Study	FS for the entire AIH corridor completed in late 2020.	Set-up project implementation strategy, in due consideration of all relevant constraints (including fiscal) and opportunities;	Decision on project implementing strategy taken and further steps implemented.	As per the agreed implementation timeline
Section: Pocem – Memaliaj					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Construction of a 37.7 km - long highway between Pocem and Memaliaj on the Adriatic – Ionian Corridor	Feasibility Study	FS for the entire AIH corridor completed in late 2020.	Set-up project implementation strategy, in due consideration of all relevant constraints	Decision on project implementing strategy taken and further steps implemented.	As per the agreed implementation timeline

			(including fiscal) and opportunities; -		
Section: Memaliaj – Subashi bridge					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Construction of a 20 km - long highway between Memaliaj and Subashi bridge on the Adriatic – Ionian Corridor	Feasibility Study	FS for the entire AIH corridor completed in late 2020.	Set-up project implementation strategy, in due consideration of all relevant constraints (including fiscal) and opportunities;	Decision on project implementing strategy taken and further steps implemented.	As per the agreed implementation timeline
Section: Subashi bridge – Gjirokaster bypass					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Construction of a 10 km - long highway between Subashi bridge and Gjirokaster bypass on the Adriatic – Ionian Corridor	Feasibility Study	FS for the entire AIH corridor completed in late 2020.	Set-up project implementation strategy, in due consideration of all relevant constraints (including fiscal) and opportunities;	Decision on project implementing strategy taken and further steps implemented.	As per the agreed implementation timeline
Section: Gjirokaster bypass					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Construction of a 10 km-long highway section bypassing the town of Gjirokaster	Detailed Design	FS for the entire AIH corridor completed in late 2020.	Set-up project implementation strategy, in due consideration of all relevant constraints (including fiscal) and opportunities;	Decision on project implementing strategy taken and further steps implemented.	As per the agreed implementation timeline

Section: Gjirokaster - Kakavije					
Project description	**Technical maturity**	**Current stage**	**Actions needed**	**Key milestones**	
				2023	**2027**
Construction of a 23.8 km - long highway between Gjirokaster and Kakavije on the Adriatic – Ionian Corridor	Feasibility Study	FS for the entire AIH corridor completed in late 2020.	Set-up project implementation strategy, in due consideration of all relevant constraints (including fiscal) and opportunities;	Decision on project implementing strategy taken and further steps implemented.	As per the agreed implementation timeline

ANNEX 2 - Railway Project Fiches



Regional Participants:	Bosnia and Herzegovina
Double track sections	100% or 172 km
Includes green and digital elements:	Electrification

Figure 19. Overview of priority project on the railway Corridor Vc

Priority Project Name	Upgrade and reconstruction of the Doboj-Rasputnica Miljacka		
Regional Participant Bosnia and Herzegovina	Length (km) 172	Estimated cost (M€) 500	Type of works Upgrade/Reconstruction
Core Network segment Yes	Strategic Projects National strategies, Single Project Pipeline		Technical status Feasibility Study (including Cost-Benefit Analysis)
Project Description	This Project of 172 km covers two main sections. The first one includes the 95 km Srpska Kostajnica – Doboj – Maglaj – Jelina double track and 77 km of Jelina – Zenica – Podlugovi – Rasputnica Miljacka single track section. It considers upgrade and reconstruction of the Doboj-Rasputnica Miljacka railway line, including the Zenica and Podlugovi freight and passenger stations, as well as the construction of doubled track along the existing one for sub-section Jelina – Zenica – Podlugovi – Rasputnica Miljacka.		
Expected Benefits	The project will result in savings in vehicle operating costs, transport time, maintenance costs and will enhance the capacity and reliability of the railway sections and traffic safety. It is expected to contribute to the modal shift from road to railway and, thereby, present environmental and road safety benefits. Thus, the project also contributes to climate change mitigation.		

