

**Public**

## Environmental and Social Data Sheet

### Overview

Project Name:	CORRIDOR VC CENTRE
Project Number:	20180270
Country:	Bosnia and Herzegovina
Project Description:	Construction on a new alignment of two non-contiguous sections of Corridor VC, totalling about 12 km in aggregate, between Poprikuse-Nemila and Tarcin-Ivan in central BiH

EIA required	YES
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Project included in Carbon Footprint Exercise <sup>1</sup> :	YES
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### Environmental and Social Assessment

#### Environmental Assessment

The project concerns the construction, largely on new alignment of two sections of the Pan-European Motorway Corridor Vc linking Hungary and eastern Croatia to Bosnia and Herzegovina (BiH) and the Adriatic Sea. The following sections are to be built as a full 2x2 motorway compliant with TEM standards:

- The road section Tarcin-Ivan with a length of 6.9 km contains two long viaducts having a total length of 1,150 m and the 1,800 m long tunnel Ivan. The section Tarcin-Ivan is located in the Sarajevo canton between Mostar and Sarajevo on the Southern stretch of the corridor and sits on the watershed divide between the region of Central Bosna (River Sava - Black Sea Basin) and a valley which flows south in to the River Neretva and artificial lake Jablanicko Jezero (Adriatic Sea Basin).
- The road section Poprikuse-Nemila (5.5 km long) includes a new ca. 3.6 km long twin tube tunnel Golubinja and the construction of new motorway section of about 1.9 km length including two viaducts, three bridges over the Bosna river, an overpass over the railway line and the interchange Poprikuse including an operation and traffic control centre. The section is located in the Zenica-Doboj Canton between Zenica and Svilaj on the Northern stretch of the corridor and runs through highly mountainous terrain. This road section lies within the River Bosna Valley. The general character of the valley is steep sided wooded limestone hills, interspersed with farmland, settlements and other infrastructure.

Both sections are part of a wider program for the realization of the Corridor Vc (total length 318km) on the territory of BiH, which aims at bringing the current north-south road corridor to a higher functional level, with increased road safety and capacity.

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If the project was located in a Member State it would fall within Annex I of the EU Directive 2014/52/EU. Hence, an Environmental Impact Assessment (EIA) procedure would be required. In FBiH the project falls under the Environmental Impact Assessment (EIA) procedure as stipulated by the Law on Environmental Protection and pertaining Regulation of BiH (published in the official gazette FBiH n. 33/03 and 38/09). The procedure for EIA and environmental permitting for construction of the motorway on Corridor Vc is also regulated by the Law on Motorway on Corridor Vc. The procedures encompass in substance the principles of the relevant EU Directives, such as the EIA Directive 2014/52/EU and SEA Directive 2001/42/EC. In so far as it has been adopted and implemented, the current legal framework on environmental protection in FBiH is adequate in terms of compliance with EU rules.

The project is consistent with the FBiH Spatial Plan 2008-2028 adopted by the Parliament in 2017; this plan was also subject of an environmental assessment in line with the principles of the SEA Directive 2001/42/EC.

The potential environmental impacts of the new motorway over the full length of the Corridor Vc on the territory of Bosnia and Herzegovina have been initially assessed in four Environmental Impact Studies (EIS) related to four distinct macro-sections of the Corridor. The project sections under consideration pertain to the EIS for the Lot 2 between Doboj South and Sarajevo South (Poprikuse-Nemila section) and Lot 3 between Sarajevo South and Mostar North (Tarcin-Ivan section). The original EIS were prepared in accordance with FBiH Law on Environment n. 33/03 in July 2006 and were approved after public consultations by the Federal Ministry of Environment and Tourism on the 19/09/2007.

The Environmental Permit for the entire Lot 2 (covering the Poprikuse-Nemila road section) was first obtained in 2010 and renewed in 2014. This permit has again lapsed and the promoter will need to obtain an updated Permit. The Environmental Permit for Sarajevo South (Tarcin) - Konjic (part of Lot 3), covering road section Tarcin-Tunnel Ivan was issued in 2017 and remains valid.

The additional pending procedures for the issuance of Urban Permits, Construction Permits and Use Permits are regulated by the Law on Motorway on Corridor Vc and the Law on Physical Planning and Land Use at the Level of the BiH Federation. They will be issued by the Federal Ministry of Physical Planning.

