

# **Environmental and Social Data Sheet**

**Overview** 

Project Name: CARANSEBES-ARAD RAILWAY - RRF CO-FINANCING

Project Number: 2022-0881
Country: Romania

Project Description: The project consists of upgrading of 155 km of existing single-

track electrified railway line, including doubling of the whole length between Arad and Caransebes. The railway line is part of both the Rhine-Danube and the Orient/East-Med Core TEN-

T Corridors.

The upgrading of the mixed traffic (passenger and freight) railway line includes an increase of maximum design speed (160 km/h for passenger trains and 120 km/h for freight trains), axle load and maximum permissible train length, as well as installation of European Railway Traffic Management System (ERTMS) level 2 in order to bring the project in compliance with the relevant Technical Specifications for Interoperability

(TSIs).

EIA required: yes

Project included in Carbon Footprint Exercise<sup>1</sup>: yes

(details for projects included are provided in section: "EIB Carbon Footprint Exercise")

#### **Environmental and Social Assessment**

# Strategic Environmental Assessment (SEA)

The Project is part of The Romanian General Transport Master Plan (GTMP), which was subject to a SEA procedure in 2014-2015. The SEA Decision was issued by the Ministry of Environment (MoE) in December 2015.

### **Environmental Impact Assessment (EIA)**

The project consists of the upgrading of existing 155 km of railway line which is currently single track, excluding a section of 8 km north of Caransebes which is double track. The upgrading will deliver 162 km of double track line, which includes alignment corrections at five locations to increase the design speed to 160 km/h. The project also includes measures to improve safety of operations such as the elimination of some level crossings along the line.

The project falls within the scope of Annex I of the Environmental Impact Assessment (EIA) Directive (2011/92/EU as amended by 2014/52/EU). The EIA procedure started in December 2016 and the EIA report was submitted to the competent authority in March 2019.

<sup>&</sup>lt;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 CO2e/year absolute (gross) or 20,000 tonnes CO2e/year relative (net) – both increases and savings.



The EIA analysed the main impacts connected to the project implementation as well as to railway operations, including impacts on water, air, noise, vibrations, soil, subsoil, flora, fauna, landscape, cultural heritage as well as on communities.

Construction activities cause some disruptions that are monitored and, in any case, limited in time. Impacts during the construction period are likely to occur on air (emissions of pollutants and dust in the building sites area due to construction activities, which also generate road traffic increase), water (spill over of polluting substances in the building sites) and soil (accidental spreading of pollutants). Mitigation measures for impacts during construction include traffic management plans, water spraying of roads to prevent high dust emissions, installation of panels in sites with large dust generating activities, reuse of materials from the existing infrastructure, appropriate disposal of waste, oils and other polluting materials, protection of soil and water bodies/streams, replantation of areas used for borrow pits and restoration of vegetation in areas affected by construction activities.

During project operations, mitigation measures include protection of soil and waters through appropriate systems of collection, storage and management of wastewater and other waste materials. The use of elastic fastening and continuous welded rails and installation of noise barriers will reduce noise and vibrations in residential areas. Moreover, maintenance works will be planned in compliance with rules which consider the protection of environment.

The competent authority issued an environmental decision on 19 November 2019. The conclusions are that, with the implementation of mitigation measures and monitoring requirements, the project is not expected to have a significant impact on the environment.

The environmental decision considered other projects which are under implementation in the area of the EIB financed project. The cumulative effect of these projects will only lead to an intensification of road traffic in the project area during the construction phase. The competent authority states in the environmental decision that the cumulative environmental impact of these projects is limited in time and, in any case, not significant.

Overall, the project will contribute to journey time savings, railway capacity increase and improvement of quality and reliability of railway services for both passengers and freight. This project will generate some modal shift from road to rail with reduction of congestion on the road network as well as reduction of car accidents and emissions of pollutants and CO<sub>2</sub>. The "with project Scenario" will bring an overall improvement to the environment if compared with the "without project scenario".

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

The public was regularly informed about the EIA for this project through community forums as well as publications in national newspapers, competent authority's websites and premises of local councils. The EIA report was made available to the public and the public consultation was carried out as required by the national legislation and the EIA Directive. No comments were received from the public.