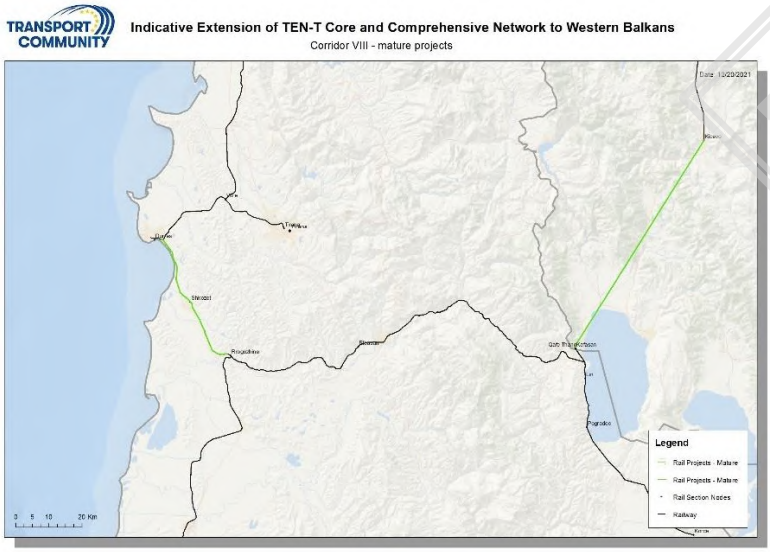


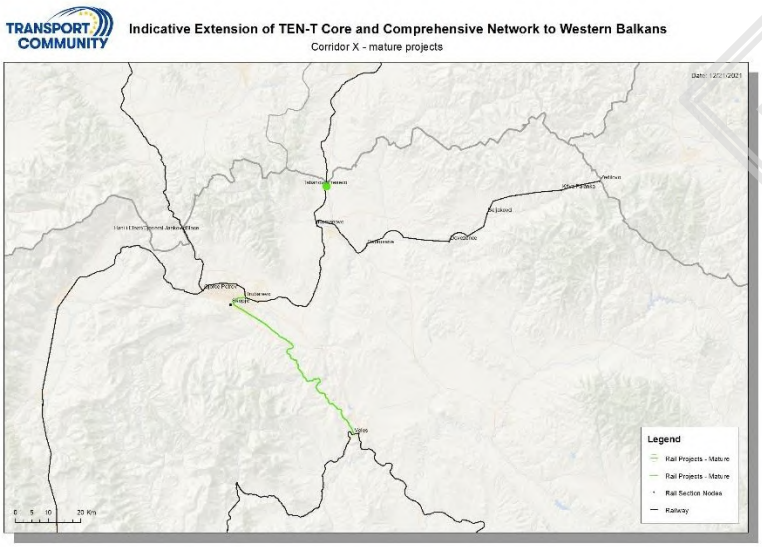
Figure 20. Overview of priority project on the railway Corridor VIII

Regional Participants:
Albania
North Macedonia
Double track sections
0 % or 0 km
Includes green and digital elements:
Electrification
ERTMS
ETCS Level 1

Priority Project Name	Construction works of the railway section along the corridor VIII Kicevo – Border with Albania		
Regional Participant North Macedonia	Length (km) 62	Estimated cost (M€) 426	Type of works New Construction
Core Network segment No	Strategic Projects National strategies, Single Project Pipeline		Technical status Detailed Design
Project Description	The objective of this project is building railway line from Kichevo to the border with the Republic of Albania. It is expected the construction of the railway line together with other missing sections of Corridor VIII would provide the population and national economy with cheaper and faster transportation. Connecting the Republic of Macedonia with the neighbouring countries by railway would contribute to the economic development and would strengthen the economic and trade activities in the country and the region. The new railway link will improve the social and economic status of local population, particularly in the areas served by railway stations. This way it would provide for the regional development in general (West region of Macedonia). Additionally, the line will connect by railway the Republic of Macedonia with the Republic of Albania, providing way railway access to the Adriatic Sea ports of Durres and Vlore. This is of great importance for the Republic of Macedonia since it is a landlocked country.		
Expected Benefits	○ Provision of part of the transnational route connecting the Mediterranean/Adriatic Transport Area with the Black Sea Transport Area; ○ Facilitation and boosting of trade exchanges between Bulgaria, North Macedonia and Albania;		

	○ Improvement of passenger services by railway along the project section and to/from destinations such as Tirana, Skopje, and Bulgaria. EIRR: 6.67%

Priority Project Name	Corridor VIII Railway Albania: Reconstruction of Durres to Rrogozhine		
Regional Participant Albania	Length (km) 34	Estimated cost (M€) 78	Type of works Upgrade/Reconstruction
Core Network segment No	Strategic Projects National strategies, Single Project Pipeline, EC Economic and Investment Plan (indirectly Flagship 3 as continuation of Podgorica-Tirana-Durres line)		Technical status Detailed Design
Project Description	The overall objective of the project is to contribute to the upgrade of the TEN-T railway network in Albania, which will result in improved transport connectivity, increase of railway traffic (and decrease of road traffic), thus contributing to railway modal shift, reduction of environmental impacts, strengthening of green economy, reduction of railway and road accident rates.		
Expected Benefits	Completion of the Corridor VIII on the Albanian side. The project will establish for the first time a direct railway connection between Rrogozhina, Lekaj, Kavaja, and Golem to Tirana, through the connection to the new Durres-Tirana railway line that has been contracted for construction. In the reverse sense, the inhabitants of Tirana would be for the first time able to access the very pretty and developed coastal area of Albania between Durres and Golem and Kavaja, by train, without changing mode of transport. This is expected to change significantly the current transport patterns between the most populous city of Albania and the most important tourist destination of Albania. EIRR: 9.2%		



Regional Participants:
North Macedonia
Double track sections
0 % or 0 km
Includes green and digital elements:
Electrification
ERTMS
ETCS Level 1

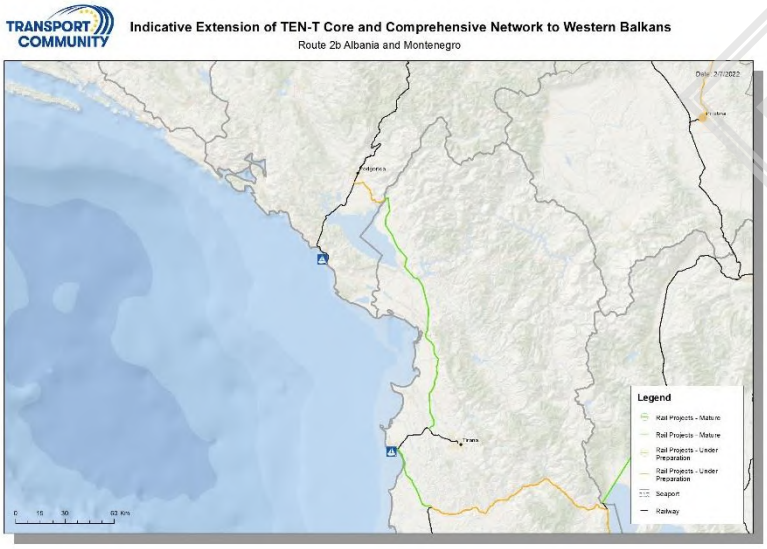
Figure 21. Overview of priority projects on the railway Corridor X

Priority Project Name	Construction of Joint Railway Border Crossing Station (JRBS) and access road at Tabanovce between Republic of North Macedonia and Republic of Serbia		
Regional Participant North Macedonia	Length (km) N/A	Estimated cost (M€) 5.5	Type of works New Construction
Core Network segment Yes	Strategic Projects National strategies, Single Project Pipeline		Technical status Detailed Design
Project Description	The railway border crossing Tabanovce is located along Corridor X which is linked to TEN-T Networks. Strategically, it is one of the most important Border Crossings for both MKD and for transport from Central Europe to SEE including Turkey and Central Asia. The existing Railway Station is located approximately 0.9 km north-east from Tabanovce village. The road and railroad Corridors X run almost in parallel, both stretching in the north - south direction, at approximate distance of 0.5 km from each other. Construction works covered building all facilities for the border police, inspections, customs and railway staff.		
Expected Benefits	Common BCP between SRB and MKD. Implementation of this project will bring cutting the time on the border for the 50% in passenger and freight traffic. The main benefits from Joint Railway Border Station are time savings for trains, passengers and freight that are transiting the border between the countries and economies of scale because two separate stations are reduced to one. The proximity to the road border crossing in Tabanovce will allow the fast transfer of phytosanitary, veterinary and other specialised controllers between both JRBS and road station by a new access road to be constructed linking them.		

