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Renovating the Railway Infrastructure on the Core Routes 2 and 4 in Montenegro

**Dragan Radević, CEO Deputy
to Capital Investments**

**EU Information Day –
Transport Infrastructure
Opportunities in Montenegro**



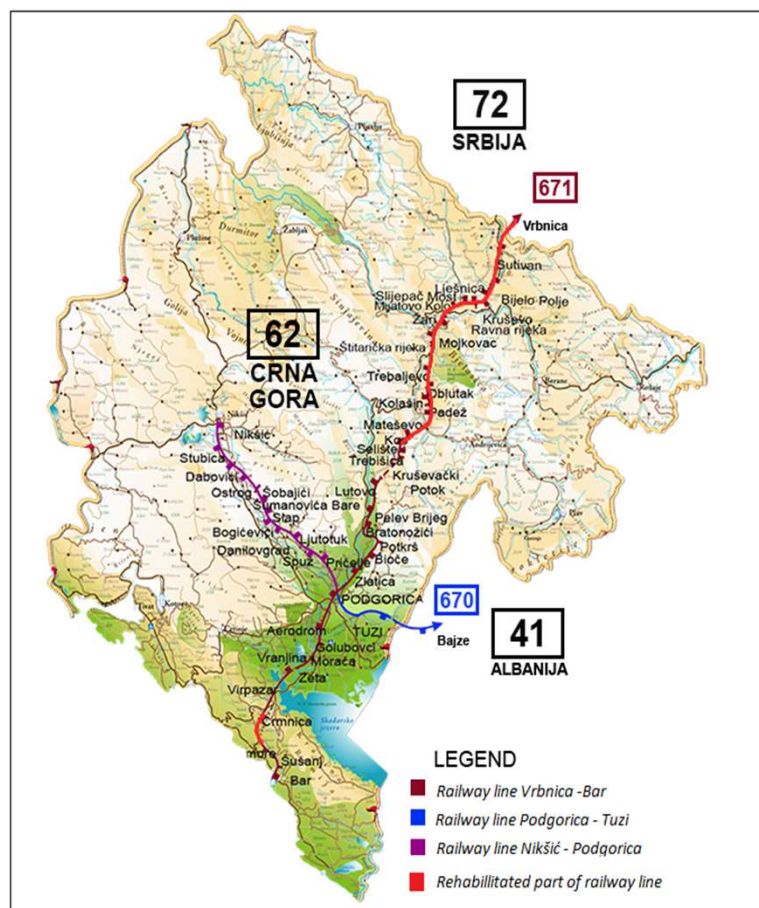
28 January 2025



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Railway Network Overview



Total railway network length in Montenegro: 327.72 km
(out of which 224 km are electrified)

The network consists of three lines:

- Vrbnica (Border with Serbia) - Podgorica - Bar, (168 km single-track electrified line);
- Nikšić - Podgorica, (56 km single-track electrified line);
- Podgorica - Tuzi - Border with Albania, (25 km single-track non-electrified line).

Railway network density in Montenegro
18.4 m of track per km²
0.40 km per 1,000 inhabitants

Railway lines

Main characteristics



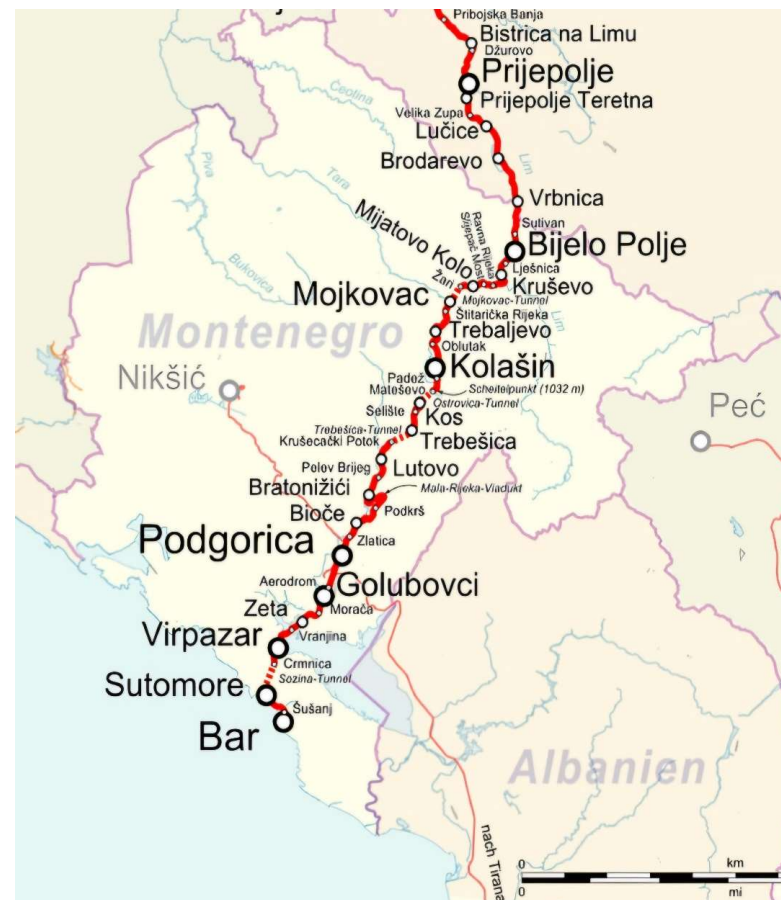
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BASIC INFORMATION ABOUT RIOM'S RAILWAY LINES				
RAILROAD	VRBNICA - BAR	NIKŠIĆ-PODGORICA	PODGORICA-BAJZE	TOTAL
YEAR OF PUTTING INTO OPERATION	1976	1948/1965/2012	1984	
The length of the open railway line with station passing tracks(km)	169.21	56.60	24.70	250.51
	electrified	electrified	non-electrified	
Station track length (km)	65.71	8.73	2.77	77.21
Railway category (valid)	D4 (22,5 t per axle; 8 t/m)	D4 (22,5 t per axle; 8 t/m)	D4 (22,5 t per axle; 8 t/m)	
Official places (number)	9 stations, 8 passing point, 19 halts	2 stations, 2 passing point, 7 halts	1 station	12 stations, 10 passing point, 26 halts
Station and administrative buildings area	35.138,00 m ²	5.688,00 m ²	1.499,00 m ²	42.325,00 m ²
STRUCTURES AND RAILROAD BED				
Bridges (number,type)	108 bridges (92 concrete, 16 steel)	9 bridges (8 concrete, 1 steel)	5 concrete bridges	122 bridges
Total length of bridges m':	8,404.49	374.75	190.00	8,969.24
Tunnels (number)	106 tunnels	12 tunnels	3 tunnels	121 tunnels
Total length of tunnels m':	51,597.00	3,439.00	2,676.00	57,712.00
Galleries (number)	14 galleries			14 galleries
Total length of galleries m':	391.57			391.57
Number of culverts below railroad (pcs.)	372 culverts	45 culverts	24 culverts	441 culverts
Railroad bed (embankment, cutting and insection)	107 km	52 km	22 km	181 km
Length of retaining walls km	45,30 km	2,70 km	2,30 km	50,30 km
Registered landslides (total length m')	2.890,00 m			2.890,00 m
Level Crossings	10	22		32 level crossings
Underpasses	10	6		16 underpasses
ELECTROTECHNICAL FACILITIES				
RAILROAD	VRBNICA - BAR	NIKŠIĆ-PODGORICA	PODGORICA-BAJZE	
Overhead Contact Line Network km	223,80 km			223,80 km
ETS (Electric Traction Substation)	Mojkovac, Trebešica, Podgorica i Bar			4 substations
NSP (Neutral Sectioning Point)	Bijelo Polje,Kolašin, Bratonožiće i Virpazar	Danilovgrad		5 points
SP (Sectioning Point)	Mijatovo Kolo, Trebaljevo, Lutovo, Kos, Bioče, Golubovci i Sutomore			7 points
Ovehead Contact Line building - OCL	Mojkovac i Podgorica			2

