

Luxembourg, 19 October 2023

## Environmental and Social Data Sheet

### Overview

Project Name:	CORRIDOR VIII RAIL - EASTERN SECTION
Project Number:	2023-0032
Country:	Republic of North Macedonia
Project Description:	Construction of the Eastern Section (Phase III) of Corridor VIII railway, linking the city of Kriva Palanka to the Bulgarian border.
EIA required:	Yes
Project included in Carbon Footprint Exercise <sup>1</sup> :	No

### Environmental and Social Assessment

#### Environmental Assessment

The Project concerns the greenfield construction of about 24 km of single-track railway line between Kriva Palanka and Deve Bair, on the Bulgarian border, in the North-East of the Republic of North Macedonia. The Project is the third and final phase of a programme aimed at completing the 88km long rail connection between Kumanovo and the border on the Pan-European Corridor VIII. The civil works for phases 1 and 2 are under construction. The now proposed EIB operation concerns the civil works and signalling and telecommunication for phase 3, plus the electrification for all 3 phases. The works are expected to begin in 2024 and to be completed by 2029. The Promoter is the Public Enterprise for Railway Infrastructure of the Republic of North Macedonia - Skopje (ZRSMI).

The Project is in line with the National Transport Strategy 2018-2030, which was subject to SEA. The National Transport Strategy 2018-2030 and the SEA Report have been published on Ministry of Transport and Communications website and were adopted in December 2018.

If situated inside the EU, the Project would fall under Annex I of the Environmental Impact Assessment (EIA) Directive (2011/92/EU as amended by 2014/52/EU), therefore requiring a regulatory EIA procedure. The EIA procedure was undertaken in line with the national Law on Environment ("Official Gazette of the Republic of Macedonia" no. 53/05 as amended) and the appropriate bylaws, which are designed to align with the requirements of the EU Directive in terms of EIA procedures.

During 2011-2012, an Environmental and Social Impact Assessment (ESIA) study was prepared for all 3 phases stretching from Kumanovo to the border, including analysis of options, on the basis of which the Competent Authority, the Ministry of Environment and Physical Planning, issued a positive Environmental Consent in November 2012. Following the expiration of the 2012 Consent and material changes to the design of various elements of phase 3, a new ESIA study was performed for phase 3 only in 2017. In June 2018, the Competent Authority issued a new Environmental Consent for phase 3, for which the validity was prolonged in 2021 and then once again extended until 2025. Although the electrification works were covered by

<sup>1</sup> 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 CO<sub>2</sub>e/year absolute (gross) or 20,000 tonnes CO<sub>2</sub>e/year relative (net) – both increases and savings.



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the 2012 Environmental Consent, this Consent has expired and a new EIA procedure will need to be performed during the design phase of the electrification but prior to the commencement of those works. The disbursement of EIB funds for the electrification works will be subject to completion of these permitting procedures.

Due to the further passage of time since the 2017 EIA procedure, a reassessment of the available studies was performed during 2022 and 2023 resulting in further primary data collection, analysis and preparation of new safeguard instruments, in particular in relation to biodiversity and social matters. In June 2023, a Supplementary E&S Package was disclosed comprising various safeguard instruments/plans as described further below.

The Project results in the following residual negative environmental impacts:

- i. permanent conversion of about 65 ha of land (mostly forest, but also arable land, meadows, orchard and some built up area);
- ii. resettlement of households (physical displacement) and loss of businesses or other income-generating activities as a result involuntary resettlement (economic displacement);
- iii. use of scarce resources, such as cement and steel, noting that a large part of excavated material for tunnels/cuts can be reused as fill for sections in embankment;
- iv. landscape fragmentation;
- v. negative visual impact for some receptors; and
- vi. increased noise and vibration for some receptors situated close to the line.

The Project includes the following measures to avoid, reduce and mitigate negative residual impacts:

- i. design changes to reduce involuntary resettlement, in particular in relation to the access roads for station/worksites inside Kriva Palanka;
- ii. implementation of compensation and livelihood support measures for Project Affected Persons in line with the provisions of a Resettlement Action Plan;
- iii. proper design of the drainage system to ensure that natural flows are not disrupted or contaminated;
- iv. installation of noise barriers, and noise insulation on adjacent buildings plus vibration dampening measures where necessary; and
- v. biodiversity measures as described further below.

As with any major infrastructure project, during construction the Project will entail some localised and temporary negative environmental impacts such as noise, dust, disruption and generation of waste, community severance, as well as risk to the supply and quality of surface and groundwater. These impacts are to be avoided or minimised through standard good construction practices, inter alia, as prescribed in the Environmental and Social Management Plan to be included in the works contract conditions.

Due to the expected modal shift of passenger and freight traffic demand from road to rail, the Project achieves the following environmental benefits: (i) GHG emissions reduction; (ii) reduction of local emissions, dust, noise and vibration for communities living adjacent to the main roads running in the same corridor to the railway; (iii) reduction of road accidents (noting that all rail/road crossings are graded separated); (iv) resilience of core infrastructure to seismic and climate change risk; and (v) construction of stations to provide for access for people with reduced mobility.