Priority Project Name	Construction works on railway section along the Corridor X Dracevo – Veles		
Regional Participant North Macedonia	Length (km) 39	Estimated cost (M€) 550	Type of works New Construction
Core Network segment Yes	Strategic Projects National strategies, Single Project Pipeline		Technical status Feasibility study
Project Description	The railway section Dracevo - Veles is located along Corridor X which is linked to TEN-T Networks. Strategically, it is one of the most important part of the Corridor X through MKD and for transport from Central Europe to SEE including Turkey and Central Asia. The current conditions should be improved. In scope of the project the following works are predicted: 1. main TEN-T standards are respected with exception of train length. 2. ERTMS is foreseen with separate project. 3. Electrification: 25 kV 50 Hz 4. Maximum weights category D4 (maximum weight per axle: 22.5 t; maximum linear weight per meter: 8 t/m) 5. Traffic regulation: Automatic Block Signals (ABS)		
Expected Benefits	The construction of the new alignment of this rail section on the Corridors X will contribute towards improving railway-based activities in several ways: by attracting greater domestic passenger and freight movements (currently either undertaken by road or not undertaken); by increasing international passenger traffics; by increasing usage of railway transport for trade imports; by increasing usage of railway for trade exports; by increasing usage of railway by international transit traffics.		

Priority Project Name	Rehabilitation/reconstruction of the railway section Kumanovo - Deljadrovce		
Regional Participant North Macedonia	Length (km) 14	Estimated cost (M€) 50	Type of works Recontrstruction
Core Network segment Yes	Strategic Projects National strategies, Single Project Pipeline		Technical status Feasibility study
Project Description	The railway section Kumanovo - Deljadrovce is located along Corridor X which is linked to TEN-T Networks. Strategically, it is one of the most important part of the Corridor X through MKD and for transport from Central Europe to SEE including Turkey and Central Asia. The current conditions should be improved. In scope of the project the following works are predicted: 1. main TEN-T standards are respected with exception of train length.		

	2. ERTMS is foreseen with separate project. 3. Electrification: 25 kV 50 Hz 4. Maximum weights category D4 (maximum weight per axle: 22.5 t; maximum linear weight per meter: 8 t/m) 5. Traffic regulation: Automatic Block Signals (ABS)
Expected Benefits	The rehabilitation, reconstruction or construction of the remaining railway section on the Corridors X will contribute towards improving railway-based activities in several ways: by attracting greater domestic passenger and freight movements (currently either undertaken by road or not undertaken); by increasing international passenger traffics; by increasing usage of railway transport for trade imports; by increasing usage of railway for trade exports; by increasing usage of railway by international transit traffics.

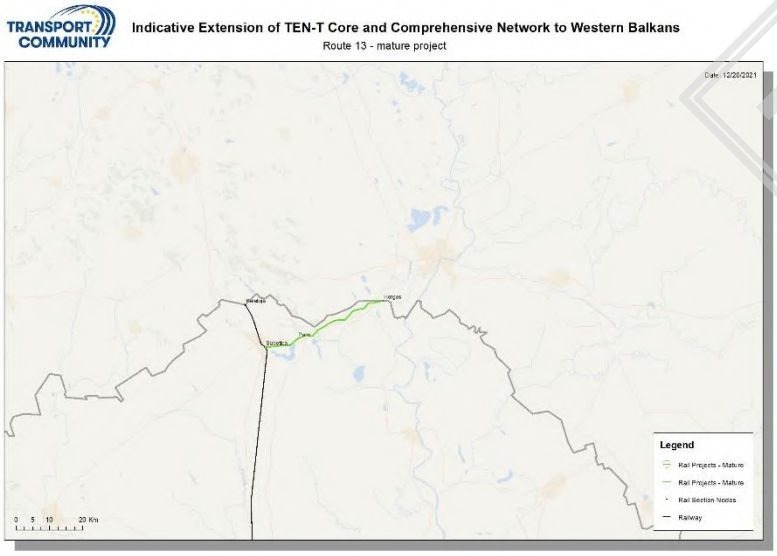


Regional Participants:	Albania, Montenegro
Double track sections	0 % or 0 km
Includes green and digital elements:	ERTMS ETCS Level 1 Electrification

Figure 22. Overview of priority project on the railway Route 2b

Priority Project Name	Rehabilitation of Vore - Han i Hotit Railway Line		
Regional Participant Albania	Length (km) 120	Estimated cost (M€) 260	Type of works Upgrade/Reconstruction
Core Network segment Yes	Strategic Projects National strategies, Single Project Pipeline, EC Economic and Investment Plan (Flagship 3)		Technical status Detailed Design
Project Description	The general objective of the Project is the rehabilitation of the railway line Vore - Hani i Hotit to enable the provision of transport services and increased safety and speed to EU standards, as well as implement the EU acquis. The project consists of the rehabilitation of the railway line Vore - Hani i Hotit (border with Montenegro), for increased speed and uniform classification (UIC D4 category, 22.5 tons/axle, and 8.0 tons/m). There is immediate need for the general rehabilitation and modernization of this line, achievement of the projected speed and increased safety conditions.		
Expected Benefits	Upgrade of distance on the Core Network and enhancing connection with neighbours (currently this is only one railway border connection for Albania): - create better conditions for the development of passenger and freight services; - improve transport capacity; - develop multimodal and intermodal transport in Albania and the wider region; - integrate the line into the regional and the EU railway network.		

