Overview	
Project Name:	PLK Warsaw Radom
Project Number:	20120045
Country:	Poland
Project Description:	The project consists of the modernization of 92.5 km of an existing electrified railway line from Warsaw Okecie to Radom in Masovia.
EIA required:	Yes
Project included in Carbon Footprint Exercise <sup>1</sup> :	Yes

## **Environmental and Social Data Sheet**

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

The project falls under Annex II of the Environmental Impact Assessment (EIA) Directive 2011/92/EU. In accordance with Polish legislation, the project was automatically screened in and therefore subject to a full EIA procedure. An Environmental Assessment was performed in 2006-2007 and the Competent Authority gave his positive Environmental Decision (ED) in February 2009. In line with Polish legislation, supplemental EIAs are expected to be performed for certain sections of the line as part of the building permit process. Submission to the Bank of such supplemental EIAs will be a condition for disbursement.

The project has the potential to impact several Natura 2000 sites; so the provisions of the Habitats Directive (92/43/EEC) and Birds Directive (2009/147/EC) apply. The EIA report did not identify any specific risks to these areas. In its ED, the Competent Authority concluded that the project is not likely to have a significant effect on protected areas. A reconfirmation of this opinion will be sought prior to first disbursement (Form A/B).

The project forms part of a broader program of investment in the region that is expected to improve rail services and thereby promote modal shift. The project's residual negative impacts during construction and operation are limited and offset by the expected modal shift facilitated by the investment. Overall, the project is acceptable from an environmental perspective.

### **Environmental and Social Assessment**

#### **Environmental Assessment**

With respect to the Strategic Environmental Assessment (SEA) Directive 2001/42/EC, the project is included in the Polish Railway Master Plan to 2030 as well as, in part, the Infrastructure & Environment Operational Program 2007-2013. Both of these have been subject to a strategy level environmental assessment.

The project consists of the modernization of 93 km of an existing electrified railway line from Warsaw Okecie to Radom (from km 11.8 to km 104.3). The modernization will be performed in two phases – broadly Okecie to Warka and then Warka to Radom. The second stage includes the addition of a second track alongside the existing single track line. In places, the alignment is to be shifted, though within a few tens of metres only. The modernized line will enable passenger trains to travel, with a few short exceptions, at 160 km/hr and cargo trains at 120 km/hr. The line runs largely through agricultural areas (particularly for fruit), some forest zones plus some low density urban areas.

<sup>&</sup>lt;sup>1</sup> Only projects that meet the draft EIB Carbon Footprint Methodologies, thresholds are included: above 100,000 tons CO2e/year absolute (gross) or 20,000 tons CO2e/year relative (net) – both increases and savings.

The EIA procedure and environmental decision cover a larger investment, that of modernization of the line between Warsaw Okecie and Kielce (about 175 km in all). The Project consists of the works between Okecie and Radom only. The balance modernization works to Kielce may be undertaken separately. The feasibility and environmental assessment considered several difference variants and selected the chosen variant on the basis of a multi-criteria analysis.

The main residual impacts of the project are conversion of land (agricultural, urban and forest); damage to the view for a limited number of receptors; as well as some additional noise/vibration, again for a limited number of receptors. The works' designs include measures to mitigate impacts including, drainage and runoff treatment/storage facilities; acoustic barriers, anti-vibration mats and window insulation; landscaping; restrictions on construction; as well as long term monitoring. All these measures should result in an improvement to the environmental situation in comparison to the "without project case". The project will also result in the removal of four and improvements to 50 level crossings; these measures should improve the safety of the line.

The project has the potential to impact four Natura 2000 sites as follows: (i) runs alongside Sawy w Zabiencu SCI (PLH 140039) for about 2km (ii) crosses for 2km Dolina Pilicy SPA (PLB140003) and Dolina Dolnej Pilicy SAC (PLH140016)<sup>2</sup> and (iii) is situated about 3 km from Ostoja Kozienicka SPA (PLB140013). The environmental report and ED do not identify any particular risks to these sites. The realignment and widening of the embankment to accommodate a second track south of the Pilica River will entail conversion of part of the N2000 site to a manmade structure (approximately 4 ha). The scale of conversion of this N2000 area by comparison with the overall size of the site (35,000 ha) is very small and no priority sites are involved. However, the ED specifies some mitigating measures including the installation of fauna underpasses/adaptation of culverts to serve as underpasses, fencing and other devices to discourage wildlife from crossing the line at grade, and restrictions on construction. Moreover, further mitigating measures may be identified during the supplemental EIA review stage (see below). A standalone opinion of the impact of the project on protected areas and species is to be obtained prior to first disbursement (Form A/B).

Section 88 of the October 2008 Polish Act on "providing access to information concerning the environment and environmental protection, participation of the public in environmental protection and on the assessment of environmental impact" allows for a "supplemental EIA" procedure to be performed at the building permit stage. Although, in his 2009 ED, the Competent Authority has not specifically required this additional procedure, the promoter is performing or will perform supplemental EIAs on certain more sensitive sections of the line. Copies of the required supplemental EIAs are to be obtained prior to first disbursement.

During the environmental procedure, disclosure of environmental documentation was undertaken at prescribed times (September – October 2007 and October – November 2008). Comments received from affected and third parties included those relating to the layout/location of stations, measures to protect wildlife and construction management. The Competent Authority has taken these comments into account in his final decision. A further round of public consultation will be performed during the Supplemental EIA procedures.

The project requires the acquisition of about 50 ha of land. A small number of residential properties are also affected. Land and property losses will be compensated in line with Polish law. The project site contains some historic buildings which have protected status; these are to be conserved during the renovations.

#### **EIB Carbon Footprint Exercise**

The project is included on the following basis:

- Forecast absolute (gross) third party emissions are 9,000 tonnes of CO2 equivalent per average operating year; and
- Forecast emissions savings are 21,000 tonnes of CO2 equivalent per average operating year.

<sup>&</sup>lt;sup>2</sup> Part of a broader, European wide, east west fauna migration corridor. The project includes the construction of a new bridge over the Pilica river.

The project boundaries are:

- In the absolute case, the section of railway line between Warsaw Okecie and Radom, totalling 92.5 km;
- In the baseline case, both (i) the section of railway line between Warsaw Okecie and Radom, totalling 92.5 km; and (ii) the road network between Warsaw Okecie and Radom, totalling 96 km.

The forecasts in the baseline and absolute cases are based on Services' assumptions about the workload of rail services (passenger trains only), energy consumption per train x km and the national grid emission factor. 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.