### **Biodiversity**

The project area supports a number of habitat types that are listed under Annex I of the Habitat Directive, including those marked as “priority habitat type”. However, most were assessed as not representative and a large portion of the habitats was found to be degraded. None of the habitats were determined to be of high priority for conservation. All species encountered in the project area are considered to be relatively widespread and common in the region.

This phase of the railway alignment passes through 2 proposed Emerald sites:



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- Emerald site Pchinja-German – MK0000029<sup>2</sup> (for 1,800 metres of which 1,400 metres in tunnel or viaduct)
- Emerald site Osogovo Mountains – MK0000026<sup>3</sup> (for 500 metres, all in tunnel)

The ESIA studies performed in 2011-12 and 2017-18 took into account the potential effects of the project on biodiversity. In March 2020, the outputs of those studies led to the Competent Authority to issue a declaration that the project is not likely to have any adverse effect on sites of nature conservation importance (Form A equivalent).

Nevertheless, following a review of the earlier studies in 2022, a number of gaps were identified and a Supplementary Biodiversity Assessment (SBA) was conducted, including collection of additional primary surveys, to cover data gaps in line with the latest national requirements as well as those of the financiers.

To avoid and minimise any potential negative impacts on biodiversity, mitigation measures and management actions will apply to all species that are important for conservation. A Biodiversity Management Plan (BMP) has been prepared that prescribes these measures which include:

- continuous monitoring by an independent expert during construction;
- proper routing of access roads and location of borrow pits and disposal areas;
- clear marking of areas for vegetation clearance and worksite boundaries;
- scheduling of works to the least disruptive period across the seasons;
- translocation of flora where necessary;
- habitat reinstatement and long-term maintenance of restoration areas to ensure no net loss;
- removal of invasive species wherever present; and
- other more specific measures for certain sensitive habitats or species.

According to the Appropriate Assessment, provided as Appendix in the Supplementary Biodiversity Assessment, the project will not have an adverse effect on the Emerald sites and, with appropriate mitigation measures and management actions, any likely impacts will not have a significant effect on the population of species and habitats in the Project area. This technical opinion is to be reconfirmed by the Competent Authority for Nature Conservation prior to the disbursement of any EIB funds for the permanent infrastructure works (Form A/B equivalent).

### **Vulnerability to climate change**

Although the Republic of North Macedonia does face climate change risk, the Project's residual climate change sensitivity is deemed low. The possible impacts from climate change include: (i) slope stability from flooding and erosion, due to more extreme precipitation events; (ii) damage to superstructure due to an increase in the temperature range (especially extreme heat in summer); and (iii) increased risk of wildfires. The designs for bridge sub-structure and tunnel works take into account slope stability and hydraulic risks, and the trackworks will accommodate wider temperature ranges.

### **Paris Alignment**

The Project has been assessed by the Bank's services for Paris alignment in accordance with the policy set out in the Climate Bank Roadmap 2020. The Project consists of construction of infrastructure for zero direct emission transport; therefore, it is considered to be aligned with the low carbon goal. The climate risk of the Project is assessed as low and, therefore, it is considered to be aligned with the resilience goal.

### **Social Assessment**

The Project concerns the construction of a new railway line and therefore requires the acquisition of land. The Project also entails some physical displacement of households and businesses.

<sup>2</sup> [Emerald MK0000029 dataforms \(europa.eu\)](https://europa.eu)

<sup>3</sup> [Emerald MK0000026 dataforms \(europa.eu\)](https://europa.eu)



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The total number of the project affected land plots for expropriation for the construction of the permanent way and access roads is 514, with total area of 64.6 ha, of which about 6% will be fully acquired, while 94% will be partially acquired. 293 parcels are privately owned while 217 are state owned, 2 are co-owned by the State/private and the remaining 2 are owned by the Macedonian Orthodox Church and by a Company.

A Resettlement Action Plan (RAP) has been prepared in line with national law and IFI standards, with measures to compensate Project Affected People, including those without formal rights or owners of any illegally constructed structures as well as special measures for vulnerable groups. The RAP includes a vulnerability analysis as part of the social baseline studies. Vulnerable households are identified considering a multi-criteria assessment based on economic, social and health-related indicators.

Despite further redesign measures that were taken in 2022-2023 to reduce the need for physical displacement, there remains up to 16 private properties where the households will have to relocate. The RAP includes appropriate measures to assist and compensate those households. The RAP also identifies 4 businesses whose plots will be partly/fully acquired and who will be assisted and compensated.

The RAP will have to be implemented by the relevant authorities prior to commencement of the permanent works.