Priority Project Name	Reconstruction and Modernization Railway Line Podgorica - Tuzi - Cross Border Albania		
Regional Participant Montenegro	Length (km) 25	Estimated cost (M€) 84.4	Type of works Upgrade/Reconstruction
Core Network segment Yes	Strategic Projects National strategies, Single Project Pipeline, EC Economic and Investment Plan (Flagship 3)		Technical status Detailed Design
Project Description	Railway line Podgorica –Tuzi (open railway 24,70km), was opened to traffic in 1986. On stretched 5 bridges, 3 tunnels and 24 culverts. On the track there is one station Tuzi. In the period 1992-2002, the railway was closed for traffic, then transport only freight trains. The track was designed for speed of trains to 100 km /h. The railway is equipped with all the necessary automatic, safety and signalling and telecommunication devices, but it is not electrified. Investment involves following items: • Preparing designing technical documentation • Track reconstruction and modernization of structural objects on line • Modernization and reconstruction of signalling- interlocking devices and contact line • Reconstruction and adaptation station buildings and cross border		
Expected Benefits	Reconstruction and modernization of railway Podgorica-Tuzi aims at increasing the safety and security of railway, reduction of travel time, and increase average train speed increase equality of services in railway traffic and evaluation of the capacity of the port of Bar, as well as the development of tourism. The project would be given sufficient development of economic activities, the efficient functioning of the airport, and greater use of the capacity of the port of Bar, and all the over-all achievement of better infrastructure connections for transit traffic.		



Regional Participants:	Serbia
Double track sections	0 % or 0 km
Includes green and digital elements:	Electrification ERTMS ETCS Level 1

Figure 23. Overview of priority project on the railway Route 13

Priority Project Name	Modernization and reconstruction of the existing railway line Subotica – Horgos – state border with Hungary (Segedin)		
Regional Participant Serbia	Length (km) 27	Estimated cost (M€) 100	Type of works Upgrade/Reconstruction
Core Network segment No	Strategic Projects National strategies, Single Project Pipeline		Technical status Construction and other statutory permits
Project Description	Railway line Subotica-Segedin is single track, unelectrified regional railway link which connect north of Serbia with south of Hungary. Project considered reconstruction of 26 km for the 120 km/h speed included interventions on substructure and super structure, telecommunications and signal system devices.		
Expected Benefits	Implementation of this project will bring better connectivity between Hungary and Serbia and two bigger cities in that region (Subotica and Segedin).		

ANNEX 3 - Road Project Fiches

Corridor Vc

Regional Participants:
Bosnia and Herzegovina
Road profile
Motorway 0 km Express road 0 km Conventional 400 km

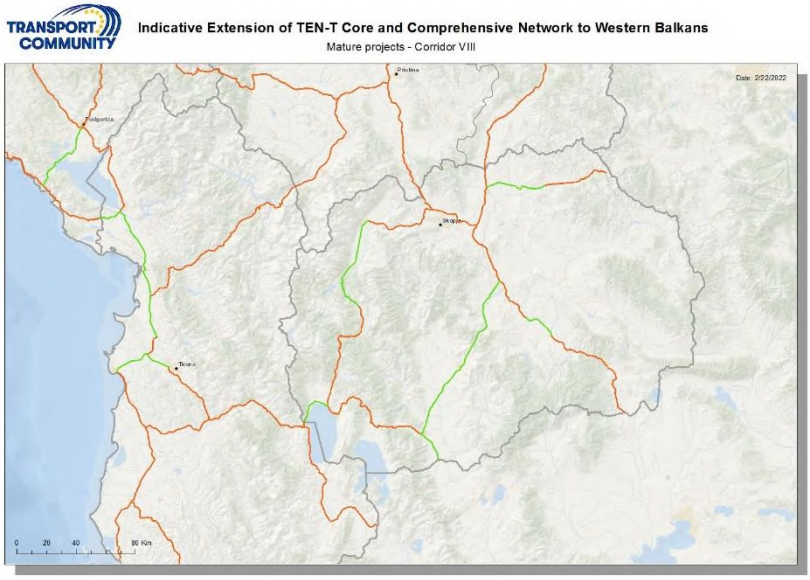
Figure 24. Overview of road priority project on Corridor Vc

Priority Project Name	**Construction of the Corridor Vc motorway section: Ivan – Konjic (Ovcari) – exit from tunnel Prenj (Salakovac)**		
Regional Participant Bosnia and Herzegovina	Length (km) 33	Estimated cost (M€) 686	Type of works New construction
Core Network segment Yes	Strategic Projects Transport Sectoral Strategy, SPP, EIP Flagship 2		Technical status Feasibility Study (including Cost-Benefit Analysis)
Project Description	Construction of approx. 33 km of motorway on Corridor Vc in a difficult mountainous terrain, including the 10 km-long Prenj Tunnel.		
Expected Benefits	Expected benefits include savings in travel time and in vehicle operating costs for all types of vehicles; improved road safety; shift of traffic fron densely populated urban zones into the new construction EIRR 13.9%		

Priority Project Name	**Construction of the Corridor Vc motorway section Exit from Tunnel Prenj (Salakovac) - Mostar North**		
Regional Participant Bosnia and Herzegovina	Length (km)	Estimated cost (M€) 130	Type of works New

