

Public

Environmental and Social Data Sheet

Overview			
Project Name:	CORRIDOR VC PC	CORRIDOR VC POPRIKUSE - MEDAKOVO	
Project Number:	20190751	20190751	
Country:	Bosnia and Herzeg	Bosnia and Herzegovina	
Project Description:	Construction of 35 northern BiH.	Construction of 35 km of new motorway on Corridor Vc in northern BiH.	
EIA required:		Yes	
Project included in Carbon Footprint Exercise ¹ :		Yes	
Environmental and Social Assessment			

Environmental Assessment

The project concerns the construction, on new alignment, of about 35 km of the Pan-European Motorway Corridor Vc linking Hungary and eastern Croatia to Bosnia and Herzegovina (BiH) and the Adriatic Sea. The project comprises two sections.

- The construction of about 21.7 km of 2x2 motorway between Medakovo (just to south of proposed junction) and the proposed junction at Ozimica, including: the 2.2 km long tunnel Crni Vrh; 7 long bridges with total length about 2.8 km; service station area, Galovac; interchange at Ozimice; retaining walls with an approximate aggregate length of 1,500 m; river training works; and noise reduction barriers. The route follows the Usora River course southward, and passes near the settlements of Čifluk, Medakovo, Tugovići, Ripna, Jablanica and Kardaglija. South of the settlement of Kardaglije, the route passes over the Glava River and continues to the Crni Vrh tunnel. The route then follows the Strupinska Rijeka course as open alignment, passing near the settlements of Novi Šeher, Grabovica and Ljubatovići up to the Ozimica interchange.
- The construction of about 12.8 km of a 2x2 motorway between Ozimica and Poprikuse 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. After the Ozimica interchange, the route continues to the southwest with several bridges and tunnels, passing near the Tatarbudžak settlement and bypassing Žepče. After the Varošište settlement, the route broadly follows the Bosna River valley, passing through various tunnels and structures up to just before the proposed Poprikuse junction.

¹ Only projects that meet the scope of the Carbon Footprint Exercise, as defined in the EIB Carbon Footprint Methodologies, are included, provided estimated emissions exceed the methodology thresholds: 20,000 tonnes CO2e/year absolute (gross) or 20,000 tonnes CO2e/year relative (net) – both increases and savings.



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, compliant with TEM standards, offering increased capacity and road safety.

If the project was located in a Member State it would fall within Annex I of the EU Directive 2014/52/EU, amending 2011/92/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 related 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. Insofar 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 included within the Spatial Plan for Motorway Corridor Vc adopted by the FBiH Parliament in 2017. This plan included an Environmental Assessment that is consistent with the principles of the SEA Directive 2001/42/EC. Inter alia, this prescribes the corridor of the motorway within an alignment 1,000 metres wide in rural areas and 250 metres wide in urban areas.

The potential environmental impacts of the new motorway over the full length of the Corridor Vc on the territory of Bosnia and Herzegovina were 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. The original EIS was prepared in accordance with then prevailing FBiH Iaw in July 2006 and was approved by the Federal Ministry of Environment and Tourism in September 2007.

The Environmental Permit (EP) for the entire Lot 2 was subsequently issued in 2010. The validity of the EP was renewed for a first time in 2014 without material change to the assessment or conditions. With the statutory five year validity of the 2014 EP again coming to an end, a new assessment and EIS was prepared in 2019. This EIS took into account the preliminary design prepared in 2014, which, inter alia, partly modified the alignment that had been determined in 2007, as well as updating and expanding a number of points including the baseline and on waste management and biodiversity. In September 2019, on the basis of this EIS, a new EP was issued.

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, waste 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, other important residual impacts include community & habitat severance, visual impairment and use of finite resources including permanent conversion of land.

To mitigate the main environmental risks, an Environmental & Social Management Plan (ESMP) will been prepared by consultants commissioned to develop the detailed design and



will subsequently form an integral part of the works specifications to be implemented by contractors. The ESMP will be agreed with the Bank.

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. Contractors will have to prepare waste management plans as part of their Construction Site Organization Plan (CSOP) which will be required to promote the circular economy and reduce waste. Any surplus excavation material not suitable for construction or in excess of needs will be disposed of in accordance with the FBiH legal requirements and the mandatory construction waste management plans. The project is not expected to impact sensitive cultural heritage sites. The Promoter has hired the Institute for the Protection of Monuments to conduct preventive archaeological research. The works contractors will prepare and implement an archaeological sites study and related management plans as part of the CSOP.

The project faces some risk from climate change, including from increased variability of precipitation. The firm preparing the detailed design is required to consult with the relevant water management agencies to ensure the project accommodates contemporary requirements.

Biodiversity

In compliance with the requirements of the EU Habitat (92/43/EEC) and Birds (79/409/EEC) Directive, an initial Biodiversity Assessment has been prepared in 2019. The project does not cross or pass close to any protected area. Nevertheless, the project crosses natural habitats which contain important flora and fauna. The Promoter shall commission a qualified third party to prepare a Biodiversity Management Plan (BMP), the conclusions of which, inter alia, shall be included in the works tender dossiers prior to tendering.

In June 2020, the Promoter received an opinion of the Competent Authority for Nature Protection, the Federal Ministry of Environment and Tourism, that the project is not expected to impact significantly 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 50,000 tonnes of CO2 equivalent per year; and
- Forecast emissions decrease is 5,000 tonnes of CO2 equivalent per year.

