

Luxembourg, 15 November 2016

Environmental and Social Data Sheet

Overview Project Name: UKRAINE RAILWAY MODERNISATION **Project Number:** 20120197 Country: UKRAINE Project Description: The Project consists of the phased construction of the electrification of the railway line between Dolynska -Mykolaiv and Mykolaiv - Kolosivka sections over a total length of approximately 253 km. EIA required: no, screened-out Project included in Carbon Footprint Exercise¹: ves

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

Environmental and Social Assessment

Environmental Assessment

The project concerns the electrification, along with the modernization of signalling and telecommunication system in stations and on open lines, of the Dolinska – Mykolaiv (Phase 1) and Mykolaiv - Kolosivka (Phase 2) railway line. The implementation of the project will be undertaken in two phases. The detailed design for Phase 1 is completed, but for Phase 2 is still on-going.

If situated in the EU, the project would fall under Annex II of EIA Directive 2011/92/EU and therefore be subject to screening. The project was screened by the Competent Authority (according to the Ukrainian regulation SCS A.2.2-1-2003 at that time) in compliance with its local category 'B', broadly following the principles of the EIA Directive 2011/92/EU. From the regulatory perspective, the EIA process for the project was completed in 2009 when it was screened-out by the State Expertise Ukrderzhbudekspertyza based on the Ministry of Environmental Protection of Ukraine's consent on 28 October 2009 (No. 01-04/6867-05).

The environmental assessment for phase 1 has been updated in 2016 and is under final approval by the State Expertise. For Phase 2 and for the High Voltage line connection the finalisation of the design is still on-going. The State Expertise consent reports will be obtained by the Bank prior to financing those components.

The environmental impacts of the project were assessed using the Environmental Impact Assessment Review Checklist provided by European Commission in the "Guidance on EIA -EIS Review". The EIA studies are deemed to have correctly assessed potential environmental impacts associated with the construction and operation of the electrified railway lines. The project has either no effect beyond acceptable boundaries or effective mitigation measures have been included in designs and specifications.

¹ Only projects that meet the scope of the Pilot Exercise, as defined in the EIB draft Carbon Footprint Methodologies, are included, provided estimated emissions exceed the methodology thresholds: above 100,000 tons CO2e/year absolute (gross) or 20,000 tons CO2e/year relative (net) – both increases and savings.



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Based on the information provided in the EIA study, the project is not likely to have a significant impact on .any protected area or on biodiversity in general.

An Environmental and Social Action Plan (ESAP) has been prepared for the project. The aim of this ESAP is to define the implementation program of mitigation measures and actions associated with the potential environmental and social impacts, both adverse and beneficial, of the project.

Improvements to rail infrastructure will allow for operation of trains by electricity as opposed to diesel and will make rail comparatively more attractive than without the project both to existing and potential passenger and freight customers.

By reinforcing and rehabilitating railway and power supply networks, the project will increase the resilience of infrastructure to climate change events. By improving the quality and availability of the railway transport network, the project will support reducing the use of automobile transport and thus support in the long-term reducing GHG emissions.

EIB Carbon Footprint Exercise

The project is included on the following basis:

Estimated annual third party greenhouse gas emissions from the use of the project in an average year of operation over a 25 year assessment period:

- Forecast absolute (gross) third party emissions are 205,000 tonnes of CO2 equivalent of which about 90% is related to freight traffic; and
- Forecast emissions savings are 45,000 tonnes of CO2 equivalent.

The project assessment boundaries are:

- In the absolute case, the existing section of railway line between Dolynska Mykolaiv and Kolosivka, totalling 253 km.
- In the baseline case, both (i) of railway line between Dolynska Mykolaiv and Kolosivka, (ii) the parallel railway route between between Znamenka and Odessa and (iii) parallel road links.

The forecasts in the baseline and absolute cases are based on Services' project specific assumptions about the workload of rail services (freight and passenger trains only) and fuel efficiency of electric and diesel train operations. In the baseline case, current diesel train services are included, as well as some of the electric train services on the parallel route that are expected to be transferred to the project after electrification. In addition, a portion of emissions from private cars and trucks is included using project specific emission factors, equivalent to those passenger or freight trips expected to shift from road to rail in the "with project" case. In the absolute case, only the electric powered train services on the project are included.

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

Potential negative social impacts of the project are not significant and no involuntary resettlement is expected.

In connection with the High Voltage line connection component, which is also financed from the Bank's loan, some land acquisition is needed, but the detailed design process is still on-



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going; therefore, the Land Acquisition Action Plan was not available at the time of appraisal. Hence, the Promoter will be required to develop such a plan to the satisfaction of the Bank and implement the project in accordance with this plan.

Public Consultation and Stakeholder Engagement

The population of Kirovohrad, Mykolaiv and Kherson regions were informed about environmental effects of the construction and the future operation of the railway line by feature of announcement in the media and with public hearings during the EIA screening process in 2009.

Nevertheless, before the start of the implementation of the project, a further round of publication will be carried out. The aim of this exercise is to ensure openness and transparency of activities, the involvement of the relevant public and other stakeholders in the early stages of the project implementation and to improve the quality and legitimacy of the public authorities` decisions taking into account the views of all interested groups.

Conclusions and Recommendations

If situated in the EU, the project would fall under Annex II of EIA Directive 2011/92/EU and therefore be subject to screening. The EIA procedure is completed and screened-out with only modest residual impacts on the environment and no involuntary resettlement required. The project will be carried out within existing rights of way or on new alignment of twin track over short sections.

The project is expected to contribute to climate change mitigation through reduction in aggregate greenhouse gas emissions due to more efficient operation within the rail mode as well as some modal shift from road to rail.

Various further conditions will need to be met by the Promoter as described above prior to EIB finance being disbursed.

The project is acceptable for EIB financing in E&S terms.