

Environmental and Social Data Sheet

Overview

Project Name: ROCK RAIL EAST ANGLIA
 Project Number: 2015-0680
 Country: United Kingdom
 Project Description: New rolling stock to provide to selected Train Operating Company for East Anglia train franchise in the United Kingdom.

EIA required: no

Project included in Carbon Footprint Exercise¹: yes

Environmental and Social Assessment

The project consists of supply of up to 378 vehicles which will be a mix of EMUs (Electrical Multiple Units) and BMUs (Bi-Mode Multiple Unit combining electrical and diesel traction equipment in one unit) to be operated on intercity, regional and commuter railway services in East England under the East Anglia passenger railway services franchise let by DfT (Department for Transport) for replacement of the existing life-expired trainsets. The project forms part of a larger investment program to modernize the whole fleet for the franchise, entailing up to 1,188 vehicles.

The project does not fall under Annex I or Annex II of Directive 2011/92/EU (the Environmental Impact Assessment Directive), which is not applicable to manufacturing of rail rolling stock. Therefore, no Environmental Impact Assessment is required for the project.

The old rolling stock to be replaced does not correspond to current passengers expectations of performance and comfort and is a deterrent for those who would potentially switch from private car to rail. The main benefit of the operation consists in improving the attractiveness of the railway service and contributing to prevent a modal shift towards road transport. In the absence of such investments, the rail service quality would deteriorate and encourage the use of private cars with the associated negative impacts in terms of energy consumption and associated emissions.

In addition, the new rolling stock will be equipped with the state-of-the-art technology and the operation of the new trains is expected to be more energy efficient compared to operation of the existing trains. Despite the new trains being fitted with additional equipment, such as air conditioning, wifi, information displays and CCTVs, some energy savings are expected.

The new trainsets will meet the requirements concerning the noise emissions by rail rolling stock, so the noise emissions of the railways themselves are expected to be lower.

The new rolling stock will also be in conformity with the requirements for accessibility for persons with reduced mobility.

The Train Operating Company (TOC) requires from the manufacturer of the new vehicles to undertake their service and maintenance during the franchise agreement period. This will be done at existing railway facilities that will undergo upgrades and renewals of equipment and special tools inside the depot area to enable the required maintenance of the new fleet and its full potential savings.

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.

Some major depot and stabling modernization investments at different locations may be implemented to accommodate the new rolling stock. These facilities will not be financed by the EIB. The scope of some of the depot and stabling investments in the other maintenance sites concerned is to be defined with Network Rail.

Part of the replaced old rolling stock will be scrapped. This will be done by entities specifically certified for this activity. The other trainsets being replaced are likely to be in demand on others routes in UK, especially where others similar and older trains operate.

EIB Carbon Footprint Exercise

The whole East Anglia franchise is included on the following basis:

- Forecast absolute (gross) new rolling stock emissions are 205,000 tonnes of CO₂ equivalent per average operating year; and
- Forecast emissions savings are 35,000 tonnes of CO₂ equivalent per average operating year.

The project boundaries, consistent with the approach adopted for the cost benefit analysis are:

- In the absolute case, the East Anglia franchise railway network, which covers the operation of around 33.3 million train-km per year on a 1600 route-km network in eastern England;
- In the baseline case, both (i) the East Anglia franchise network; and (ii) the relevant road network between the same cities in eastern England.

The forecasts in the baseline and absolute cases are based on Services' standard assumptions about the workload of rail services and fuel efficiency of rail operations. In the baseline case, a portion of emissions from cars and buses is included, equivalent to those passenger trips expected to shift from road to rail in the "with project" case.

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 does not fall in the scope of the EIA Directive, which is not applicable to manufacturing of rail rolling stock. No associated construction work subject to EIA are included in the project.

The project is expected to promote an increase in the use of public transport, and as such prevent an increase in road transport, which is expected to happen if the project is not implemented. In addition, the new rolling stock is expected to be more energy efficient and have lower level of noise emissions, compared to existing older electrical and diesel trainsets. By comparison with the "without project" scenario, as well as, with the current situation, the project is expected to have positive environmental impact in terms of energy savings, air pollution, noise and CO₂ emissions.

Considering the above, the project is acceptable from an environmental perspective.