

## Environmental and Social Data Sheet

### Overview

Project Name:	Neue Fahrzeuge U-Bahn Nuernberg
Project Number:	2015-0257
Country:	Germany
Project Description:	The project consists of procuring and putting into operation of new rolling stock (trains) for the Nuremberg underground servicing the Cities of Nuremberg and Fuerth in the German federal state of Bavaria. With over 500,000 inhabitants, Nuremberg is the second-largest city in Bavaria after Munich and the largest one in the administrative region of Middle Franconia. The existing rolling stock will reach its calculated service life by 2019 and has to be replaced.
EIA required:	no
Project included in Carbon Footprint Exercise <sup>1</sup> :	no

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

The construction of the new trainsets will take place in the manufacturer's plants. There are adaptations needed to the existing workshop, but none of these project components fall within the scope of EU environmental Directives (92/2011/EC on EIA, as well as Directive 92/43/EEC and 2009/147/EC on Habitat resp. Birds).

Overall, it is expected that the project will have a positive impact on the city's overall transport conditions and on the quality of the urban environment, enhancing the attractiveness of public transport and preventing use of private cars.

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

### Environmental and Social Assessment

#### Environmental Assessment

The manufacturing of the rolling stock is expected to take place in existing plants within the EU, in accordance with EU and national specifications and applicable environmental, labour, health and safety regulations. Rolling stock to be replaced by the newly purchased rolling stock will be scrapped. This will be carried out in accordance with national legislation which is satisfactory to the Bank.

To be able to service the new longer trains in the workshop adaptations are needed. All the adaptations except one are within the existing building and are therefore not within the scope of 92/2011/EC. The Promoter made a pre-assessment of the excluded adaptation which is outside the existing building: the lengthening by 20m of track on land of the existing depot. It was concluded that the environmental impact of the extension is negligible and that therefore also this part of the work does not fall under the scope of the EIA Directive.

For this extension an additional avoidance measure is taken. The building site will be fenced off by a unidirectional permeable amphibian fence in spring 2016. This will allow any remaining lizards to exit the site after their hibernation, but no new ones will be able to enter.

In 2004 the Promoter, VAG Verkehrs-Aktiengesellschaft (VAG) signed, as one of the first transport undertakings, the UITP Charter on Sustainability. In 2014 STUVA

<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.

(Studiengesellschaft für Unterirdische Verkehrsanlagen) performed an analysis to identify measures the VAG could take to improve further. The Promoter was well above the general state of the art in Germany. An example is that since 2012 the Promoter has been operating its metros and trams on 100% hydropower so CO<sub>2</sub> emissions are zero and will remain zero.

Energy efficiency and usage is part of the assessment to determine the economically most viable bid. The energy consumption will decrease for some systems (e.g. more trains with regenerating braking systems), but for others it will grow (climate control). In total the energy consumption is expected stay more or less the same, but overall the energy efficiency will improve as the capacity of the trains is slightly higher. Furthermore there is a higher quality of services (Wi-Fi, etc.).

Regarding scrapping of the replaced vehicles, a number of adequate measures are taken by VAG. Between 1995 and 2002 all vehicles went through a health and environment inspection during which all components containing asbestos were removed, following required regulations and guidelines for such works. The replaced vehicles will be scrapped by entities certified for this activity, and prior to this all spare parts of value as well as batteries will be removed.

The new rolling stock will facilitate the use of public transport to persons with reduced mobility.

The project is expected to have an overall positive impact on the environment. It will not have a significant impact on climate change mitigation since no increase in services is foreseen and it concerns the replacement of old trains which are already scheduled for decommissioning. However, if these public transport services were not provided, travellers would transfer to private vehicles bringing the usual undesirable consequences of congestion, noise, and CO<sub>2</sub> and other harmful air emissions. Hence, the retention of public transport services does have a significant positive effect on climate change mitigation as the use of the metro network is much more energy efficient than alternative modes – particularly private cars.

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

Requirements for the new rolling stock have been discussed with Passenger Advisory Board.