Core Network segment Yes	Strategic Projects Transport Sectoral Strategy, SPP, EIP Flagship 2	Technical status Feasibility Study (including Cost-Benefit Analysis)
Project Description		
Expected Benefits	Expected benefits include savings in travel time and in vehicle operating costs for all types of vehicles; improved road safety; shift of traffic fron densely populated urban zones into the new construction EIRR 13.9%	

Corridor VIII



Regional Participants:	
Albania North Macedonia	
Road profile	
Motorway	131 km
Express road	156 km
Conventional	429 km

Figure 25. Overview of road priority project on Corridor VIII

Priority Project Name	**Reconstruction and rehabilitation of road section Tetovo-Gostivar**		
Regional Participant North Macedonia	Length (km) 22.4	Estimated cost (M€) 50	Type of works Upgrade/reconstruction
Core Network segment Yes	Strategic Projects Transport Sectoral Strategy, SPP		Technical status FS, ESIA, PD, Detailed design
Project Description	Reconstruction and rehabilitation of road section A2 Tetovo - Gostivar with length of 22.4 km		
Expected Benefits	The overall project's objective is therefore to reduce traffic congestion and traffic pollution, improve road safety.		

Priority Project Name	**Construction of road section Trebeniste-Struga**		
Regional Participant North Macedonia	Length (km) 8	Estimated cost (M€) 45	Type of works Upgrade/reconstruction
Core Network segment Yes	Strategic Projects Transport Sectoral Strategy, SPP		Technical status Detailed design
Project Description	Construction of road section Trebeniste - Stuga with length of 8km, part of Corridor VIII		
Expected Benefits	The overall project's objective is therefore to reduce traffic congestion and traffic pollution, improve road safety.		

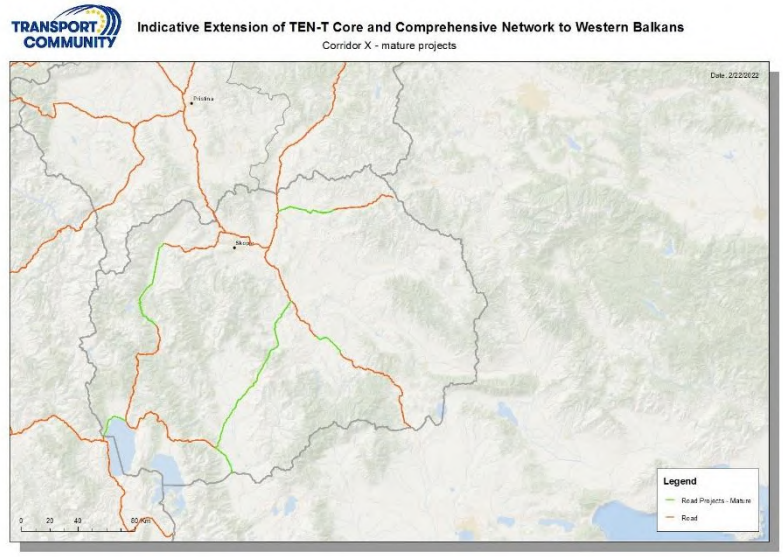
Priority Project Name	**Construction of road section Struga- Kjafasan**		
Regional Participant North Macedonia	Length (km) 13	Estimated cost (M€) 80	Type of works Upgrade/reconstruction
Core Network segment Yes	Strategic Projects Transport Sectoral Strategy, SPP		Technical status Detailed design, FS, ESIA
Project Description	Construction of road section Stuga - Kjafasan with length of 13.05km, part of Corridor VIII		
Expected Benefits	The overall project's objective is therefore to reduce traffic congestion and traffic pollution, improve road safety.		

Priority Project Name	**Construction of new express road Romanovce – Stracin**		
Regional Participant North Macedonia	Length (km) 30	Estimated cost (M€) 88	Type of works New construction
Core Network segment Yes	Strategic Projects Transport Sectoral Strategy, SPP		Technical status
Project Description	Construction of new express road Romanovce – Stracin		
Expected Benefits	The overall project's objective is therefore to improve mobility, accessibility and road safety.		

Priority Project Name	**Construction of road section Gostivar-Kicevo**		
Regional Participant North Macedonia	Length (km) 44	Estimated cost (M€) 280	Type of works New construction

Core Network segment Yes	Strategic Projects Transport Sectoral Strategy, SPP	Technical status Finalization of Detailed design for Bukojcani – Kicevo. The other detailed design, ESIA, PD.
Project Description	Construction of road section A2 Gostivar- Kicevo with length of 44.4 km on Corridor VIII, western section. Construction works are to be divided in 3 sections: 1- Kicevo Bukojcani, 2- Gostivar Gorna Gjonovica and 3- Bukojcani- Gorna Gjonovica.	
Expected Benefits	Expected benefits include savings in travel time and in vehicle operating costs for all types of vehicles; improved road safety	

Corridor X



Regional Participants:	
North Macedonia Serbia	
Road profile	
Motorway	585 km
Express road	0 km
Conventional	141 km

Figure 26. Overview of road priority project on Corridor X

Priority Project Name	**Rehabilitation of road section Gevgelija-Greece border (Bogorodica)**		
Regional Participant North Macedonia	Length (km)	Estimated cost (M€) 1.5	Type of works Upgrade/reconstruction
Core Network segment Yes	Strategic Projects Transport Sectoral Strategy, SPP		Technical status Detailed design & Tender Documentation
Project Description	Rehabilitation of road section in the north central-region of the country and it is a section that connects Macedonia with Greece, along Corridor X (right carriageway)		
Expected Benefits	The overall project's objective is therefore to reduce traffic congestion and traffic pollution, improve road safety.		