Railway line Vrbnica - Bar:

- One of the most difficult railway lines to maintain and operate in Europe.
- Together with the Port of Bar, forms a key system linking Montenegro with Central Europe
- The railway was fully opened to traffic in 1976, while the Podgorica–Bar section had been operational since 1959.
- Length of open track with station passing tracks: 169.21 km
- Length of station tracks: 65.71 km
- Line category: D4
- Axle load capacity: 22.50 tons per axle or 8 tons/meter
- Due to the mountainous terrain, nearly 40% of the railway consists of engineering structures, including:
 - 106 tunnels (total length: 51,597 m)
 - 108 bridges (91 concrete and 16 steel, total length: 8,404.49 m)
 - 14 galleries (total length: 391.57 m)
 - 372 culverts
 - 45.30 km of retaining walls





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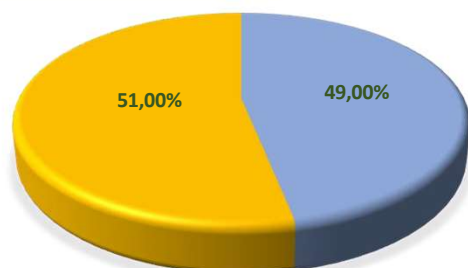


Infrastructure Rehabilitation Overview

Overview of railway line rehabilitation incl. completion year

Railway line Rehabilitation	Implementation year
State border with Serbia-Bijelo Polje	2006-2007
Kruševo – Mijatovo Kolo	2010-2011
Mijatovo Kolo-Mojkovac	2012-2013
Trebaljevo-Kolašin	2011
Kolašin-Kos	2016
Kos-Trebešica	2018-2019
Station tracks Trebešica	2012
Virpazar-Sutomore -Tunnel Sozina	2016-2017
Nikšić-Podgorica	2006-2012

- State border with Serbia to Trebešica section (2006–2020)
- Superstructure refurbished.
- Trebešica to Bar section (95.65 km) - No refurbishment conducted



- Ratio of overhauled and non-overhauled track machine (sleepers, rails, gravel)



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Vrbnica – Bar

• Bridges and Tunnels

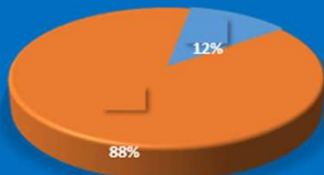
Overview of rehabilitated and non-rehabilitated tunnels

Railroad Section(RS)	Rehabilitated bridges	Non-rehabilitated bridges	Total bridges
Railroad Vrbnica -Bar			
TOTAL	27	81	108
RS Bijelo Polje	3 AB + 1 AB = 4	19	23
RS Mojkovac	1 AB + 5 AB= 6	18	24
RS Kolašin	5 PN + 2 celicna + 1 AB + 1AB =9	7	16
RS Podgorica I	4 AB	25	29
RS Podgorica II	1 celicni	6	7
RS Bar	1 AB + 2AB = 3	6	9
Railroad Nikšić-Podgorica			
TOTAL		8	8
RS Nikšić		4	4
RS Danilovgrad		4	4
Railroad Podgorica - Tuzi			
RS Tuzi		5	5

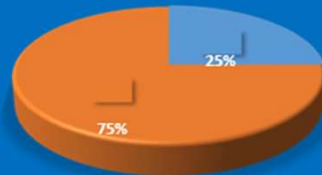
Overview of rehabilitated and non-rehabilitated tunnels

Railroad Section(RS)	Rehabilitated tunnels	Non-rehabilitated tunnels	Tunnels TOTAL
Railroad Vrbnica -Bar			
TOTAL	13	93	106
RS Bijelo Polje	3	8	11
RS Mojkovac	1	19	20
RS Kolašin	4	15	19
RS Podgorica I	5	47	52
RS Podgorica II		1	1
RS Bar		3	3
Railroad Nikšić-Podgorica			
TOTAL	12		12
RS Nikšić	11		11
RS Danilovgrad	1		1
Railroad Podgorica - Tuzi			
RS Tuzi		3	3
TOTAL OF ALL RAILROADS	25	96	121

Percentage of rehabilitated and non-rehabilitated tunnels



Percentage of rehabilitated and non-rehabilitated bridges



Budget and Funding Sources

The European Union recognizes the need of supporting Montenegro in the context of regional connectivity and transit flows.

EU actively contributes to the improvement of the railway sector in Montenegro through various financial and technical support mechanisms. This support goes through:

- Grants through the Western Balkans Investment Framework (WBIF)- the financing of preparatory technical documentation and co-financing of infrastructure works.
- Convenient loans - international financial institutions such as the European Investment Bank (EIB) and the European Bank for Reconstruction and Development (EBRD).
- EU grants under the Instrument for Pre-Accession Assistance – IPA (85% donor funds, 15% financed through the contribution from the Capital Budget)