There may be small temporary disturbances and nuisances to local inhabitants adjacent to the works; for example related to dust/noise emissions and construction traffic. The usual mitigation measures during the construction phase, such as the appropriate timing of works, waste collection/disposal and avoiding the use of heavy machinery during certain times, are designed to minimise impacts on local communities, mainly located in Kriva Palanka, Zidilovo and Uzem.

Construction works will have to be carried out in accordance with national laws, including the Labour Law and Health & Safety Law, as well as the International Labour Organisations (ILO) conventions, ratified by the Republic of North Macedonia. Specific requirements in relation to labour and working conditions, including occupational health and safety, are contained within the Environmental and Social Management Plan (ESMP) to be included in the works contract conditions.

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; management of electrical hazards; prevention of unintended ground movements and collapse; and biological hazards (CV19 or other pandemic). A Construction Site Organization Plan will be developed by selected contractors, and implemented according to national law containing provisions for health and safety during construction.

The social baseline studies of the Project incorporate gender analysis and report disaggregated data as relevant. Contractors will be required to develop and implement Gender Based Violence and Harassment Action Plan, including a grievance redress mechanism for workers, to define specific mitigation measures for GBVH risks.

The social negative impacts of the Project during the construction and operation phase are considered to be fully offset by the creation of a new reliable, efficient and safe railway service as well as an improved accessibility of regions connecting with the line with the capitals Skopje and Sofia. Furthermore, the Project is expected to contribute to the balancing or preventing of modal shift towards road, thereby reducing environmental externalities as well as road accidents.

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

The Promoter has prepared and published a Stakeholder Engagement Plan (SEP) describing how it and its contractors are to communicate with people who may be affected by or interested in the Project, as well as to describe the grievance mechanism for people to raise any concerns about the Project. The SEP seeks to implement the relevant national, EU and financiers' standards as well refers to the Espoo Convention, which in this case also applies as a major Project that may have an adverse environmental impact across boundaries.



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Gender aspects are considered and incorporated into the SEP. Different engagement activities – e.g. workshops and focus groups – have been designed to allow for meaningful participation of all concerned local inhabitants, including women, in public consultations throughout the project cycle.

The SEP records all the consultations already performed during Project preparation. In 2017, a first version of the ESIA was published and public consultation was conducted in 2017/2018 in accordance with the national environmental legislation, and one public hearing was held in Kriva Palanka. Additional public consultations were conducted in 2022 and 2023 for project information and resettlement purposes, having in total 15 meetings with different stakeholders and relevant institutions.

All the principal environmental and social documentation has been published on the Promoter's and EIB websites.

As the Project includes a cross-border tunnel with Bulgaria, the Project is subject to the Espoo Convention on EIA in a Transboundary Context. The 2017 ESIA procedure included consultation with the environmental authorities in Bulgaria, who provided their requirements for the ESIA, and particularly asked for consideration of potential effects of the construction of the cross-border tunnel on groundwater. In the ESIA, a low sensitivity of groundwater to the Project was determined. Upon the consideration of the ESIA and associated design documents, in April 2018 the Bulgarian authorities informed the Macedonian authorities that the assessed effects of the cross-border tunnel were found to be acceptable. The Bulgarian authorities further determined that no public consultation for the Project was necessary inside Bulgaria. Nevertheless, the relevant updated safeguard instruments prepared in 2023 have been translated into the Bulgarian language, disclosed and shared with the Bulgarian authorities for their information only.

### **Other Environmental and Social Aspects**

The works will be implemented through one or more internationally selected contractors who will be required to perform the works in line with an Environmental and Social Management Plan (ESMP) consistent with domestic law and EBRD and EIB standards. The overall ESMP is published, whilst contract specific ESMP's will be developed for the works contracts (one for civil works and one for electrification are currently planned). The contractors will be subject to third party supervision by internationally selected consultants, acting as Engineer, who will enforce the proper implementation of the ESMP. The delivery of the ESMP will be further monitored by the Promoter's own staff, and technical assistance consultant working for the Promoter.

While no particular risks to cultural heritage have been identified, the works contracts will include a chance finds procedure to deal with possible buried relics or structures of cultural value.

### **Conclusions and Recommendations**

Overall, the Project will result in environmental benefits, including a reduction in GHG emissions, with negative impacts being largely temporary and localised. Negative social impacts have been duly mitigated and are acceptable, notably when compared to the social benefits of the Project.

Prior to the disbursement of EIB funds for the tranches related to the whole or part of the permanent works, the Promoter shall provide evidence that:

- the Competent Authority for Nature Conservation has issued its opinion on the impact of the Project on protected areas and species (Form A/B equivalent);
- there is a valid Environmental Consent issued by the Competent Authority for each Project sub-component; and
- the Safeguard Documents - Biodiversity Action Plan, Resettlement Action Plan, Environmental and Social Management Plan, Environmental and Social Action Plan, Stakeholder Engagement Plan - are being properly implemented.



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The Promoter will undertake a third party evaluation of the implementation of the RAP within six months of the RAP's completion.

Under these conditions, the Project is acceptable for EIB financing in both environmental and social terms.