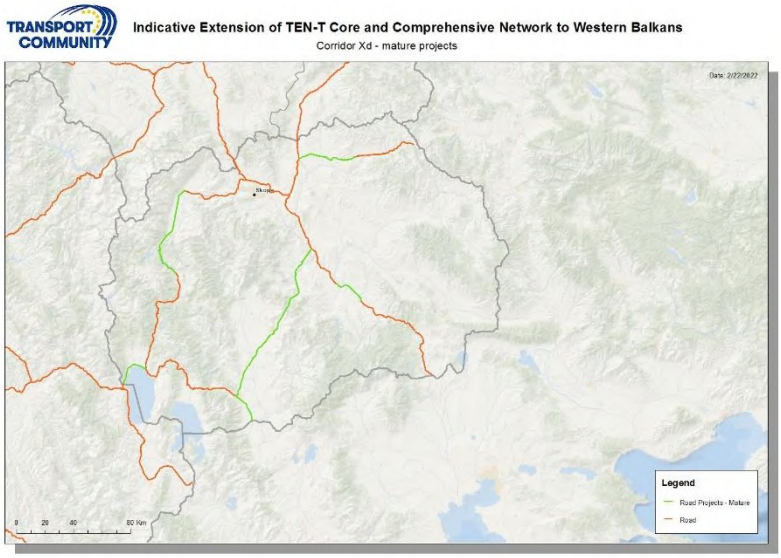
Priority Project Name	**Construction of motorway Bitola – Prilep**		
Regional Participant North Macedonia	Length (km) 44	Estimated cost (M€) 130	Type of works Upgrade/reconstruction
Core Network segment Yes	Strategic Projects Transport Sectoral Strategy, SPP		Technical status Detailed design, FS, ESIA, CD
Project Description	Construction of motorway Bitola – Prilep, with length of 44 km		
Expected Benefits	The overall project's objective is therefore to reduce traffic congestion and traffic pollution, improve road safety.		

Priority Project Name	**Construction and supply of ITS on Corridor X**		
Regional Participant North Macedonia	Length (km) 179	Estimated cost (M€) 19	Type of works New deployment of ITS
Core Network segment Yes	Strategic Projects Transport Sectoral Strategy, SPP		Technical status
Project Description	Constructed and supplied of ITS on Corridor X with length of 179 km.		
Expected Benefits	The overall project's objective is therefore to improve mobility and reduce traffic pollution, improve road safety		

Priority Project Name	**Rehabilitation of road section Negotino – TEC Negotino**		
Regional Participant North Macedonia	Length (km) 8.8	Estimated cost (M€) 8	Type of works Detailed design & Tender Documentation
Core Network segment Yes	Strategic Projects Transport Sectoral Strategy, SPP		Technical status Detailed design & Tender Documentation
Project Description	Rehabilitated road section A1 Negotino – TEC Negotino with total length of 8.8 km, on Corridor X.		
Expected Benefits	The overall project's objective is therefore to improve mobility and reduce traffic pollution, improve road safety		

Priority Project Name	Rehabilitation of road section Gradsko-Stobi		
Regional Participant North Macedonia	Length (km) 4.5	Estimated cost (M€) 4.5	Type of works Detailed design & Tender Documentation
Core Network segment Yes	Strategic Projects Transport Sectoral Strategy, SPP		Technical status Detailed design & Tender Documentation
Project Description	Rehabilitated road section A1 Gradsko - Stobi with length of 4.5 km, on Corridor X.		
Expected Benefits	The overall project's objective is therefore to improve mobility and reduce traffic pollution, improve road safety		

Corridor Xd



Regional Participants:	
North Macedonia	
Road profile	
Motorway	0 km
Express road	0 km
Conventional	117 km

Figure 27. Overview of road priority project on Corridor Xd

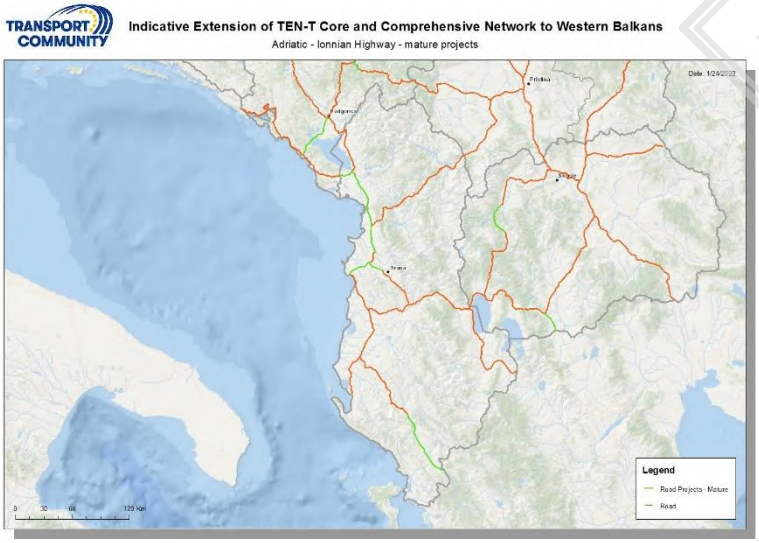
Priority Project Name	Construction of road section Prilep- Raec Bridge		
Regional Participant North Macedonia	Length (km) 8.8	Estimated cost (M€) 8	Type of works Upgrade/reconstruction
Core Network segment No	Strategic Projects Transport Sectoral Strategy, SPP		Technical status Detailed design and Tender Documents
Project Description	The section from Prilep to Raec is comprised of the following subsections: • Prilep – Lenishka river to be reconstructed in express road;		

	• Belovodica – Kamenolom Mavrovo to be reconstructed and added a third lane
Expected Benefits	Expected benefits include savings in travel time and in vehicle operating costs for all types of vehicles; improved road safety; shift of traffic fron densely populated urban zones into the new construction EIRR ranging from 9.24% to 11.76%