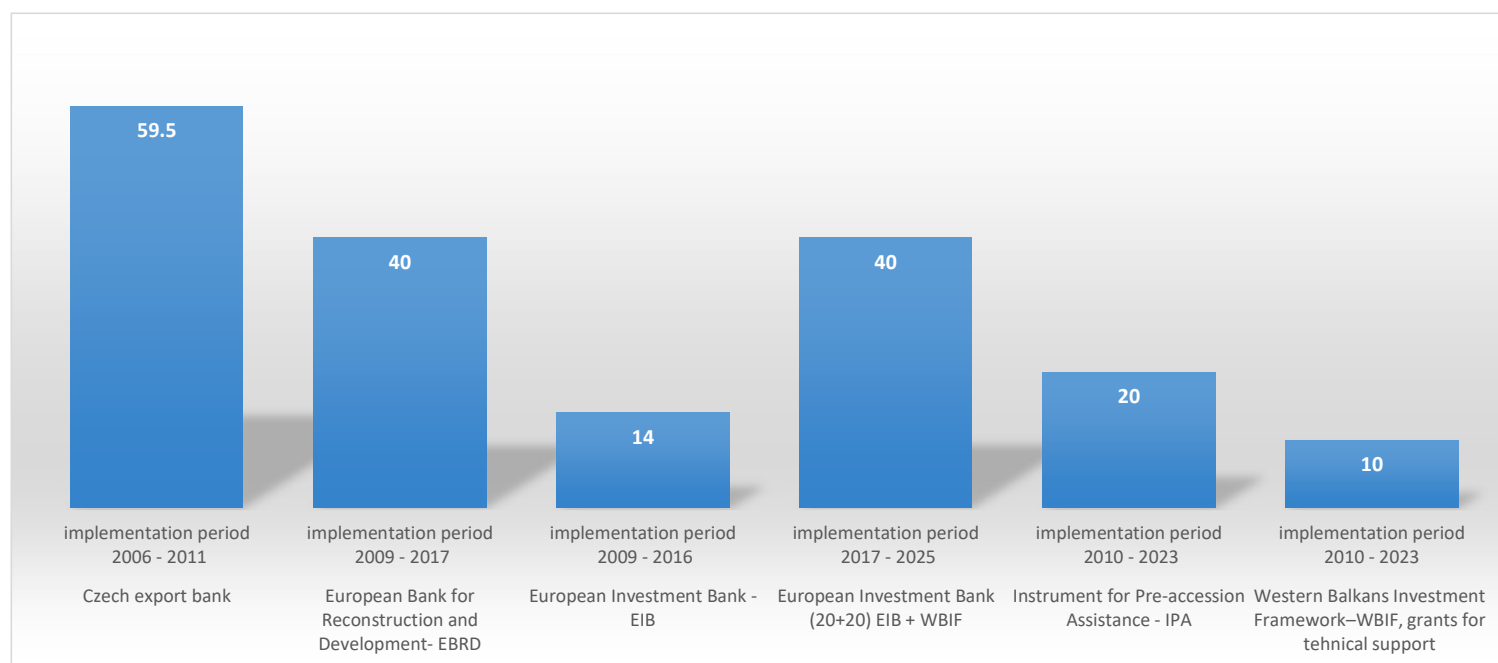




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Overview of Particular Sections Rehabilitations (2006-2023)





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Funded by WBIF (EU, IFIs, other donors)

DESIGN DEVELOPMENT PROJECTS

Name of the project	Value (€)	Period of implementation		Funding source
Visual inspection of concrete bridges and development of Main Design for Replacement of signaling/interlocking devices in station Podgorica	1,0 m	2013	2017	WB10-MNE-TRA-01
Special inspection and development of Main Design for rehabilitation of 45 Tunnels	2,5 m	2016	2020	WB13-MNE-TRA-01
Special inspection and development of Main Design for rehabilitation of 91 Concrete bridges	3,0 m	2016	2019	WB14-MNE-TRA-01
Development of the Main Design for Replacement of signaling/interlocking devices in stations from Podgorica to Bar	1,5 m	2018	2020	WB16-MNE-TRA-01
Development of the Main Design for Replacement of signaling/interlocking devices in stations from Podgorica to Bijelo Polje	1,0 m	2018	2020	WB17-MNE-TRA-01
Development of the Main Design for stabilization of landslide Ratac	1,0 m	2018	2020	WB17-MNE-TRA-01
Development of the Conceptual Design for modernisation and electrification railway line Podgorica-ALB including CBA and FS	1.3 m	2020	2022	WB17-MNE-TRA-02
Modernization of Rail Route 4, Golubovci – Bar , ESIA, Main Design	3,9m	2021	2025	WB21-MNE-TRA-01
Main Design for modernisation and electrification railway line Podgorica - Albania	2,5	2024	2026	WB29-MNE-TRA-02
TOTAL	17,7			

General objectives of rehabilitation:

- Modernization and sustainable development of the Montenegrin railway transport system within the Trans-European corridors, in order to meet the required levels and quality standards relevant for the TEN-T network in the context of the EU accession process.
- Increasing the capacity and safety of railway transport through the modernization of infrastructure - better connectivity, high European safety standards and sustainable economic growth.
- Improving interoperability with neighbouring countries through the implementation of TSI standards and the introduction of the ERTMS systems.
- Increasing the efficiency and reliability of railway transport through the modernization of signaling and electrification.
- Support to sustainable transport by reducing gas emissions and shifting freight transport from road to rail.





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Planned and Upcoming projects

Name	Indicative budget (mil)	Timeline	Secured Financing (Yes/No/Remarks)
Rehabilitation of 3 steel bridges	3	2024-2027	Yes
Rehabilitation 20 km of superstructure Lutovo – Bratonožići - Bioče	17	2024-2027	Yes
Rehabilitation of 10 steel bridges	19	2024-2028	Yes
Rehabilitation of 8 tunnels	12	2024-2027	Yes
Rehabilitation Golubovci - Bar	220	2025-2030	An investment grant of around 220 million eur is expected to be signed in 2025
Reconstruction Golubovci - Trebešica	150	2027-2031	No
Reconstruction Podgorica – Alb.border	70	2027-2031	Funding is expected to be provided through the Growth Plan for the Western Balkans



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Upcoming projects - Vrbnica – Bar railwayline

Project objective:

- Finance Contract with EIB – 80 million EUR (EIB loan 40 mil., WBIF investment grant 35,5 mil.)
 - Budget of Montenegro 4,5 mil.)
- Includes:*
- Reconstruction of 13 steel bridges with a total length of 2,600 m
 - Reconstruction of 8 tunnels with a total length of 2,655 m
 - Reconstruction of 20 km of superstructure Lutovo – Bratonožići – Bioči
 - Improve the condition of the railway line
 - Improve safety level, reduce the need for introduction of restricted speed running and extraordinary railway line inspections, or on-call duty in the case of adverse weather conditions.
 - Extend the life-time of bridges and tunnels and increase stability, or safety during exploitation, ensure structural stability, reduce ongoing maintenance costs, reduce the scope of bridge and tunnel inspections



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Vrbnica – Bar

• Tunnels

➤ Section Lutovo – Bratonožići

Tunnel 215 in km 370 + 545.8 L = 673m

Tunnel 218 in km 372 + 197.1 L = 309m

➤ Section Kruševo – Mijatovo Kolo

Tunnel 154 in km 310 + 533.32 L = 505m

Tunnel 156 in km 312 + 650.53 L = 172m

➤ Section Mijatovo Kolo – Mojkovac

Tunnel 157 in km 314 + 413.28 L = 182.5m

➤ Section Mojkovac – Trebaljevo

Tunnel 165 in km 326 + 972.98 L = 114m

Tunnel 167 in km 328 + 125.98 L = 415m

Tunnel 169 in km 329+545.74, L = 285m

The total length of proposed tunnels is 2.655 m Works, which will be supervised under this assignment, include:

- preparatory works;
- re-profiling tunnel lining;
- concrete works;
- reinforcement works;
- grouting between the rock mass and lining, waterproofing of the tunnel lining;
- track drainage works; and other miscellaneous works.



