

Environmental and Social Data Sheet

Overview

Project Name:	ROLLING STOCK ERTMS RETROFIT AND UPGRADE
Project Number:	2020-0649
Country:	Poland (27.7%), Italy (24.6%), France (19%), Germany (13.6%), Austria (5.3%), Switzerland (3.9%), Netherlands (2.9%), Belgium (1.7%), Czech Republic (0.4%), Slovakia (0.4%) and Hungary (0.4%). (Indicative estimates)
Project Description:	Acquisition of a fleet of 30 new electric locomotives, retrofitting with European Railway Traffic Management Systems (ERTMS) on-board units (OBU) of 122 existing locomotives and upgrading the ERTMS OBUs of 121 existing locomotives. The rolling stock will be leased to European rail transport service operators mainly for freight operations
EIA required:	No
Project included in Carbon Footprint Exercise ¹ :	Yes/
(details for projects included are provided in section: "EIB Carbon Footprint Exercise")	

Environmental and Social Assessment

Environmental Assessment

The project consists of the acquisition of 30 new electric railway locomotives, retrofitting with European Rail Traffic Management System (ERTMS) equipment 66 existing electric and 56 existing diesel locomotives and upgrading of the existing ERTMS equipment of 121 existing electric locomotives.

Manufacturing, retrofitting or upgrading of rail rolling stock does not fall under Annex I or Annex II of the Environmental Impact Assessment (EIA) Directive (2011/92/EU as amended by Directive 2014/52/EU). Therefore, no EIA is required for the project.

The new, retrofitted and upgraded locomotives will be leased to railway freight operators for freight rail services on the European rail network.

The new locomotives are mostly expected to indirectly replace some existing locomotives that are beyond their economic life. The promoter will not directly replace any locomotives that are part of the promoter's fleet; however, at the overall European fleet level some decommissioned locomotives owned by operators are expected to be replaced by the project locomotives. To a more limited extent, the project is also expected to increase the overall European fleet of rail freight locomotives. The main benefits of the project are expected to be an improvement of the performance and interoperability of the railway freight services, and by this means improving the competitiveness of rail services. The project is thus expected to

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.

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prevent a modal shift of existing rail freight services towards road and also to allow some increase of the rail modal share.

The new locomotives will comply with the relevant European Technical Specifications for Interoperability (TSI) including those for noise emissions. Their maintenance will take place in existing workshops in Europe, in accordance with the applicable EU and national environmental regulations.

EIB Carbon Footprint Exercise

The project is included on the following basis:

Estimated annual greenhouse gas emissions from the use of the project in a typical year of operation over a 30-year operating assessment period:

- Forecast absolute (gross) emissions are about 36,000 tonnes of CO₂ equivalent; and
- Forecast emissions savings are about 102,000 tonnes of CO₂ equivalent.

The project assessment boundaries are:

- In the absolute case: the 30 new electric locomotives operating on the European rail network.
- In the baseline case: the existing locomotives, operating on the same network and the road traffic shifted to rail in the project scenario. The latter is considered to constitute approximately 50% of the demand transported by the new locomotives.

The ERTMS equipment of the retrofitted and upgraded locomotives has not been considered for either scenario, as its consumption is negligible. This approach is conservative as the retrofit and upgrade will indirectly lead to some modal shift to rail and the corresponding emissions savings.

The forecasts in the baseline and absolute cases are based on project specific assumptions about electrical energy consumption and fuel efficiency of rail and road traffic.

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.

These forecasts may differ from those of the Promoter due to different assumptions, boundaries and baselines.

Conclusions and Recommendations

The project is expected to contribute to increasing the modal share of rail and have positive environmental impact in terms of safety, accessibility of transport, energy savings, air pollution, noise and CO₂ emissions.

The project is acceptable for EIB financing from an environmental and social perspective.