

Environmental and Social Data Sheet

Overview

Project Name:	BANGLADESH RAIL FLEET MODERNIZATION PROJECT
Project Number:	20170863
Country:	Bangladesh
Project Description:	Purchase of about 200 rail passenger carriages and 40 locomotives for regional and intercity services on the 1,230 km long broad/dual gauge network across Bangladesh as well as international services to India.
EIA required:	no
Project included in Carbon Footprint Exercise ¹ :	no

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

Environmental and Social Assessment

Environmental Assessment

The project consists of the manufacturing and supply of broad track gauge passenger carriages and locomotives that will be used for both domestic and international services of Bangladesh Railways (BR). In the EU, rolling stock manufacture would not fall under either Annex I or Annex II of the Environmental Impact Assessment Directive 2011/92/EU, and would not be subject to an EIA. Also in Bangladesh there is no national requirement to complete a specific environmental assessment for this type of investments.

Introduction of the new trains does not require any change of the infrastructure, as the new rolling stock is similar to what is currently operating on the broad track gauge network of Bangladesh. The new trains will be using the existing railway network and will be maintained in existing loco sheds and carriage depots of the promoter. The project is not expected to have significant environmental adverse impacts, but instead, when compared to the existing fleet, there will be positive environmental impacts due to new technology.

The new rolling stock will improve the reliability and comfort of BRs train services. The project will contribute to maintaining and potentially increasing the market share of rail transport, and reducing the use of private car or diesel buses. This will reduce the adverse environmental impacts of road transport such as emission of noise, local pollutants and greenhouse gases, and also reduce the number of traffic accidents.

The tender documents for the new locomotives and rolling stock follow UIC standards, including the UIC Emission and Smoke Standards. To further reduce fuel consumption and emission of pollutants, the new locomotives will be equipped with Auxiliary Power Units (APU). APU will allow the shutdown of the main engine during the idling time, representing

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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about 40%-50% of engine operating time for locomotives. The engines are usually kept running during the idling time to avoid the long time required for the engine re-starting and to make the train ready again with adequate air pressure for the brake system. The APU will contribute to the reduction of carbon dioxide emission and pollutants like nitrogen oxide, particulate matter, etc., in particular at locations where trains often are running idle for instance at train stations. Technical assistance will be given to help drivers to operate the APU correctly and also to recommend potential solutions to improve the overall energy efficiency of Bangladesh Railway rolling stock operations. These will be the first locomotives in Bangladesh with this technology.

The new locomotives will also have measures for noise and vibration control and all equipment will be designed to eliminate rattling and resonance at all speeds up to the maximum running speed. The driver's control compartments shall be designed to promote a good work environment with good illumination, ventilation and air conditioning. The insulation material out of stone wool and asbestos are not allowed. All doors and window seals will be such as to render the cabins absolutely leak proof during heavy rains, taking into consideration the climatic conditions in Bangladesh.

The project represents largely a replacement of obsolete vehicles, which will be sold for scrap, but also a modest expansion of the fleet to better meet growing demand. In case of scrapping, the promoter will organise an auction in which only licenced scrapping companies that have sufficient working capital to successfully carry out the scrapping, and have sufficient equipment or devices for the melting of scrap material are eligible.

Social Assessment

The purchase of new rolling stock does not require any land purchase and thus no resettlement.

The new rolling stock will provide some additional capacity and therefore benefit also women, children and persons with reduced mobility, as these often refrain from using train services given the current overloading of trains and the crowded stations and platforms.

Bangladesh follows ILO labor standards and there are eight registered trade unions at the Bangladesh Railways.

As far as the manufacturing of the carriages is concerned, the promoter undertakes to include in its tender documents provisions and requirements for the respect of ILO conventions to ensure that their manufacturing will not in any way use or benefit from harmful child labour, use or knowingly benefit from forced labour, or not comply with national law on worker representation and organisation. Furthermore, the promoter will also be required to include in the tender documents it is preparing requirements with regard to occupational and public health and safety, ensuring a healthy, safe and hygienic working environment, and that the pre-shipment inspection consultant will review compliance of the supplier in this regard. The manufacturing of the locomotives will comply with ADBs Environmental and Social Safeguards, which are acceptable to the Bank.

Conclusions and Recommendations

The project is expected to enable the passenger railways to avoid a modal shift towards road, and contribute to some strengthening of the rail modal share, resulting in positive environmental impacts.



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The promoter will supply evidence that provisions and requirements for the respect of EIBs labour, occupational and public health, and safety standards have been included in the supply contracts to be financed by the EIB.

The promoter will also ensure that the pre-shipment inspection consultant will review compliance of the supplier with EIBs labour, occupational and public health and safety standards.

Under the conditions indicated above, the project is acceptable for Bank financing from an environmental and social point of view.