The project boundaries are:

- Existing network comprising 54 km of M17 and other regional roads between Karuse and Poprikuse;
- In the "with project" case, the new network comprising: (i) 35 km of completed motorway E73 from Medakovo to Poprikuse (settlement Kovanici) as well as, (ii) 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 main adverse social impact is related to involuntary resettlement. The project entails expropriation of private land as well as involuntary resettlement. In 2017, the Promoter prepared a Land Acquisition and Resettlement Framework (RPF), specifying the principles, entitlements and implementation mechanisms consistent with national law and EBRD requirements. EBRD requirements on involuntary resettlement are aligned with EIB and therefore the RPF was considered consistent with EIB standards.

The project requires the acquisition of about 175 ha, which will be permanently converted into road way or associated right of way. The majority of the land is either agricultural or forest land. On the first six kilometre stretch from Medakovo towards Poprikuse, there are 35 residential structures which will need to be physically displaced and about 180 land owners might be affected. The total number of affected land owners and households will be determined during further preparation. It remains to be determined whether vulnerable groups may be impacted.

Two or three Resettlement Action Plans (RAPs) will be prepared by the Promoter, and agreed with the Bank, once the detailed design is complete, expected in Q1 2021, thereby allowing a precise assessment of the quantum of land acquisition and resettlement. The RAP is expected to be developed in consultation with all project-affected persons, to ensure acceptance of the proposed mitigation measures and facilitate the involuntary resettlement process. The subsequent implementation of the Resettlement Plans in a timely manner 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 Management Plan to be included in the works contract conditions.

Occupational and Community Health and Safety

During the construction phase, the main health and safety occupational is sues 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 (CV19 or other pandemics, poisonous snakes). A Construction Site Organization Plan (CSOP) will be developed by the selected contractors and implemented according to national law containing provisions for health and safety at construction, compiled 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. Contractors are required to be certified to OHSAS 18001.

Road Safety

Prior to tendering the works, 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. The recommendations of the audit will be included into the final designs. Traffic Management Plans will be prepared by the contractors prior to construction which, inter alia, should consider management of traffic on the existing access roads

Public Consultation and Stakeholder Engagement

The route has a long planning history starting in 1980 when the construction and modernization of the corridor Bosanski Samac – Doboj – Zenica – Sarajevo – Konjic - Mostar - Opuzen was identified. After a public consultation process this was formally approved as part of the Spatial Plan of BiH for the period from 1981 to 2000. At the third Pan-European conference held in Helsinki in 1997, the number of European corridors was increased to ten and changes were made. One of these changes was the introduction of Corridor Vc (Budapest - Osijek - Sarajevo - Ploče) in the basic European transport network.

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 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

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.

At the time of the renewal of the EP in September 2019, the updated EIS was not subject to disclosure and public consultation as it was not required by law. The promoter has subsequently disclosed the relevant documentation on its website² - <u>http://www.jpautoceste.ba/en/home/</u> - and will prepare and distribute a Non-Technical Summary, in local language and English, both on its website and in hard copy at suitable local public places. During the detailed design, the promoter will also undertake further consultations with local communities on mitigants, for example in relation to the specific location of noise barriers, construction traffic management and addressing community access

² <u>http://www.jpautoceste.ba/en/documentation-regarding-the-requirements-of-european-investment-bank-eib/</u>



needs. The promoter confirmed during appraisal that there was no outstanding concerns raised by an affected or interested party as to the substance of the project.

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

The Promoter is gaining experience in stakeholder engagement and has prepared and implemented Stakeholder Engagement Plans (SEP) for several IFI financed projects. The Promoter will prepare, publish and implement a specific SEP for this project.

Other Environmental and Social Aspects

The Promoter will prepare, disclose and keep up to date an Environmental and Social Action Plan (ESAP) for this project which explains the compliance of the project with applicable laws and EIB standards.

The Promoter will engage a suitably qualified third party to monitor and report periodically on compliance of the project to the ESMP, BMP and RAP. Such third party review shall also assess the extent to which the livelihoods of PAPs have been restored or improved in line with expectations.

Conclusions and Recommendations

The project will have positive impacts for communities living adjacent to the existing high way as well as contributing to the reduction of local and global emissions due to reduced journey lengths and congestion. Road safety will also be significantly improved. However, as with any new motorway construction, there will be some residual negative impacts, for example in terms of land take, involuntary resettlement, use of scarce resources and visual change to landscape.

As the regulatory procedure and related management plans 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:

- an updated Environmental and Social Action Plan for the project;
- finalization of the RAP(s) and BMP for both road sections;
- implementation of the RAP(s) agreed with the Bank, in accordance with its respective schedule; and
- a Stakeholder Engagement Plan, including measures to be taken during detailed design to allow views of affected parties to be solicited.

Furthermore, the Promoter will be required to implement the project in accordance with the agreed Environmental and Social Management Plans, Biodiversity Management Plans, the Stakeholder Engagement Plan as well as the Resettlement Action Plan(s). The successful implementation of these plans will be subject to periodic third party monitoring.

Given the conditions and assurances to be put in place as outlined above, the project is acceptable for EIB financing in environmental and social terms.