

Environmental and Social Data Sheet

Overview

Project Name:	<i>Warsaw II metro line infrastructure</i>
Project Number:	<i>2011-0421</i>
Country:	<i>Poland</i>
Project Description:	<i>Construction of the Central Section of the second metro line in Warsaw, including 7 new stations and an extension to the existing Kabaty depot.</i>
EIA required:	YES
Project included in Carbon Footprint Exercise ¹ :	YES

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

The construction of the metro falls under Annex II of the EIA Directive 2011/92/EU, according to which the need for a full EIA is decided on a case-by-case analysis by the Competent Authority. In this case, the Competent Authority did request an EIA for the construction of the metro infrastructure but not for the modernisation of the Kabaty depot. In 2007, an EIA for the central section of the Warsaw Metro Line 2 was completed. In 2009, an additional EIA was done for the construction of the *Stadion* transfer interchange.

The major environmental effects expected of the Warsaw Metro Line 2 (Central Section) are a reduction in air and noise pollution from transport in the long run, due to modal shift from cars to metro. The project will also contribute to the reduction of CO₂ and a reduction of 42 kton CO₂ per year has been estimated. Overall, the project is deemed to have a positive impact on the environment.

The competent authority of Warsaw (RDOS) issued declarations stating that the project is not likely to impact any Natura 2000 site. Although the metro will go under the Vistula River, which is a designated Natura 2000 site (PLB140004), the project will not encroach on any Natura 2000 site, with the exception of a fenced ventilation shaft which will take about 0.001ha. One project construction activity will take place on the border the Natura 2000 area and will be closed after the construction is completed.

The project is strongly linked with the strategic planning for Warsaw transport and has been part strategic planning for some time now. The project is part of the 'Sustainable Development Strategy for Transport of Warsaw time frame 2007-2013 and beyond', for which an SEA has been completed. In addition, in 2009 a preliminary EIA has been done for the complete metro line II including all the sections (Western Section, Central Section, North-East Section and the South-East section), covering the cumulative environmental impacts of the complete metro line II project.

Environmental and Social Assessment

Environmental Assessment

The construction of the metro falls under Annex II of the EIA Directive 2011/92/EU, according to which the need for a full EIA is decided on a case-by-case analysis by the Competent Authority. In this case, the competent authority issued a positive EIA screening decision, and two EIA reports have been prepared. In 2007, an EIA for the central section of the Warsaw Metro Line 2 was completed. The EIA report of 2007 has been complemented with additional information regarding cumulative and secondary effects of the project. In 2009, an additional

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.

EIA was done for the construction of the *Stadion* transfer interchange. Environmental consent decision was received from the President of the City of Warsaw on 03/09/2007 and for the Stadion transfer interchange from RDOŚ on 09/09/2009.

The works to increase the capacity of the current *Kabaty* depot were not part of the EIA for the central section, because the depot is located at the end of line I and is not physically part of line II. Given that the construction of a depot falls under Annex II of the EIA Directive 2011/92/EU, the Competent Authority needs to assess whether an EIA is needed. In this case, the president of the City of Warsaw issued a negative screening decision on 29/01/2010. The construction takes place on the existing depot area and environmental impacts are deemed to be limited.

During the construction phase, impacts of noise will be mitigated with measures identified in the environmental decisions, such as working hours of the construction team. Noise impacts on birds should not be significant and should not disrupt the migration and their habitats. Vibration impacts will be limited, as the metro is mostly constructed under a road corridor. Excavated bedrock material is not contaminated and will be transported and stored safely. The impact on flora has been mitigated by the measures to replant trees where they will have to be removed. For the most part, the digging and excavation will be carried out well below 6m depth where such impacts are unlikely. The modernisation of the Kabaty depot may result in additional noise pollution and mitigation measures are being employed, for instance by limiting working hours and any operations during the night hours.

The competent authority of Warsaw (RDOS) issued a declaration (form A) on 10.11.2010 declaring that the project is not likely to impact any Natura 2000 site. Although the metro will go under the Vistula River, there will not be a significant impact. One project construction activity will take place on the border the Natura 2000 area and will be closed after the construction is completed. The impacts are not likely to become significant on the scale of the Natura 2000 site and it is considered that impacts will be small and short term. For the Kabaty Depot, a separate declaration was issued on 12/07/2011 by the Warsaw RDOŚ, stating that the depot modernisation is not likely to have significant impacts on the nearest Natura 2000 site (which is 1.5 km away).

The project is part of the National Transport Policy time frame 2006-2025 (with SEA), the Operational Plan Infrastructure and Environment (with SEA), the City of Warsaw Development Plan (approved in 1992, updated in 2001, before the SEA Directive), the Development Strategy for the City of Warsaw till 2020 (adopted in 2005 without an Action Plan or SEA), the Sustainable Development Strategy for Transport of Warsaw time frame 2007-2013 and beyond (with SEA).

EIB Carbon Footprint Exercise

The project is likely to contribute to the reduction of CO₂ during the exploitation phase. To estimate the CO₂ savings, it is assumed that from the new metro passengers about 25% is coming from private car and 75% from other public transport modes. In the base line, transport is done by car, bus and tram and it is estimated that the trips that would be transferred to the new metro line emit in total 60 kton CO₂ per year. When the project has become operational, the new metro line emits around 19 kton CO₂ per year, a net reduction of 41 kton CO₂ per year. These savings will increase significantly when others parts of line II are constructed and passenger volumes increase.

Social Assessment

The stations are largely built within existing road corridors and this limits the land take. The feasibility study estimated that 7177 m² needs to be acquired. On a few places the metro runs under dense residential areas but this should not affect the properties above. The impact of vibration on any properties above the tunnels during construction and operations will be measured by the promoter. The public information and consultation took place in 2007 and 2009 and covered the entire environmental decision-making process. JASPERS did a detail review of all public consultation documents and concluded that it was done in accordance to EU directives.