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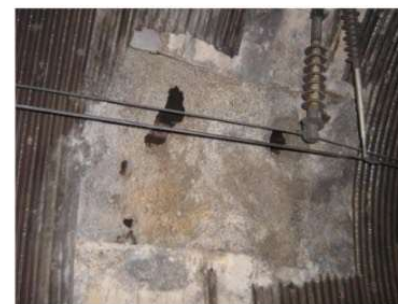
Vrbnica – Bar

• Tunnels

STATE ASSESSMENT	STATE DESCRIPTION	WATER OCCURRENCE
GOOD LOW RISK	Concrete lining is slightly damaged or not damaged at all	Moisture or Dropping of small intensity
POOR MEDIUM RISK	Damages of great intensity on certain tunnel segments (tunnel rings)	Dropping and leakage of different intensity, freezing and thawing in cycles
EXTREMELY POOR HIGH RISK	Significant surface and depth damages identified along the whole tunnel structure that punch the lining	Streams of different intensity, freezing and thawing in cycles



*State assessment - extremely poor - HIGH RISK
significant damages - ruined concrete - water flow*



State assessment - extremely poor - HIGH RISK - caverns that punch the lining



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Vrbnica – Bar

• Bridges

13 STEEL BRIDGES TO REHABILITATE

Steel bridges:

- Bridge Kosorski žlijeb in km 391 + 846.06 L= 89.5 m
- Bridge Rudnica in km 320 + 183.86 L = 11 m
- Bridge Vujisića most in km 312 + 557.93 L=80 m
- Bridge no. 4 (Lim III) in km 289 + 460.48 L = 395.5m
- Bridge no. 20 (Ljubovidja) in km 311 + 510.59 L = 454m
- Bridge no. 27 (Tara I) in km 321+953.64, L = 120m
- Bridge no. 50 (Skrbuša) in km 343 + 704.98 L = 157m
- Bridge no. 54 (Tara III) in km 346+903.46, L = 275
- Bridge no. 61 (Vuče potok) in km 358+076.67, L = 207m
- Bridge no. 72 (Kruševački potok) in km 367 + 421.95 L = 85.2m
- Bridge no. 77 (Dubočica) in km 369 + 504.39 L=109 m
- Bridge no. 85 (Mala Rijeka) in km 385+489.39, L = 498.8m
- Bridge no. 98 (Tanki rt) in km 429 + 284.32 L = 201.7m

Most of these bridges were built between 1970 and 1974, meaning that age of steel bridges is close to 50 years, with the exception of Tanki Rt Bridge, which has been built between 1950 and 1956 and its age is closer to 70 years. This is quoted with a view to defining residual Service Life of steel bridge structures, whose durability in previous national standards, as well as European Norms is 100 years. The total length of these bridges is 2,626 m. Works, which will be supervised under this assignment, shall include: • rehabilitation of bridge substructure, repair of abutments and piers; rehabilitation of bridge superstructure, repairs to bearing surfaces, beams and girders, parapet; Anticorrosive protection...

The dynamics of Implementation

Implementation Time Schedule:

- Implementation of tender procedures - 2025
- Realization 2025-2028

Implementation challenges

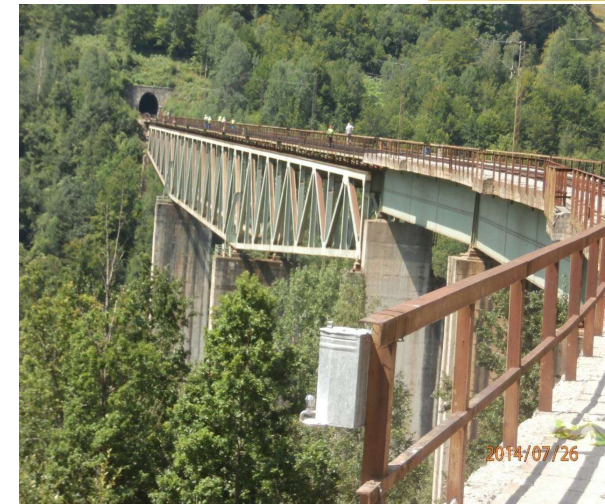
- The execution of works is limited to a daily period of 5-6 hours due to unobstructed traffic. Challenge: harmonization of the methodology and technology of works with the permitted daily closure of the railway
- Maintaining traffic safety during the execution of works



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Steel bridge Tanki Rt



Steel bridge Ljuboviđa



Steel bridge Tara III

Vrbnica – Bar

- **Bridges**

The main steel truss bridge structure is the Bridge Mala Rijeka, that is one of the most important bridges on the Belgrade - Bar International Line, in km 385+489,39 and on altitude 316 m. Bridge Mala Rijeka was built in 1973 as the highest railway bridge in the World. The bridge is over 200m above river bank. Mala Rijeka is a continuous girder range - the total length is 498.80 m.



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Figure 1-3: View at the bridge and surroundings of the bridge Mala Rijeka



Figure 1-4: View at the bridge and surroundings of the bridge Mala Rijeka



Figure 1-5: View at the bridge and surroundings of the bridge Mala Rijeka



Figure 1-6: View at the bridge and surroundings of the bridge Mala Rijeka



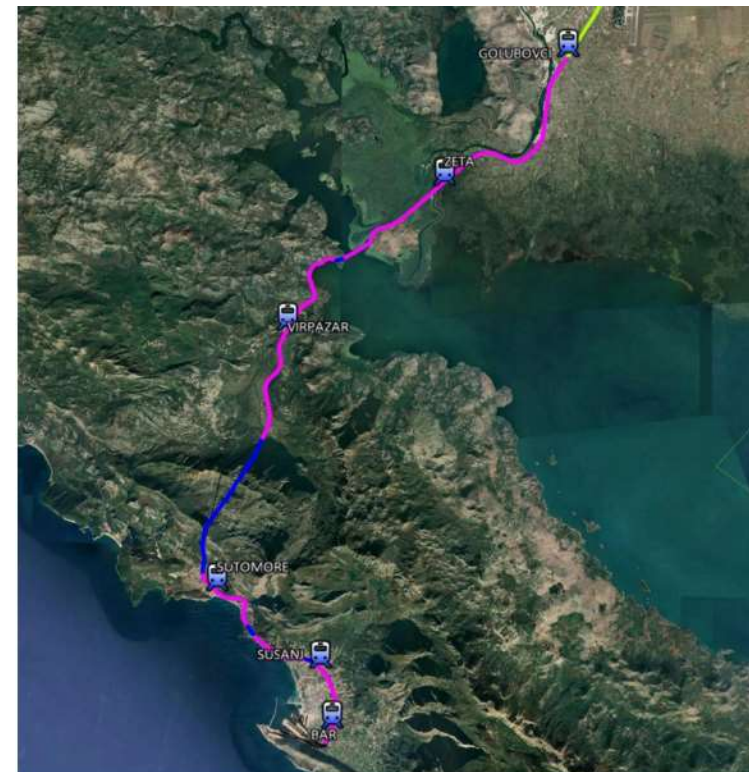
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Vrbnica – Bar

Reconstruction of the Golubovci – Bar railway line

General overview of the Line "Golubovci – Bar"	
•	38.5 km single track
•	Fully electrified line (25kV, 50 Hz AC)
•	Used for mixed traffic (both passenger and freight trains)
•	Maximum design speed 100km/h
•	Maximum operational speed: 80km/h
•	Line category: D4 (22.5 tn/axle & 8tn/m)
•	Max gradient: 8.4 ‰
•	Min. radius: 300 m
•	Structure gauge: GB
•	Main stations: 5 (Golubovci, Zeta, Virpazar, Sutomore & Bar)
•	Tunnels: In total 4. Sozina tunnel is the longest (6.170m)
•	Bridges: In total 11. Tankirt bridge is the longest (200m)
•	Level crossings: 9





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Vrbnica – Bar

Reconstruction of the Golubovci – Bar railway Design Requirements

- Designed constructional speed from 80 to 120 km/h (with restrictions in urbanized areas conditioned by town-planning reasons);
- Maximum allowed weight of railway vehicles 25t/axle (load model E5);
- Transit gauge GC;
- Design width of track formation must be 7.0m;
- Usable length of required number of tracks in stations foreseen for operating interoperable freight trains must comply the train length of 750m;
- Usable length of required number of platforms in stations intended for operating interoperable passenger trains must be 400m;
- Traffic control and signal and safety infrastructure subsystem must be equipped according to ERTMS requirements and technical specifications;