The main environmental risks for the project identified in the EIS are related to the potential pollution of soil and water (i.e.: river Bosna), and noise generation due to tunnelling activities during the construction phase. The main negative residual impacts after completion/ during operation are linked to accidental spillages (protection of water resources) and the potential increase in air pollution and noise resulting from traffic.

In addition, impacts include community & habitat severance; visual impairment; and use of finite resources including permanent conversion of land.

Mitigating the main environmental risks, an Environmental & Social Action Plan (ESAP) has been prepared and will form part of the works specifications to be implemented by contractors. Prevention measures will be applied to avoid river contamination; the respective conditions are set out in the Water Acts issued by the Sava River Basin District Agency and Adriatic Sea River Basin District Agency that requires the Federation of BiH to apply mitigation measures to prevent any contamination to surface and ground waters. Furthermore, based on a noise mapping exercise, appropriate locations for noise barriers will be determined during the detailed design. Waste sites for excavated material will be managed by contractors in accordance with the FBiH legal requirements and the mandatory construction waste management plans.

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## Biodiversity

In compliance with the requirements of the EU Habitat (92/43/EEC) and Birds (79/409/EEC) Directive, a supplementary Biodiversity Assessment and a Biodiversity Management Plan were prepared for both road sections in 2017. In March 2019, based on the findings of the Biodiversity Assessment and EIAs, the Federal Ministry of Environment and Tourism, being the Competent Authority, issued declarations confirming that there would be no significant impact on sensitive or protected areas or species (Form A equivalent).

## **EIB Carbon Footprint Exercise**

The project is included on the following basis.

Estimated annual third party greenhouse emissions (vehicular use, from existing and generated demand) from the use of the project in a standard year of operation:

- Forecast absolute (gross) emission are 25,000 tonnes of CO<sub>2</sub> equivalent per year; and
- Forecast emissions decrease is 8,000 tonnes of CO<sub>2</sub> equivalent per year.

The project boundaries are:

- Existing network comprising: (i) 12km of M17 between Spoj Poprikuse and Nemila; and (ii) 10km of M17 between Tarcin\_sjiever and Vukovici;
- In the “with project” case, the new network comprising: (i) 5.5 km of completed motorway E73 from Poprikuse (exit from the “Zeleece” tunnel) to Poprikuse (settlement Kovanici) and (ii) 6.9 km of completed motorway E73 from Tarcin (Do locality) to the end of the new tunnel “Ivan” as well as the existing network described above.

The baseline is the forecast third party emissions, in the absence of the project, from the existing network only within the boundary defined above. The forecast for absolute emissions includes both the existing and additional network. The forecast reflect the Services’ assumptions on traffic, traffic growth, speed/flow, infrastructure capacity and fuel consumption.

For the annual accounting purposes of the EIB Carbon Footprint, the project emissions will be prorated according to the EIB lending amount signed in that year, as a proportion of project cost.

## **Social Assessment**

### Involuntary Resettlement

The project entails expropriation of private land and houses as well as involuntary resettlement. In 2017, the Promoter prepared a Land Acquisition and Resettlement Framework, specifying the principles, entitlements and implementation mechanisms consistent with national law and Bank requirements.

The main adverse social impact is related to involuntary resettlement. The project requires the acquisition of about 60 ha of land before construction. The majority of the land is either agricultural or forest land. Around 13 residential structures will need to be physically

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displaced. Approximately 253 land owners and around 712 potentially affected people (related families) might be concerned by involuntary resettlement.

Draft Resettlement Action Plans (RAPs) were prepared for both road sections (Tarcin-Ivan and Poprikuse-Nemila). For the road section Poprikuse-Nemila a final assessment of land acquisition and resettlement will be only known once the detailed design (to be prepared by the contractor under a design& build contract) is complete. The implementation of the Resettlement Plans will ensure the compliance of the project to national law and EIB standards.

#### Labour Standards

Construction works will have to be carried out in accordance with FBiH laws, including the Labour Law and Health & Safety Law, as well as the International Labour Organisations (ILO) conventions, ratified by BiH. Specific requirements in relation to labour and working conditions, including occupational health and safety, are contained within the Environmental and Social Action Plan, as well as in the works tender dossiers.