Priority Project Name	**Construction of expressway Bitola – Medzitlija, with interchange Bitola**		
Regional Participant North Macedonia	Length (km) 20	Estimated cost (M€) 50	Type of works Upgrade/reconstruction
Core Network segment No	Strategic Projects Transport Sectoral Strategy, SPP		Technical status Detailed design under preparation
Project Description	Construction of expressway Bitola – Medzitlija with interchange Bitola, with length of 20.0 km		
Expected Benefits	The overall project's objective is therefore to improve mobility and reduce traffic pollution, improve road safety		

Priority Project Name	**Construction of motorway Veles - Prilep**		
Regional Participant North Macedonia	Length (km) 57	Estimated cost (M€) 295	Type of works Upgrade/reconstruction
Core Network segment No	Strategic Projects Transport Sectoral Strategy, SPP		Technical status FS, ESIA, PD, Detailed design
Project Description	Construction of motorway Veles – Prilep with length of 57 km		
Expected Benefits	The overall project's objective is therefore to improve mobility and reduce traffic pollution, improve road safety		

Blue Highway



Regional Participants:	
	Albania
	Montenegro
Road profile	
Motorway	0 km
Express road	0 km
Conventional	347 km

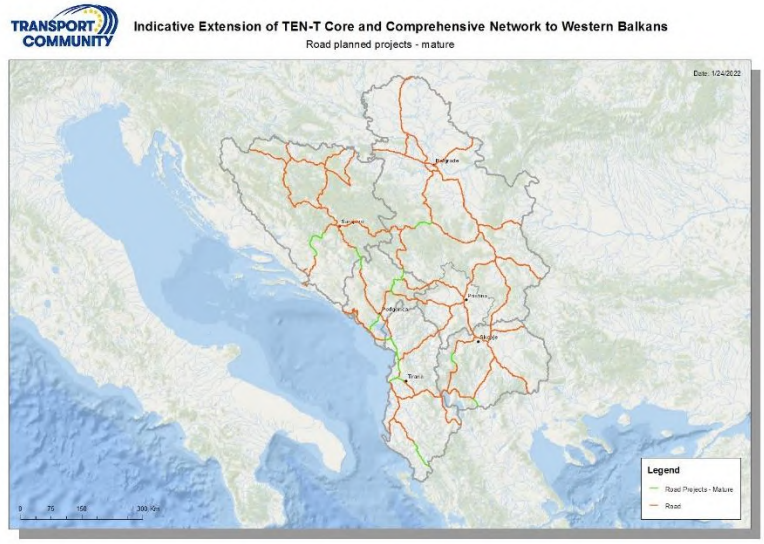
Figure 28. Overview of road priority project on Blue Highway

Priority Project Name	**Adriatic-Ionian Motorway-Expressway along Montenegro's coast**		
Regional Participant Montenegro	Length (km) 110	Estimated cost (M€) 1013	Type of works Upgrade/reconstruction
Core Network segment Yes	Strategic Projects Montenegro Spatial Plan, Transport Strategy, EIP Flagship 3		Technical status Feasibility Study (including Cost-Benefit Analysis)
Project Description	The expressway along the Montenegrin coast passes through its hinterland. It starts near the border with the Republic of Croatia, in the area of Herceg-Novi, and it extends further onto the following sections: Herceg Novi - crossing over the Bay of Kotor - Tivat - Budva - Bar - Ulcinj - Sukobin (border with Albania), total length is approximately 110 km		
Expected Benefits	The main objective of this project is to improve connectivity within the region as well as with the EU as a key factor for growth and jobs in the Western Balkans. The main function of the expressway along Montenegro is the inclusion of the state into road network of high rank with the possibility of connecting all transversal, main, regional and existing roads in Montenegro with the modern road traffic.		

Priority Project Name	**Construction of Adriatic- Ionian in Albania** Section 1: Murriqan – Balldren Section 2: Balldren (starting from Lezha Bypass) – Milot Section 3: Milot-Thumane Section 4+5: Thumane-Kashar-Rrogozhine Section 6+7: Konjat-Fier bypass

	Section 9A-2: Fier bypass (Levan)-Pocem Section 9B-2: Pocem-Memaliaj Section 10: Memaliaj-Subashi Bridge Section 11: Subashi Bridge-Gjirokaster bypass Section 13A: Gjirokaster-Kakavije		
Regional Participant Albania	Length (km) 287	Estimated cost (M€) 2649	Type of works Upgrade/reconstruction
Core Network segment Yes	Strategic Projects Transport Sectoral Strategy, National Transport Plan, SPP, EIP Flagship 3		Technical status Feasibility Study (including Cost-Benefit Analysis)
Project Description	Albania has planned to be expanded to full motorway standard new sections between Muriqan/Sukobin border crossing to SH1 at Bushat south of Shkodër, Thumane-Kashar-Rrogozhina highway part of Milot-Fier upgrade to motorway standard linking with Fier Bypass, and expanding south of Fier with slight deviation at Pocem near Memaliaj. The motorway in Albania will pass on the current stretch along the western lowland, bypass Tirana through newly planned Thumane-Kashar-Rrogozhine motorway, continue south on the existing SH4, and enter inland at Fier towards Tepelene and Gjirokaster.		
Expected Benefits	Expected benefits of the project include: • better connections with neighbouring countries; • reduced congestion, fuel consumption, emissions and noise levels; • increased road safety levels; and • economic development, particularly in the tourism sector.		

