

## Environmental and Social Data Sheet

### Overview

Project Name: PROGRAMM NAHVERKEHR BADEN-WÜRTTEMBERG NETZ 1  
 Project Number: 2015-0470  
 Country: Germany  
 Project Description: Investment into rolling stock for Stuttgarter Netz in Baden-Württemberg (network 1).  
 Sub-operation under Programme loan for rolling stock and related infrastructure for local and regional public transport in Baden-Württemberg (2014-0765).  
 EIA required: No  
 Project included in Carbon Footprint Exercise<sup>1</sup>: Yes  
 (details for projects included are provided in section: “EIB Carbon Footprint Exercise”)

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

Stuttgarter Netz (Network 1) is a sub-operation under a programme loan to buy new electric multiple units. On this network the number of train services will be increased by approximately 40%. This should enable the railways capturing traffic growth and thus avoiding a modal shift towards road, resulting in positive environmental impacts.

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

The railway undertaking that leases the rolling stock will have to arrange its own stabling and maintenance facilities. Such elements could fall under Annex II of the EIA directive, and therefore may be subject to an EIA procedure. German law requires complying with Directive 92/2011/EC, as amended, to obtain building permits for such elements. If construction of new facilities will be required, then the promoter undertakes to inform the Bank on environmental compliance by submitting a copy of the environmental decision and the non-technical summary of the EIA (if applicable), as well as evidence that the requirements of the EU Habitats Directive 92/43/EC and the EU Birds Directive 79/409/EC have been fulfilled (form A/B or equivalent document to the satisfaction of the Bank) – if applicable.

Considering the above, the project is acceptable for Bank financing from an environmental point of view.

### Environmental and Social Assessment

#### Environmental Assessment

The Federal State of Baden-Wuerttemberg is procuring new rail services on its networks. The future Railway Undertaking procures the new rolling stock and sells it to the Federal State (Promoter) who takes the ownership of the rolling stock through a public law subsidiary (Borrower), the newly founded SFBWG. The SFBWG rents it to the private RU which will provide rail transport services.

The programme is in line with Baden-Württemberg's General Transport Master Plan 2010 and the Strategy for Sustainable Mobility 2014 for the region around Stuttgart. The use of modern

<sup>1</sup> 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<sub>2</sub>e/year absolute (gross) or 20,000 tons CO<sub>2</sub>e/year relative (net) – both increases and savings.

vehicles and increased frequency of services will improve accessibility and attractiveness for users, thus strengthening the demand for rail services in the region.

The total capacity is expected to increase by ca. 40%. The increase in capacity is put into place to accommodate traffic growth in a more sustainable manner. Therefore, the impacts of the project investments on energy consumption are deemed positive.

The train-sets will comply with the applicable European Technical Standards of Interoperability (TSI) for conventional rolling stock, including those for passenger safety, noise emissions and access for persons with reduced mobility. Furthermore the Promoter encourages efforts of the RU's to reduce energy consumption via incentives in the contract.

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.

Rolling stock to be replaced by the newly purchased rolling stock will be reassigned by the incumbent Railway Undertaking to other rail services to be identified, setting off a cascade of reassignments of rolling stock at the end of which some older vehicles will be scrapped. This shall be performed in accordance with applicable domestic rules and regulations. Eventually, some trains could also be sold by the incumbent Railway Undertaking.

The railway undertaking that leases the rolling stock will have to arrange its own stabling and maintenance facilities. The tender to select the railway undertaking is ongoing. Contract award is expected in October 2015 after which the arrangements will become clear.

## **EIB Carbon Footprint Exercise**

The sub-operation is included on the following basis:

Estimated annual third party greenhouse gas emissions (vehicular use, from existing and induced demand) from the use of the project in an average year of operation over a 30 year assessment period:

- Forecast absolute (gross) third party emissions are 87,000 tonnes of CO<sub>2</sub> equivalent of which about 1,400 tonnes are forecast from induced traffic; and
- Forecast emissions savings are 53,900 tonnes of CO<sub>2</sub> equivalent.

The project assessment boundaries are:

- In the absolute case, network 1 including railway line sections between Stuttgart - Mühlacker - Bruchsal/Pforzheim (47 km), Stuttgart - Jagstfeld - Mannheim/Osterburken (139 km), Stuttgart – Tübingen (46 km), Stuttgart - Aalen – Crailsheim (132 km), Stuttgart - Geislingen – Ulm (102 km), Karlsruhe - Stuttgart – Aalen (82 km) and Stuttgart – Würzburg (154 km).
- In the baseline case:
  - the same railway line sections between Stuttgart - Mühlacker - Bruchsal/Pforzheim (47 km), Stuttgart - Jagstfeld - Mannheim/Osterburken (139 km), Stuttgart – Tübingen (46 km), Stuttgart - Aalen – Crailsheim (132 km), Stuttgart - Geislingen – Ulm (102 km), Karlsruhe - Stuttgart – Aalen (82 km) and Stuttgart – Würzburg (154 km) ) and
  - the highway network between the same cities as follows: Stuttgart - Mühlacker - Bruchsal/Pforzheim (36 km), Stuttgart - Jagstfeld - Mannheim/Osterburken (84 km), Stuttgart – Tübingen (35 km), Stuttgart - Aalen – Crailsheim (92 km), Stuttgart - Geislingen – Ulm (69 km), Karlsruhe - Stuttgart – Aalen (60 km) and Stuttgart – Würzburg (87 km).

The forecasts in the baseline and absolute cases are based on Services' project specific assumptions about the workload of rail services (passenger trains only) and fuel efficiency of rail operations. In the baseline case, a portion of emissions from cars is included using project specific emission factors, 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.

### **Public Consultation and Stakeholder Engagement**

Requirements for new rolling stock have been discussed with Passenger Advisory Board which includes the chairman of the association for people with reduced mobility from the Land BW.