Luxembourg, 4 June 2014

Environmental and Social Data Sheet

Overview

Project Name:	RHEIN-RUHR-EXPRESS
Project Number:	2013-0367
Country:	Germany
Project Description:	Financing of new rolling stock for a high density schedule and fast regional rail system in the densely populated Rhein-Ruhr region.
EIA required:	No

Project included in Carbon Footprint Exercise[1]: YES

Summary of Environmental and Social Assessment, including key issues and overall conclusion and recommendation

The purchase of rolling stock does not fall under either Annex I or II of the Environmental Impact Assessment (EIA) EIA Directive 2011/92/EU codified version; so an EIA is not required.

The new rolling stock will conform to modern environmental standards. These include reduced noise and pollution, increased energy efficiency and restrictions on the use of some materials. The trainsets will also comply with all the European Technical Standards for Interoperability (TSI) including those for noise emissions and access for persons with reduced mobility.

The project will replace, reorganise and improve currently existing train offers. The new operating concept and the new double-deck rolling stock will replace outdated trains and provide more rail capacity thus reducing peak hour crowding, providing improved passenger comfort and better timetable reliability. This is credibly expected to trigger a significant modal shift towards the rail mode, with associated positive environmental impacts.

Overall, the project will have a positive environmental impact and is thus acceptable to the Bank.

Environmental and Social Assessment

The new rolling stock will replace a large part of the existing fleet, in use for the core connections in the Rhein-Ruhr area. The coaches and the motive power units currently in use on these lines will be over 25 years old when from 2019 to 2022 the new vehicles will start operating.

The new rolling stock consists of at least 71 electrical multiple units (EMU) which will replace the older equipment currently in use. The rolling stock currently used will continue to be used by its operator and cascaded to other, less intensively used railway lines.

[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 CO_2e/year absolute (gross) or 20,000 tons CO_2e/year relative (net) – both increases and savings.

The tender for the new EMUs has been launched in October 2013. The technical specifications have been established on the basis of advanced proven technology and include the following aspects:

New trains are expected to have better overall energy efficiency, even though, due to rigid requirements concerning air condition, acceleration capacity and minimum speed the overall per EMU consumption is not expected to be reduced. Also, the new trains will have regenerative brakes, which allow the train to produce energy when braking and to deliver it back to the power supply system, where it can be then used by other trains on the same line.

New trainsets will also have a higher seating capacity, while offering more space and flexibility per seat. Noise levels, inside and outside the vehicle and the level of perceived vibrations will be reduced. The number of doors will be higher (at least 8 per train side for the 4 coaches EMU and at least 6 for the shorter 3 coaches EMU) so that access will be easier and faster, including for persons with reduced mobility.

The technical reliability of EMU's even under extreme weather conditions is required to particularly stable and therefore improve against the (more diverse) set of trains which currently operates the respective lines.

The manufacturing of the rolling stock is expected to take place in existing plants within the EU, in accordance with International Union of Railways (UIC)/national specifications and applicable environmental, labour, health and safety regulations.

EIB Carbon Footprint Exercise

The modal shift of current car users to the rail mode, given the heavy usage of both rail and roads in the Rhein-Ruhr area and the rail capacity and service level improvements brought by the project, is expected to yield large CO_2 reductions amounting to annual average CO_2 reductions of 43.9 kilotons. The project is therefore included in the EIB Carbon Footprint Exercise. 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 portion of project cost.