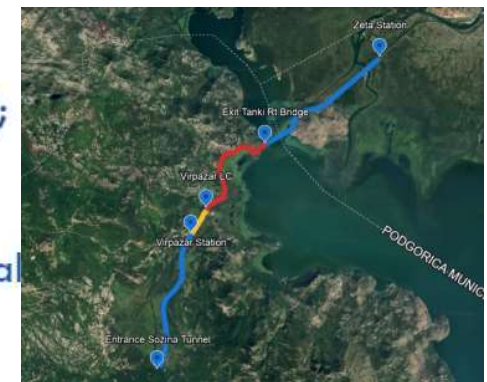
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Vrbnica – Bar

Reconstruction of the Golubovci – Bar railway Design Requirements

- Signal and safety installations have to be equipped with ETCS Level 1 system;
- Installation of modern traffic management systems (when the conditions for this are met);
- Telecommunication devices equipped with GSM-R system.
- Usable length of required number of platforms in train stops foreseen for operating local passenger trains must be 160 m;
- Video surveillance in stations and train stops;
- Protect level crossings that have not yet been protected with electronic closure devices (light-sound signals and half-barriers);
- Parking facilities for all stations and train stops.





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Vrbnica – Bar

Reconstruction of the Golubovci – Bar railway line Specific Characteristics and Challenges of the project:

- Complexity in aligning with technical standards due to limited tunnel profiles (Sozina Tunnel). Environmental Permits: Works in the area of the Skadar Lake National Park require careful planning and approvals. ERTMS Implementation: Necessary adjustments in the legal framework and technical infrastructure. Tunnels and Bridges: Execution of works is limited to a daily window of 5–6 hours to avoid disrupting regular traffic. Maintaining traffic safety during construction works. Modernization of Level Crossings: Adapting technical solutions to specific locations of level crossings. Coordination with local communities and institutions.



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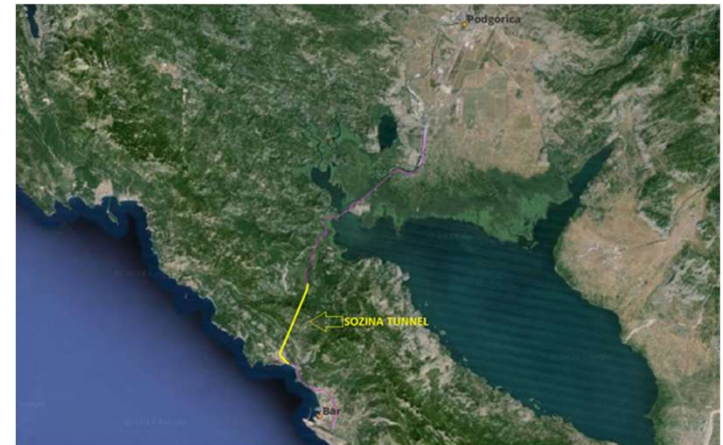


Vrbnica - Bar

Tunnel Sozina

Includes:

- Preparation of technical documentation - WBIF grant (850 000 EUR)
- The Sozina Railway Tunnel was built between 1954 and 1959 and is located about 35 km from Podgorica, the main railway station in Montenegro. It is the longest tunnel on the entire railway network in Montenegro. The drainage channel (drainage tunnel) was built in 1979.
- Specific geotechnical and hydrological problems - large inflow of water, significant damage to the tunnel lining, which causes great damage to the concrete lining and the entire operation of the tunnel.





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Vrbnica - Bar

Tunnel Sozina

Project objective :

- Constructive repair of the tunnel lining and compliance with TSI standards

Implementation challenges

- TSI standards: Complexity of harmonization with technical standards in the segment of fire protection, evacuation, ventilation and lighting in the tunnel, due to limited tunnel profiles (Sozina Tunnel).
- Environmental challenges: Projects implemented in sensitive ecological zones, such as the Skadar Lake National Park, require detailed environmental impact studies and approvals from relevant institutions.
- ERTMS implementation: Necessary adjustments in the legislative framework and technical infrastructure.





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Cooperation with the Transport Community and the Ministry of Transport through the project Modernization of Level Crossings

- Source of Funding World Bank/Transport Community

Includes:

- Modernization of level crossings to increase safety
- Installation of modern signaling and safety devices and automatic ramps

Project objective:

- Increasing the visibility and marking of crossings according to EU standards



Challenges:

- Adaptation of technical solutions to specific crossing locations.
- Coordinating with local communities and institutions.



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R2 railway interconnection, Podgorica – Albanian border

- Modernisation of Rail Route 2, Podgorica – Albanian Border: Feasibility Study and ESIA”
- Part of the SEETO Route 2 Comprehensive Network from Podgorica (Montenegro) to Vlore (Albania).
- Forms part of the indicative extension of the Core TEN-T Corridor into neighbouring countries.
- Opened in 1986 - Single-tracked, non electrified and designed for a maximum speed of 100 km/h.
- It is currently used only for freight traffic.
- Currently in a poor condition and the permissible operational speed is substantially reduced in some sections (30 km/h).

Single Track

- ✓ 25 km (plus 2,237 m secondary tracks)
- ✓ Ballasted track
- ✓ Slab track (Tunnel 2)
- ✓ Reduced construction height compared to the Ballasted track
- ✓ Lower maintenance costs

Structures

- ✓ Bridges (in total 190 m)
- ✓ Tunnels (in total 2,676m)
- ✓ New road overpass



Podgorica – Albanian border



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Project status:

- Issuance of technical documentation through WBIF grants:
- Phase I - Feasibility Study, Preliminary Design and Preliminary Environmental and Social Impact Assessment (ESIA) in the amount of EUR 1.3 million - COMPLETED
- Phase II- Main Design, ESIA and Tender Documentation in the Amount of EUR 2.6 Mil- ONGOING

Works - preliminary estimated value of EUR 80 million



Planned dynamics:

- Main project - end of 2025
- The announcement of the tender
- Works

Objective, purpose and expected results:

- Modernization and electrification of the existing railway section Podgorica – Albania border on the Mediterranean Railway Corridor (route 2) in accordance with TEN-T standards,
- Establishing passenger transport, increasing freight traffic, improving cross-border cooperation and promoting regional integration, cohesion, interoperability and modal shift from road to rail,
- Achieving Measurable Economic Benefits:
 - Savings in operating costs from modal load change;
 - Local and global environmental benefits from modal shifts;
 - The safety benefits of changing modes of transport;
 - Potential time savings if travel services are introduced.