#### Natura 2000 sites

The project was subject to Appropriate Assessment (AA) according to the EU Habitats Directive. Impacts were assessed for five Natura 2000 sites, i.e. ROSCI 0277 Becicherecu Mic, ROSCI 0402 Valea din Sanandrei, ROSCI 0109 Lunca Timisului, which are crossed by the project as well as ROSPA 0047 Hunedoara Timisana and ROSCI 0385 Raul Timis intre Rusca si Prisaca which are in the vicinity of the project, respectively 20m and 450m away from the project.

The environmental decision issued by the competent authority states that, with the implementation of the designed solutions and the proposed mitigation measures, the project will not generate significant impacts on Natura 2000 sites at any stage, including construction, operation and decommissioning of the project.



## Paris alignment

The project has been assessed by the Bank's services for Paris alignment in accordance with the policies set out in the Climate Bank Roadmap. The project consists of upgrading of infrastructure for zero direct emission transport, therefore, it is considered to be aligned with the low carbon goal. The climate residual risk of the project, with the correct implementation of planned mitigation measures and designed features to make the infrastructure more resilient to climate change, is assessed as low and, therefore, it is in line with the resilience goal.

#### **Climate Assessment**

A Climate Risk and Vulnerability Assessment (CRVA) was carried out for the project in the context of the EIA. Vulnerability assessment was carried out for the current (2020s) and future (2050s) scenarios. The results show medium vulnerability to average annual temperatures, average annual precipitations, storms, average wind speed and changes of maximum wind speed as well as high vulnerabilities to extreme temperatures, extreme precipitations and floods. The project includes adaptation measures which can address these vulnerabilities.

Moreover, the project is expected to mitigate impacts on climate change by generating some modal shift from road to rail with the consequent reduction in GHG emissions.

# **EIB Carbon Footprint Exercise**

Based on Promoter's forecast of passenger and freight volumes, the Bank's services estimated that the project will produce about 8 ktonnes CO<sub>2e</sub>/year. Project emissions savings are estimated to be about 22 ktonnes CO<sub>2e</sub>/year. The estimated values refer to an average year of the 43-year appraisal period.

The absolute emissions (project scenario) calculation assumes the effects generated by the project on the transport network. The baseline (without project scenario) considers emissions from existing rail and the road network of both passenger and freight traffic. Relative emissions (absolute emissions minus baseline emissions) are calculated considering modal shift from the road network to the upgraded railway and the overall savings at network level.

The calculation of emissions may be different from the Promoter's estimate because of different assumptions and boundaries. 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**

### Land acquisition and resettlement

The implementation of the project includes the acquisition of 376 hectares of land and demolition of 23 buildings. The procedures for land acquisition, resettlement and compensation of people and businesses are well advanced and are carried out in compliance with the national legislation.

# Transport safety

The installation of ERTMS will result in improvement of safety of the railway network. Moreover, the construction of grade-separated level crossings will result in improvement of safety of both railway and road transport. The project is also expected to result in modal shift from road to rail and therefore to an improvement of the safety of the transport system in general.

#### Accessibility

The project will improve the accessibility of railway transport for passengers. Passenger buildings and platforms at stations and stops as well as the underpasses will be renovated in accordance with the current EU requirements for accessibility for persons with reduced mobility and persons with disabilities.



### **Conclusions and Recommendations**

The project is part of an infrastructure programme, which was subject to SEA. The project was subject to an EIA procedure, including public consultation and an Appropriate Assessment of the potential impacts on Natura 2000 sites was carried out. At the end of the EIA procedure, the competent authority issued an environmental decision for the project.

The environmental decision identifies appropriate mitigation measures for environmental impacts during construction and operations and the competent authority stated that the project does not have significant impacts on any Natura 2000 sites if mitigation measures are implemented. Moreover, the cumulative impact of this project and other projects under implementation in the area is not significant.

The residual negative impacts of the project during construction and operations, considering the planned mitigation measures, are acceptable. The impacts during the operation phase are partly offset by the expected modal shift facilitated by the investment.

The Promoter undertakes to provide the development consents (building permits according to Romanian legislation) for all construction lots as soon as they become available.

Under the circumstances indicated above, the project is acceptable for EIB financing from an environmental and social perspective.