



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

NORTH MACEDONIA

Preparation of project documentation at the level of detailed design for replacement of guardrails along Road Corridor X in North Macedonia

Partners:

- Ministry of Transport and Communications
- Public Enterprise for State Roads
- EU Delegation

Budget of Technical Assistance:

- Euro 345,000

EU contribution¹:

- As above (100%)

Technical Assistance provided by:

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

Much of Road Corridor X in North Macedonia (MKD) from Tabanovce to Gevgelija is equipped with old guardrails (safety crash barriers) built to MKD, i.e. ex Yugoslavian standards. This has resulted in low safety conditions for road users and a risk of fatalities and serious injuries in road accidents.

The need to replace the guardrails to meet EN1317 standards and install guardrails at unprotected locations was identified in the SENSoR project, which scanned the road network of MKD in 2014 using the EuroRAP methodology.

The main objective is the improvement of road safety conditions along the indicative extension of the TEN-T Core Network in the Western Balkans (SEETO core network). As such, the project fits with the priorities of the Western Balkans Connectivity reform agenda and is part of the National Transport Strategy and strategy for improvement of road safety. Its implementation is envisaged through the national IPA funds.

The purpose of this Technical Assistance (TA) assignment was to develop mature project documentation at the level of Detailed Design for the EN-type guardrails along road Corridor X in MKD. Approximately 140 km per direction were studied.

The scope of the assignment included in brief:

- inception period: review of available documentation and of adequacy of Digital Terrain Model (DTM), field visits and inspections;
- detailed design: technical documentation for new guardrails in accordance with EN standards supplemented by respective bill of quantities (BoQ) and costs;
- prioritisation of sections for tendering (works, supplies) given that the available funds for the supply/erection of the barriers is limited.



Tunnel without crash cushions

Results achieved by the TA:

- Review of national design standards of guardrails (Rulebook) for adherence to EN standards;
- Surveying and development of Digital Terrain Model;
- Detailed design documentation (including bill of quantities and budget) and related "books";
- Prioritisation of road sections for tendering.



Insufficient distance of gantry pillars from carriageway edges

¹ EU contribution concerns only Technical Assistance services for project development