Route 2a

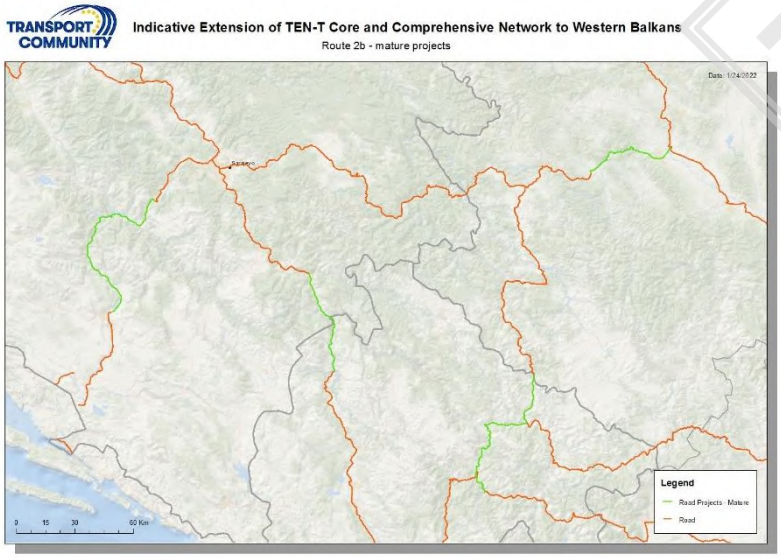


Regional Participants:	
Bosnia and Herzegovina	
Road profile	
Motorway	0 km
Express road	0 km
Conventional	197 km

Figure 29. Overview of road priority project on Route 2a

Priority Project Name	**Construction of the expressway section Turbe – Nevića Polje -Lašva**		
Regional Participant Bosnia and Herzegovina	Length (km) 61	Estimated cost (M€) 641	Type of works New construction
Core Network segment No	Strategic Projects Bosnia and Herezegovina's SPP		Technical status Detailed Design
Project Description	Comstruction of a 61-km-long expressway on Route 2a, ensuring connection with Corridor Vc		
Expected Benefits	Expected benefits include savings in travel time and in vehicle operating costs for all types of vehicles; improved road safety; shift of traffic from densely populated urban zones into the new construction EIRR 13.6%		

Route 2b



Regional Participants:
Albania
Bosnia and Herzegovina
Montenegro
Road profile
Motorway 0 km
Express road 0 km
Conventional 385 km

Figure 30. Overview of road priority project on Route 2b

Priority Project Name	**Reconstruction of the main way Šćepan Polje-Plužine (border crossing with Bosnia and Hercegovina)**		
Regional Participant Montenegro	Length (km) 22.5	Estimated cost (M€) 60	Type of works Upgrade/reconstruction
Core Network segment No	Strategic Projects Montenegro Spatial Plan, Transport Strategy, EIP Flagship 2		Technical status Preliminary Design
Project Description	Reconstruction of the road section from Scepan Polje to Pluzine is part of the overall reconstruction of M18 main road which includes construction of Niksic bypass (completed in 2014), sanitation of slopes, bridges and tunnels, construction of third lanes, construction of a new alignment from Podgorica to border with Albania and reconstruction of sections from Podgorica to Niksic and from Niksic to Pluzine. The project aims to significantly increase the level of services of the road through improvement of the geometry of the situation plan and cross sections, increase of safety level on the road during the future exploitation, significant protection of the road from landslides rock falls, snowfalls, etc. during the winter period, with large deviations from the route of the existing road.		
Expected Benefits	The key benefits will be improved transport safety and reduction of travel time and distance for people and goods. The project will increase the employment rate in the country in general, increase local economy competitiveness within the road gravity area. Indirect impacts will be on generation of new projects and investments in the economy of the region. Main benefit of this infrastructure project will be represented		

	through improved road safety, reduced vehicle operating costs time savings in new route and better environment in adjacent urban areas. The improved road would facilitate improved regional integration in South-East Europe.

Priority Project Name	**Improvement and construction of the road route Sarajevo - Foca (Brod na Drini) - Hum (Scepan Polje) with the interstate bridge at the border BiH/MNE**		
Regional Participant Bosnia and Herzegovina	Length (km) 23	Estimated cost (M€) 300	Type of works Rehabilitation
Core Network segment No	Strategic Projects Bosnia and Herzegovina's SPP, Flagship 2		Technical status Feasibility Study (including Cost-Benefit Analysis)
Project Description	Improvement of the road link between Sarajevo and Podgorica. On BiH territory, the project is split in 2 sections (Sarajevo - Foca and Foca - Hum) having different maturity levels.		
Expected Benefits	Expected benefits of the project include: • better connections with neighbouring countries; • reduced congestion, fuel consumption, emissions and noise levels; • increased road safety levels; and • economic development, particularly in the tourism sector.		

ANNEX 4 – IWW and Maritime Project Fiches

<table>
<tr><td>Priority Project Name</td><td colspan="3">Demining of the right bank of the Sava River</td></tr>
<tr><td>Regional Participant

Bosnia and Herzegovina</td><td>Length (km)

N/A</td><td>Estimated cost (8.160.000 EUR €)</td><td>Type of works

Upgrade/reconstruction</td></tr>
<tr><td>Core Network segment

Yes</td><td colspan="2">Strategic Projects

Part of the Economic and Investment Plan for WB (Flagship 1)</td><td>Technical status

Feasibility Study done (including Cost-Benefit Analysis)</td></tr>
<tr><td>Project Description</td><td colspan="3">The demining of the right bank of the Sava River within BiH is part of Phase I of the project. To unlock Phase I and Phase II investments, first the right bank of Sava within BiH needs to be demined to facilitate safe navigation and to allow technical surveys needed for designing waterway improvement projects during Phase I, which will then be implemented in Phase II. Areas that need to be demined include 10 municipalities located in Republika Srpska and the Federation of Bosnia and Herzegovina: Odzak, Brcko, Domaljevac, Samac, Orasje, Kozarska Dubica, Gradiska, Srbac, Derventa, Brod, Samac (43 clearance and 101 technical survey projects).</td></tr>
<tr><td>Expected Benefits</td><td colspan="3">The project will unlock investments and enable inland waterway improvement by removing bottlenecks in the waterway. However, finalization of detailed design for certain sections for removing the bottlenecks (most importantly for the Jaruge – Novi Grad section between BiH and Croatia) is not possible without demining, due to the necessity of field investigation in the mine contaminated areas.</td></tr>
</table>