Podgorica – Albanian border



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Scope of work

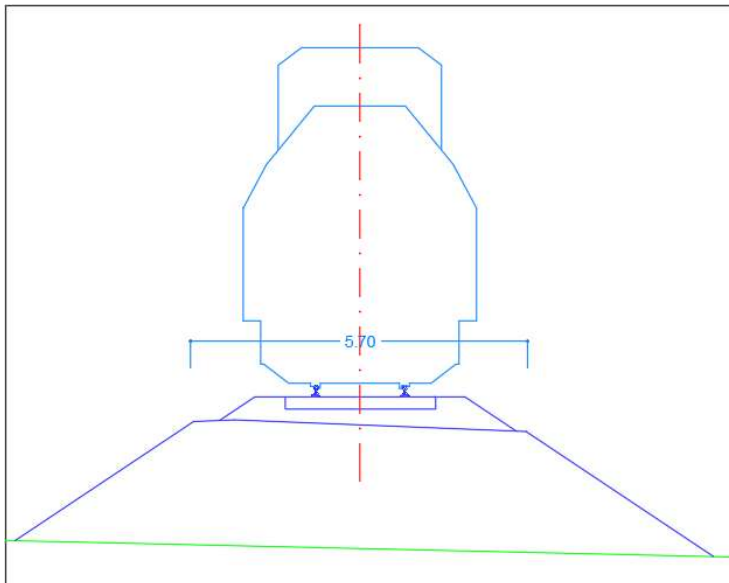
- Reconstruction and modernization of the permanent route in the length of 25 km, with the upgrade of the elements of the lower and upper structure and the installation of new rails;
- Reconstruction and/or rehabilitation and/or replacement of five bridges, three tunnels and 25 culverts;
- Reconstruction and/or rehabilitation and/or reinforcement and/or replacement of cuts, embankments, retaining walls, water supply and other communal facilities on the section from Tuzi station to the border crossing with Albania;
- Electrification and passive provision of the future installation of the ERTMS system through rehabilitation and modernization of existing signaling and interlocking devices;
- Digitalization of telecommunications along the entire railway line;
- Modernization of security and video surveillance systems;
- Reconstruction of the station track and the station building in Tuzi;

Podgorica – Albanian border

Alignment and Track Geometry (2)

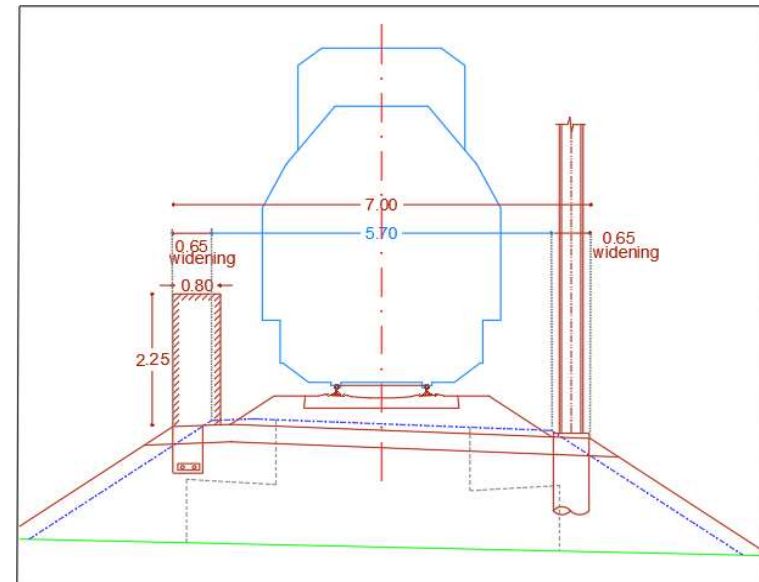
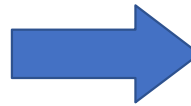


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Existing Single Track

- ✓ Wooden sleepers
- ✓ Ballasted track
- ✓ 5.70 m width



New TCS

- ✓ Concrete sleepers
- ✓ Ballasted track
- ✓ 7.00 m width

Podgorica – Albanian border

Structures

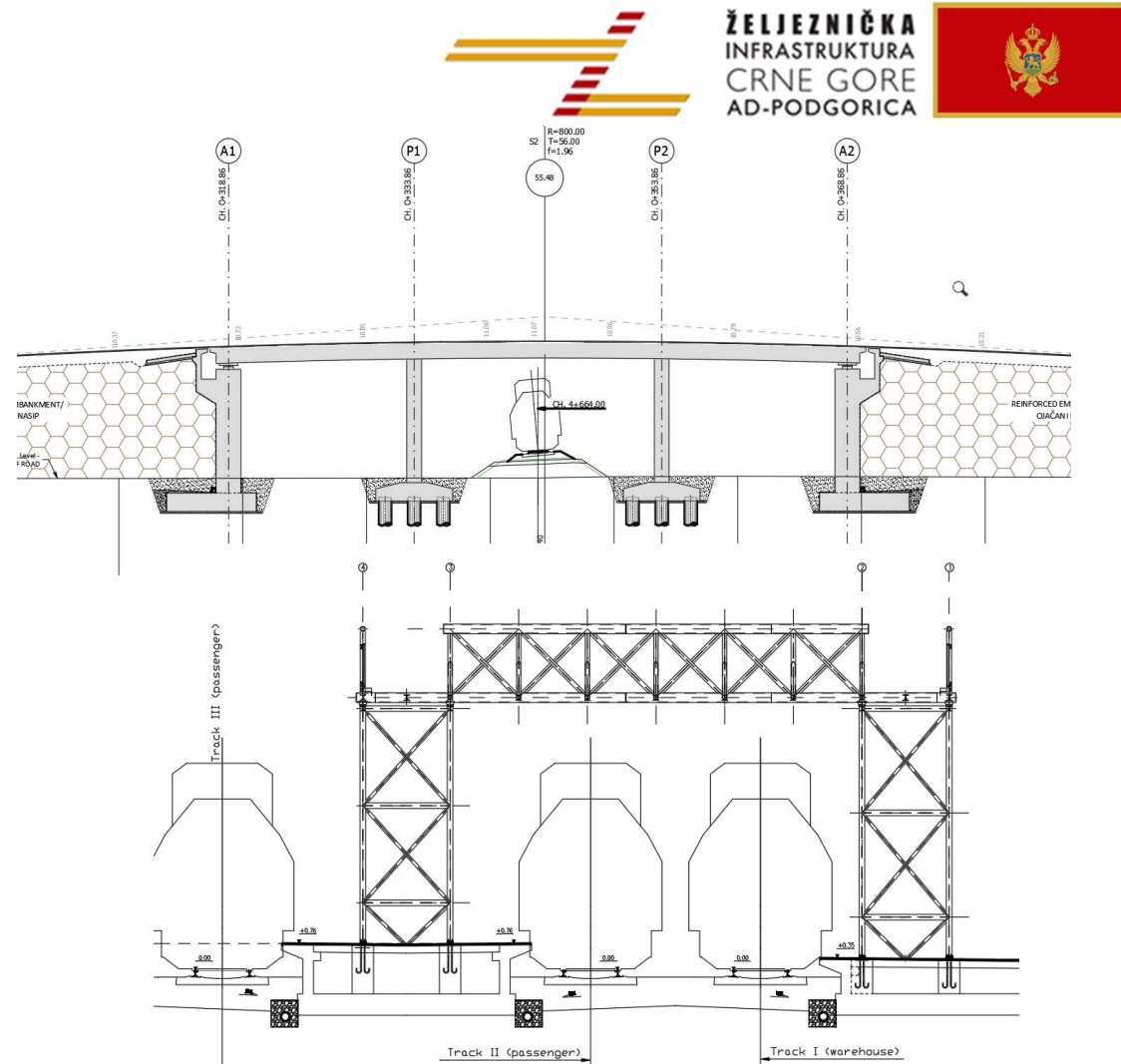
Rehabilitation works on Bridges/Minor Structures

- Replacement of waterproofing
- Concrete rehabilitation
- Reinforcement anti-corrosion protection
- Replacement of bearings, expansion joint
- Restoration of retaining walls