#### Occupational and Community Health and Safety

During the construction phase, the main health and safety occupational issues will include movement of vehicles and traffic management; working at heights; working in confined spaces; working with hazardous material (e.g. explosives); management of electrical hazards; prevention of unintended ground movements and collapse; and biological hazards (poisonous snakes). A Construction Site Organization Plan (CSOP) will be developed by selected contractors and implemented according to national law containing provisions for health and safety at construction site developed in the Occupational Health and Safety Management Plan (OHSMP). The construction contractor will implement the OHSMP in order to provide a safe working environment and reduce any occupational health and safety hazards. As part of the CSOP, a Fire and Explosion Management Plan, which includes a safety procedure related to unexploded ordnance, will be developed and implemented.

#### Road Safety

The Promoter will commission a Road Safety Audit with content and prepared in a manner consistent with the principles of the EU Directive on Road Infrastructure Management (2008/96/EC) and the Tunnel Safety Directive 2004/54/EC. Traffic Management Plans will be prepared by the contractors prior to construction which should consider management of traffic on the existing access roads.

### **Public Consultation and Stakeholder Engagement**

The Corridor Vc route was defined in 1981 and, after a wide public consultation process, formally approved as part of the Spatial Plan of BiH in 1982.

With the main route proposed by the Spatial Plan, the alignment options had been proposed and evaluated by the Feasibility Studies and Preliminary Designs divided into four lots along the entire corridor. The EIA documentation pertaining to each lot was made available to the public on the 27.06.2006, public consultations were held on the 26 and 31 October 2006. The material was distributed to the stakeholders and/or interested parties determined by the Federal Ministry of Environment and Tourism. Public consultations were organized in

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residential districts nearest to the location of the lots; the public was informed on the activities through the media and through the announcements on local communities' notice-boards. Participation of public brought comments and suggestions that were integrated within the Environmental Impact Study for each lot respectively and are summarized in the Public Consultation & Disclosure Plan and published on the Promoter's web site:  
<http://mkt.gov.ba/doc/default.aspx?id=1069&langTag=bs-BA>

In 2012, public consultations were further conducted in relation to the new Spatial Plan of FBiH 2008-2028 adopted by Parliament in 2017. As part of the procedure for adoption of the Spatial Plan for Area of Special Interest to FBiH – Motorway Corridor Vc, public consultations were undertaken in 2011 in all Municipalities in which the Corridor Vc is located.

In May 2017, a meeting was held in Municipality of Žepče with the aim to present the design solution of the route of the motorway on Corridor Vc, section Poprikuše-Nemila to local community representatives.

Further consultations within the future land acquisition procedures for sections Poprikuse-Nemila and Ivan-Tarcin will have to be carried out upon the finalisation of the Expropriation Studies and Resettlement Action Plans for these sections.

In July 2017, a Stakeholder Engagement Plan (SEP) was prepared for the project and is published on the promoter's website. The Bank will monitor that the SEP is updated and implemented including the envisaged 5.1 km motorway construction from Tarcin to the entrance of Tunnel Ivan. (the current SEP only refers to the 1.8 km-long Tunnel Ivan).

## **Other Environmental and Social Aspects**

In 2017, an updated Environmental and Social Action Plan (ESAP) covering the Poprikuse-Nemila road section and the Tunnel Ivan and agreed between the Promoter and co-financing partner EBRD, has been prepared and disclosed. The ESAP will have to be updated including the road subsection Tarcin to Tunnel Ivan.

## **Conclusions and Recommendations**

As the regulatory procedure and related management measures are yet to be concluded, a number of requirements are to be met prior to any disbursement of the EIB loan for the relevant sections, namely:

- the Competent Authority for the Environment has re-issued his positive decision for the Nemila-Poprikuse road section;
- an updated Environmental and Social Action Plan including the complete (6.8 km) Tarcin-Ivan road section;
- finalization of the RAP(s) for both road sections;
- implementation of the RAP(s) agreed with the Bank, in accordance with its respective schedule; and
- an updated Stakeholder Engagement Plan referring to the required public consultations related to both road sections.

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The Promoter will provide a copy of the Environmental and Social Management Plan prepared by the design and build contractor for the Poprikuse-Nemila road section when it is agreed.

Furthermore, the Promoter will be required to implement the project in accordance with an agreed Environmental and Social Management Plan, the Stakeholder Engagement Plan as well as the agreed Resettlement Action Plan(s). Given the conditions and assurances to be put in place outlined above, the project is acceptable for EIB financing in environmental and social terms.

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