

## Environmental and Social Data Sheet

### Overview

Project Name: *URBAN TRANSPORT MAINZELBAHN*  
 Project Number: *2013-0167*  
 Country: *Germany*  
 Project Description: *Extension of a tram line by 9.2 km from Mainz Central Station to Mainz Lerchenberg and acquisition of additional trams*

EIA required: yes

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 Mainz tramway extension falls under Annex II of Directive 85/337/EC, as subsequently amended (see codified version EC 2011/92), according to which the need for an EIA is decided on a case-by-case basis by the Competent Authority. The project was screened in and an EIA was carried out in accordance with EU and German regulations.

The project will influence the environment at both construction and operation stages. Most of the negative impacts during the construction stage will be short-lived and reversible. At operation stage the major impacts will be connected with noise, vibration and water drainage and infiltration. Special mitigation measures have been proposed by the Promoter to reduce such impacts to acceptable levels. On the other hand, the project will improve the quality of public transport services in terms of speed, comfort, availability and reliability, thus increasing the attractiveness of public transport in the urban area of Mainz and contributing to the reduction of reliance on private cars and their negative impact on the environment. In conclusion, the positive impacts of the project are expected to balance out the negative impacts during construction and operation with a final overall beneficial effect on the environment.

According to the applicable law, the construction of the tramway infrastructure is subject to a Planning Approval Procedure (Planfeststellungsverfahren), which includes the Environmental Impact Assessment with integrated Nature Conservation Evaluation. The promoter – Mainzer Verkehrsgesellschaft - MVG – has submitted the application for the building and environmental permit to the Competent Authority (Planfeststellungsbehörde). The project has been subject to public consultation. The promoter also involved the public during the design phase to gather beforehand all possible objections and suggestions from the public. As a result, the project was modified to take into wider consideration public interests including changes in the alignment and improved design standards in particular sections. The final Planning Approval Notice (Planfeststellungsbeschuß) is expected to be issued during summer / autumn 2013.

According to the EIA, the project is not likely to have any significant effects on the species and habitats of Natura 2000 sites. This will be verified by the Planning Approval Notice or the corresponding certificate by the Competent Authority if not covered by the Planning Approval Notice.

<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.

Under these circumstances and conditioned to the positive Planning Approval Notice including a Form A or equivalent from the Competent Authority, the project is acceptable for Bank financing.

## **Environmental and Social Assessment**

### **Environmental Assessment**

The Mainz tramway extension falls under Annex II of Directive 85/337/EC, as subsequently amended (see codified version EC 2011/92), according to which the need for an EIA is decided on a case-by-case basis by the Competent Authority. The Competent Authority is the Federal State of Rheinland-Pfalz through its Mobility Council -Landesbetrieb Mobilität -. The project was screened in and an EIA was carried out in accordance with EU and German regulations.

The EIA considered numerous variants in each of the three alignment sections. A preferred variant was named for each section and unfeasible variants were withdrawn. Section 1 runs mainly along university campuses whereas section 2 is dominated by a dense housing area with dispersed small businesses. Section 3 in the area of Lerchenberg is predominantly mixed with dense housing areas and large business buildings. The tramway crosses a motorway and a railway line in this section.

As a result of a survey, some protected bird species were detected, as well as a protected lizard species. Potential bat shelters were also detected along some tree alleys. Seven pear trees under nature protection were also identified. The ground is predominantly anthropogenic and partially or completely sealed due to its use for road traffic and urban construction. No superficial water currents or protected areas for drinking water are located in the area. The landscape is predominantly of an urban and business nature. Only a short part of section 3, between an existing railway station at the outskirts of the dense urban area of Marienborn and the mixed dense urban/business area of Lerchenberg can be characterised as typical rural landscape.

Considering noise emissions related to the tramway, it has been estimated that the zone specific limits established in the 16<sup>th</sup> Decree of Enforcement of Country Emission Law (16. BImSchV) will not be exceeded. However, overall traffic noise could be above 75 dB(A) during the daytime and/or 65 dB(A) during the night beside seven buildings located within one traffic junction and two buildings very close to a street. The track will be designed to reduce noise emissions wherever possible e.g. use of grass on the tracks. Where not possible or wherever necessary, passive measures will be taken e.g. use of noise protection windows.

Regarding vibrations, the reference values published in the Vibration Impact Norm DIN 4150-2 will be respected along almost the full length of the infrastructure. Some short sections were identified as critical and will be designed with special elements to mitigate such emissions.

Protected bird species use the zone during the breeding period. Special precautions will be taken during construction i.e. location of offspring before start of construction, excavation works outside breeding periods, and provision of ancillary habitats. Some of the trees that need to be felled may potentially be used by bats as winter shelter. Special control measures are foreseen to determine the existence of bats in shelters before the tree felling begins. Additional appropriate bat shelters will be installed in zones with potential presence of bats.

Construction works could disturb a protected lizard population. Therefore special precautions will be taken during that phase e.g. ecologically controlled construction works during determined months of the year. On the other hand, the use of ballasted track could improve the living environment of this species.

The negative effects on climate will be minimised by tree planting close to the alignment of the tram in foreseen compensation areas and the use of grass track, hence no significant overall impact is expected. Furthermore and according to the traffic demand analysis, the project will result in the elimination of significant bus traffic that previously serviced these

areas and less traffic of private cars, and consequently reduction of CO2 and noxious air pollutants.

**Public Consultation and Stakeholder Engagement, where required**

The formal stakeholder engagement started with a public site visit to the tram alignment on the 21<sup>st</sup> august 2010. Subsequently, four different sets of planning workshops took place in three different locations organised by the promoter lead by a neutral professional moderator and with active collaboration of selected citizens representing different groups affected. The project design was improved to take public interests into account.

A second public consultation has been carried out as part of the Planning Approval Procedure. This process is still on-going.

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