Tuzi Station

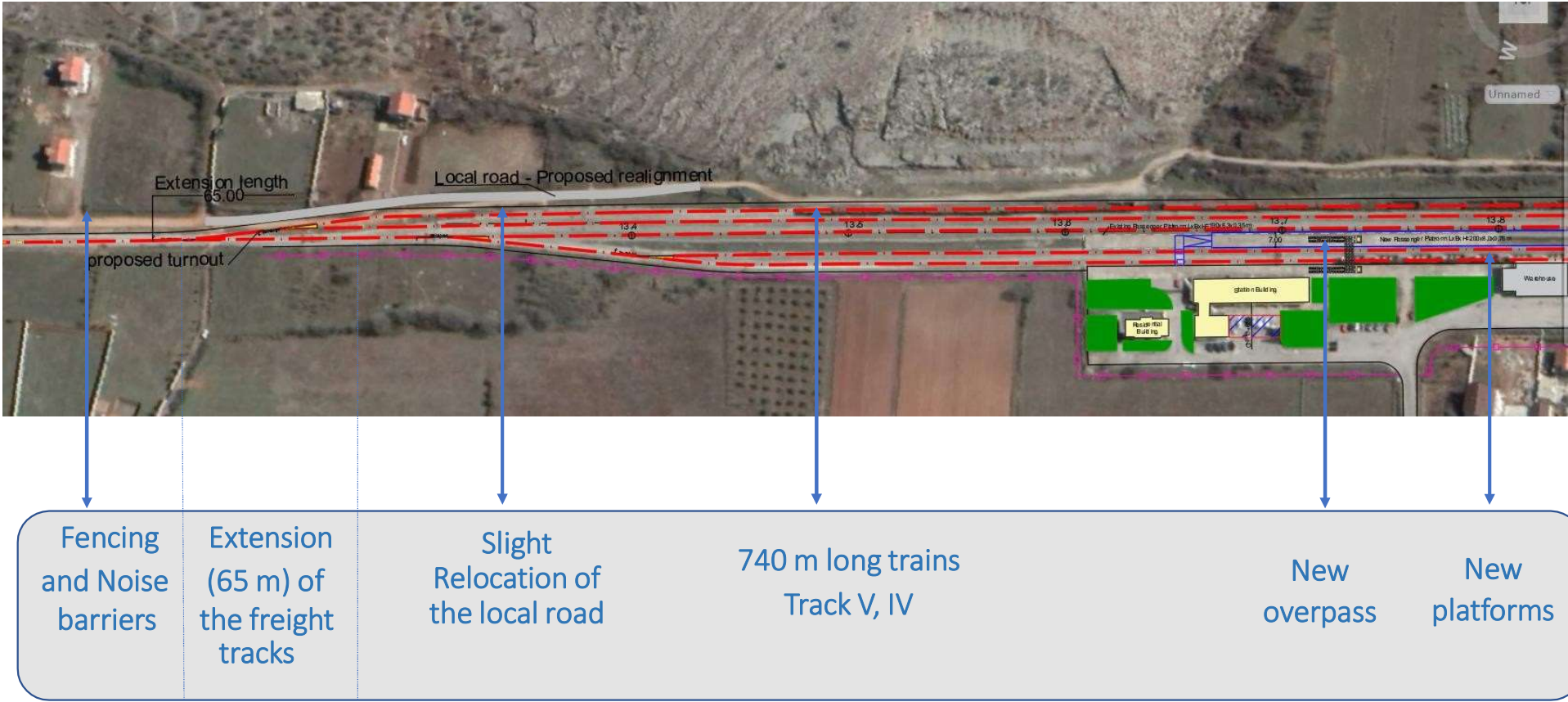
- New Platform
- New pedestrian overpass

New Road Overpass



Podgorica – Albanian border

Railway Station (2)



Podgorica – Albanian border

Architectural Design(1)

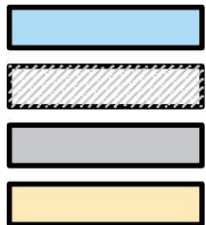


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Tuzi Station

- ✓ Reconstruction of the Main Building
- ✓ Extension of the Main Building (around 700 m²)
- ✓ Residential Building
- ✓ Warehouse
- ✓ Services Republic of Montenegro and of Albania (Customs Administration, Border Police etc)
- ✓ Waiting room, ticket window etc
- ✓ Technical Room

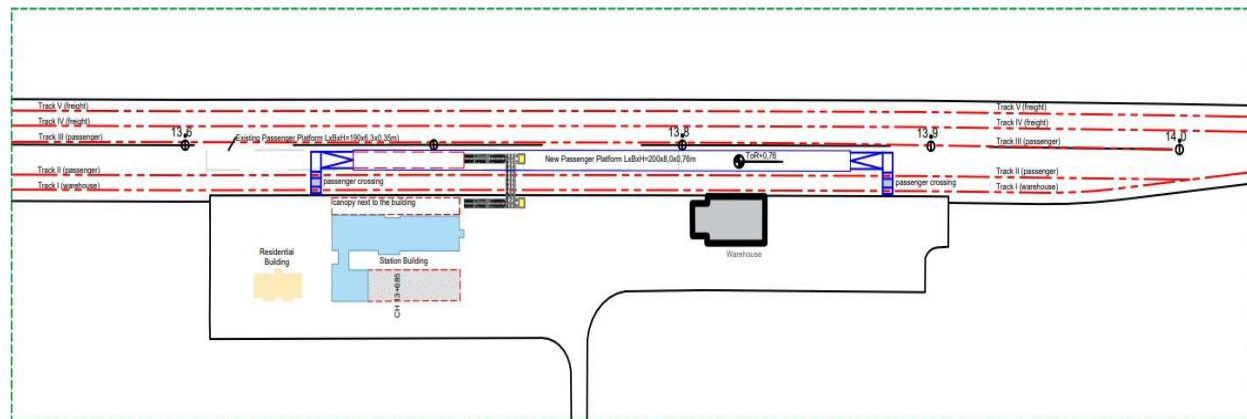
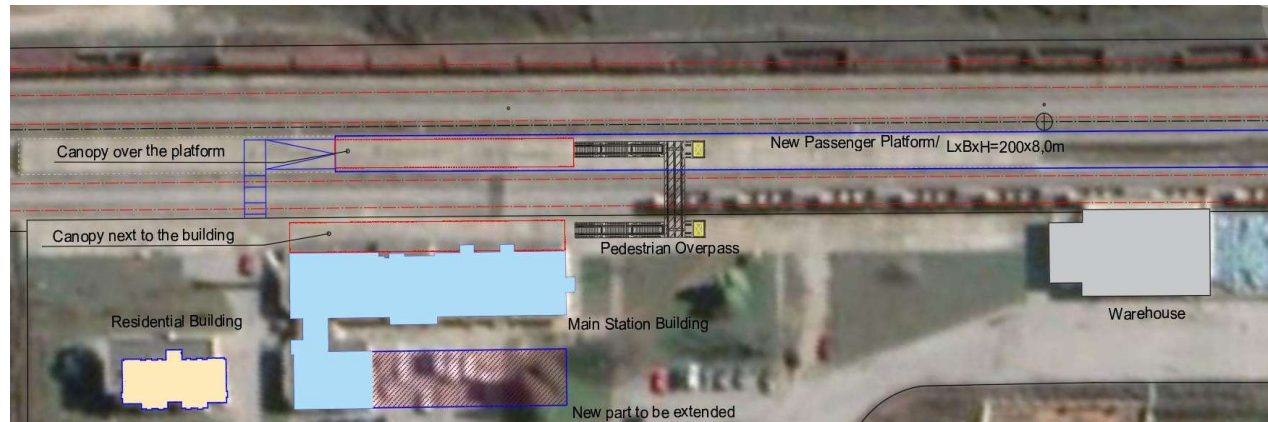


Main building

Extension of the Main Building

Warehouse

Residential Building



Podgorica – Albanian border

Environmental challenges:

The existing railway line crosses one prominent watercourse – the Cijevna River. The length of the flow of the Cijevna River is about 62.2 km.

