



# Technical Assistance to Connectivity in the Western Balkans EuropeAid/13785/IH/SER/MULTI

## SERBIA

### Technical Assistance for the preparation of Road Safety Audit (RSA) on detail design documentation for the new highway section Niš (Merošina) - Pločnik (Beloljin) along SEETO Route 7 in the Republic of Serbia

The subject project is still ongoing. The description that follows is for information purposes only and subject to the project's completion.

#### Partners:

- European Investment Bank (EIB)
- European Bank for Reconstruction and Development (EBRD)
- Government of the Republic of Serbia, Ministry for European Integration (MEI), Ministry of Construction, Transport & Infrastructure (MCTI)
- Koridori Srbije d.o.o. (Corridors of Serbia)
- JP 'Putevi Srbije' (PERS) (Public Enterprise 'Roads of Serbia')

#### Budget of Technical Assistance:

- Euro 50,000

#### EU contribution<sup>1</sup>:

- As above (100%)

#### Technical Assistance provided by:

- CONNECTA (Technical Assistance to Connectivity in the Western Balkans)

In December 2017, the Western Balkans Investment Framework steering committee approved the preparation of *Detailed Design and Tender Documents for the Orient/East-Med Corridor (Road R7), Construction of Niš - Merdare Highway, Section Niš (Merošina) - Pločnik (Beloljin)*, which was assigned to consultants in September 2018. A requirement of both financing parties (EIB and EBRD) was that an RSA - stage 2 should also be performed at the detail design level. In accordance with the consultant's Terms of Reference, a design for construction permit and a design for construction (for the Works contractor's use) would be prepared. The RSA would be performed only on the draft design for construction permit.

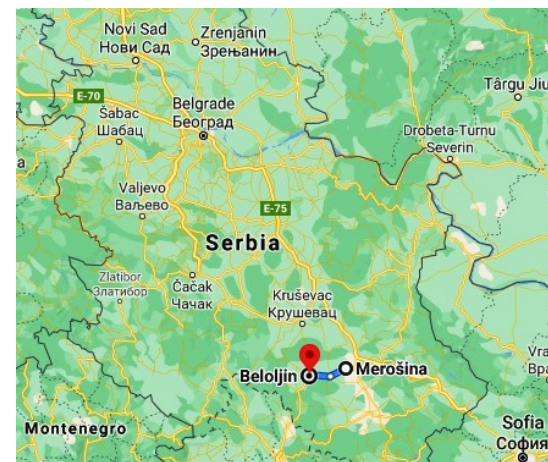
The **purpose** of this assignment was to review and assess the outputs of the draft detail design (for construction permit) related to road safety and provide specific recommendations for improving the project documentation on safety related issues. The draft detail design was divided into four sub-sections, which were planned to be delivered in two periods as follows:

- Sub-sections 1 & 2 (Merošina - Merošina 1, Merošina 1 - Prokuplje East respectively) in the first period.
- Sub-sections 3 & 4 (Prokuplje East-Prokuplje West, Prokuplje West - Beloljin respectively) in the second period.

Description	1	2	3	4
	Merošina - Merošina 1	Merošina 1 - Prokuplje East	Prokuplje East - Prokuplje West	Prokuplje West - Beloljin
Length (km)	5.50	8.78	12.82	5.55
Terrain characteristics	flat to hilly	Hilly	Hilly	flat
Design speed (km/h)	130	130	100	130
Pavement width (m)	25	25	26	25
Interchanges (pcs.)	2	-	2	1
Bridges/Viaducts (pcs.)	2	3	8	3
Overpasses/Underpasses (pcs.)	2	1	3	2
Tunnels (no./m)	0/0	2/450	4/2,215	0/0

General data on the sub-sections

The **main objective** was to ensure high level traffic and safety conditions along Route 7 (as part of an indicative extension of TEN-T in the WB – SEETO core network) by properly designing new highway sections and their connections to existing transport networks.



Section Niš (Merošina) - Pločnik (Beloljin)

#### Results achieved by the TA:

The result of the proposed project was a detail design (for construction permit) for a stage 1a semi-motorway highway between Niš (Merošina) and Pločnik (Beloljin), audited for road safety related elements as per Directive 2008/96/EC. For this purpose, the following deliverables were foreseen:

- Two draft RSA reports (one for sub-sections 1 & 2 and one for sub-sections 3 & 4) on draft design documentation, subject to comments from promoter/beneficiary and upon clarifications/discussions with designer; and
- Two final RSA reports (one for sub-sections 1 & 2 and one for sub-sections 3 & 4) on draft design documentation, subject to acceptance by the end beneficiary (Koridori Srbije d.o.o.).

<sup>1</sup>EU contribution concerns only Technical Assistance services for project development



Layout of traffic signalisation and equipment, km 5+523.00 - km 5+670.055. Proposed Traffic Signs.

## Key recommendations - further actions:

- The remaining sub-sections to be provided for auditing;
- Construct road elements according to proposed road safety measures;
- Transpose respective EU Directives and endorse relevant EU practices;
- Achieve proper and systematic coordination between all parties involved; and
- Implement a harmonized road safety approach among all sub-sections.

## Key Conclusions:

- The project output will have significant impact on increasing road safety in the specific section;
- A satisfactory level of data from beneficiaries was received; and
- The proposed safety measures are to be adopted during the construction period.



Example of a proposed safety measure (implemented on a Danish Motorway)

## Benefits expected due to Technical Assistance:

- Reduction of the number of road accidents;
- Reduction of the severity of road accidents and thus their consequences (fatalities and serious injuries);
- Improved safety indices;
- Lower risk factors; and
- Safer infrastructure.

## Anticipated impact:

- Better understanding of the causes of accidents;
- Improved prevention of accidents; and
- Reduction of traffic accidents (especially fatalities and serious injuries).