The existing railway corridor crosses one national protected area - Skadar Lake National Park, also internationally recognized as RAMSAR area - wetland area of international importance and Emerald area - potential EU NATURA 2000 area. It was declared in 1983 according to the relevant Montenegrin legislation.



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Western Balkans
Investment Framework **WBIF**
BUILDING THE EUROPEAN FUTURE TOGETHER

Key Environmental Sensitivities



Crossing of NP Skadar Lake



Crossing of Cijevna River,
Emerald site



www.wbif.eu

Detailed environmental impact studies, preparation of environmental studies and approvals of relevant institutions



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Challenges in the implementation of infrastructure projects:

- Obsolete infrastructure: Railway network has been mostly constructed according to the standards that are no longer applicable, requiring complete reconstruction and modernization.
- Limited budgetary capacities: As a small economy, Montenegro cannot independently finance such large-scale projects without international assistance.
- Lack of professional staff: There is a need for continuous training of the staff in the fields of project management, technical implementation and maintenance of new systems.
- Additional financial and technical assistance from EU and international partners in order to ensure the sustainable implementation of strategic projects:



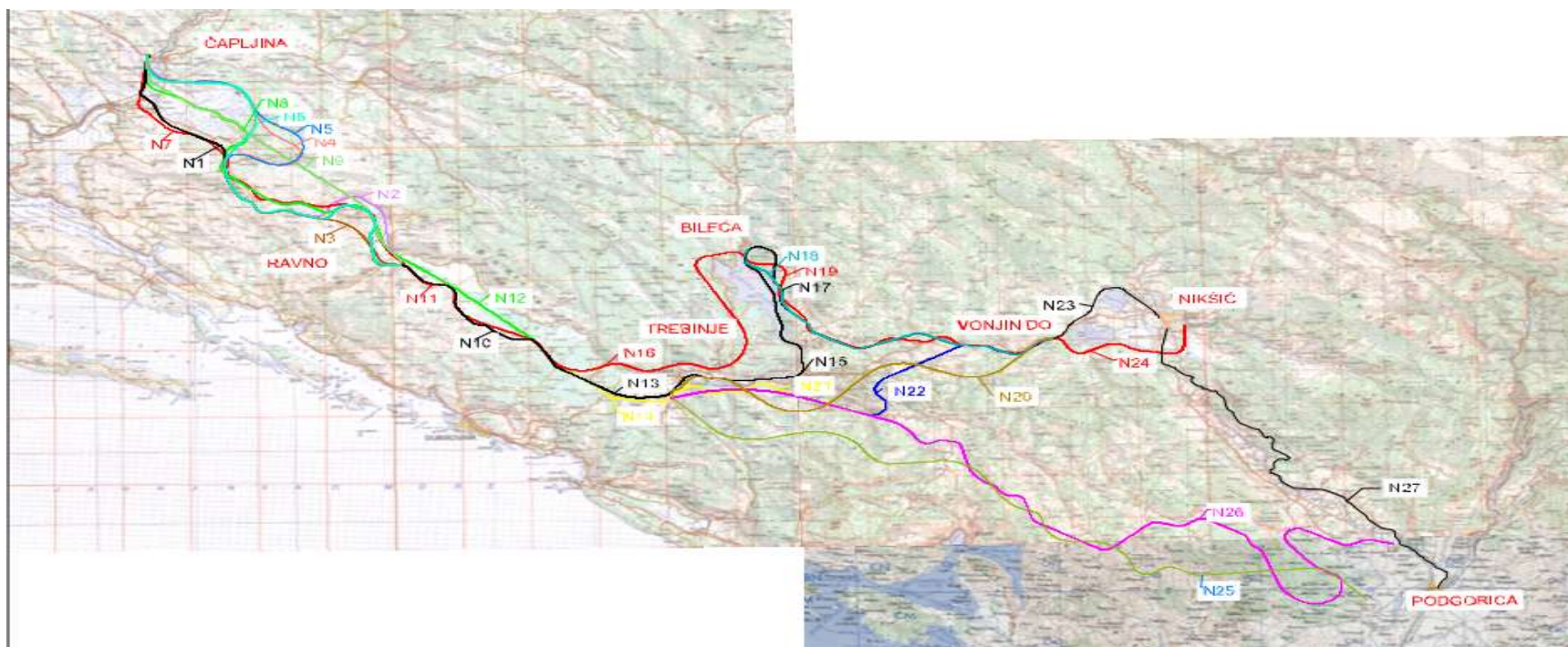


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PLANNED PROJECTS IN THE FUTURE

Construction of the regional railway line Čapljina - Trebinje – Nikšić-Podgorica



Construction of the regional railway line Čapljina - Trebinje – Nikšić-Podgorica



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- The total length of the railway line Čapljina-Trebinje-Nikšić-Podgorica is 245.35 km, where the length of the section Čapljina-Trebinje-Nikšić is 188.85 km, and the length from the state border with Bosnia and Herzegovina to Nikšić is 57.85 km. The length of the railway line through Bosnia and Herzegovina is 131 km.
- In the period between the 1930s and 1970s, Montenegro was connected to Bosnia and Herzegovina by the narrow-gauge railway line Bileća-Nikšić. The construction of normal gauge railway lines in that period in the region led to the replacement of narrow gauge railway lines with a network of normal gauge railway lines, but this part of the railway line was not replaced, thus this narrow gauge railway line was abolished and dismantled in 1965.
- Previously developed studies: “Inocsa Ingenieria S.L” 2008.
 - Technical Study
 - Preliminary Environmental Impact Assessment;
 - Traffic Study;
 - Preliminary Feasibility Study
 - Conceptual Design



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Railway line Pljevlja – Bijelo Polje – Berane – border with Kosovo

Corridors of the route of the newly planned railway Pljevlja - border with Kosovo are elaborated so that the route is divided into two sections, namely:

- Section V1 – Pljevlja – Bijelo Polje/ Ravna Rijeka and;
- Section V2 – Bijelo Polje/Ravna Rijeka – Berane – border with Kosovo.

Previously developed studies:

- Preliminary Feasibility Study
- Conceptual Design

Designer:

Institut za građevinarstvo d.o.o.Podgorica-2013.





Further steps and expectations

- Efficient implementation of contracted projects in accordance with the planned dynamics
- Close cooperation with the relevant institutions in order to implement the projects
- European Union support through grants, loans and technical assistance - a key role in the recovery and modernization of the railway sector in Montenegro
- Continuous cooperation with international partners with the aim of further development and modernization of the railway system of Montenegro, which contributes to sustainable development, economic stability and regional connectivity.

THANK YOU!