Luxembourg, 11 December 2015

Environmental and Social Data Sheet

Overview

Project Name:	LITHUANIAN RAILWAYS V
Project Number:	2014 0395
Country:	LITHUANIA
Project Description:	The project consists of several railway infrastructure upgrading and renewal schemes throughout Lithuania and renewal of rolling stock for passenger services in the country.
EIA required:	Multi-scheme project, requirements vary

Project included in Carbon Footprint Exercise[1]: 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

The infrastructure component of the project consists of 8 schemes; the environmental assessment requirements vary and the schemes are at different preparation or implementation stages.

For six schemes the procedures required by the Environmental Impact Assessment (EIA) Directive (Directive 2011/92/EU) have been essentially completed. The project crosses two Natura 2000 sites, Kenos upė (LTVIN0025) and Neries upė (LTVIN0009), and runs in the vicinity of several other sites. No significant effects on these sites are expected, in particular, because the works on these sections are within the existing right of way. For one scheme the significance of the impact on Natura 2000 sites has not yet been determined.

Prior to any disbursement for a particular scheme the Promoter will be required to submit to the Bank evidence of completion of any outstanding procedures related to the EIA and Natura 2000 sites.

The rolling stock component of the project does not fall under the EIA Directive, which is not applicable to manufacturing of rail rolling stock. Therefore, no EIA is required for this component.

The new rolling stock will contribute to preventing further shift from rail to road transport, which is expected to happen if the project is not implemented. By comparison with the "without project" scenario, as well as, with the current situation, the project is expected to have positive environmental impact in terms of energy savings, air pollution, noise and green-house gas (GHG) emissions. The new rolling stock will improve the accessibility of the rail services for persons with reduced mobility. The finance contract will include undertakings to ensure the disposal of the old rolling stock to be done in an appropriate manner.

The project's residual negative impacts during construction and operation are limited and partly offset by the reduction of pollutants and GHG emissions resulting from prevention of the modal shift and the transition from diesel to electric traction facilitated by the project.

The project is acceptable from an environmental perspective.

[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.

Environmental and Social Assessment

Environmental Assessment

Infrastructure component

The project forms part of the Long-Term (until 2030) Strategy of the Lithuanian Railway Transport Sector. This program has been subject to a Strategic Environmental Assessment (SEA) as set out in Directive 2001/42/EC.

The schemes included in the project and the state-of-play of the EIA procedures and evaluation of the impact on the Natura 2000 sites are as follows

Scheme	EIA procedures and evaluation of the impact on the Natura 2000 sites
1. Electrification of section Kena – N. Vilnia.	Annex II of the EIA Directive. Screened out in September 2011. No significant impact on Natura 2000 sites.
2. Electrification of Vilnius railway junction.	Annex II of the EIA Directive. Screened out in February 2015. No significant impact on Natura 2000 sites.
3. Electrification of section Kaišiadorys – Radviliškis.	Annex II of the EIA Directive. The screening decision is pending. No significant impact on Natura 2000 sites.
4. Stage I of Šiauliai - Radviliškis section modernization and electrification.	Annex II of the EIA Directive. Screened out in March 2010. No significant impact on Natura 2000 sites.
5. Stage II of the extension of Klaipėda railway junction. Reconstruction of Pauostis yard.	Annex II of the EIA Directive. EIAs was carried out in 2009 and the environmental approval granted in October 2010. Significance of impact on Natura 2000 sites has not been determined.
6. Construction of the second track in the section Telšiai – Lieplaukė.	Annex II of the EIA Directive. Screened out in January 2010. No significant impact on Natura 2000 sites. Appropriate assessment according to Art 6(3) of Directive 92/43/EEC carried out.
7. Construction of the second track of the Vilnius bypass Pušynas - Paneriai of the IXB corridor.	Annex II of the EIA Directive. EIAs were carried out in 2009 and the environmental approval granted in February 2010. No significant impact on Natura 2000 sites.
8. Implementation of railway traffic safety and noise mitigation measures	The scope of the scheme has not yet been defined completely.

The environmental approvals of schemes 5 and 7, as well as the screening out decisions, require implementation of some mitigation measures, such as construction or improvement of animal crossings, proper location of storage sites, improvements of the drainage system, avoiding works during birds breeding season, continuously welded rail so that noise is reduced, replacement of windows in nearby houses by windows with increased acoustic isolation, etc.

Overall these schemes include construction of second track on some 42 km of line, the second stage extension of the Klaipėda railway node and electrification of some 320 km of line and track renewal on some sections. Except for the extension of the Klaipėda railway node, where additional 13.7 ha of forest will be cut, the rest of the schemes will be implemented within the existing right of way. No households need to be resettled.

The main residual impacts of the project are conversion of about 22 ha of mostly undeveloped land and some disturbance and nuisance during the construction phase, mostly to passengers and track-side dwellers. The works' design includes significant measures to mitigate impacts including animal passages, drainage and runoff treatment/storage facilities, as well as monitoring after project completion. All these measures should result in an improvement to the environmental situation in comparison to the "without project case".

Concerning the Natura 2000 sites, two sites are crossed by the project, specifically by the electrification works, and one site is adjacent to the project. In all these cases the project is inside the existing right of way. Several other sites are in the immediate vicinity of the railway line. The sites closest to the works are summarised in the following table:

Natura 2000 site		**Distance**	**Comments**
LTVIN0025	Kenos upė	Crossed	Electrification project
LTVIN0009	Neries upė	Crossed	Electrification project
LTKAI0005, LTKAI0006	Būdos – Pravieniškių miškai	Adjacent	Electrification project
LTJOA0006	Gaižiūnai	0.23 km	Electrification project
LTTEL0011	Gelžio ežero	0.05 km	Track duplication project Appropriate assessment according to Art 6(3) of Directive 92/43/EEC carried out
LTTEL0001	Germanto ežeras	0.40 km	Track duplication project Appropriate assessment according to Art 6(3) of Directive 92/43/EEC carried out
LTNER0005	Kuršių nerija	0.80 km	Significance of impact on Natura 2000 sites has not been determined.
LTSIA0005	Rėkyvos pelkė	1.00 km	Modernisation and electrification project

The conclusions of the Competent Authority, Ministry of Environment, concerning the absence of significant impact on sites were documented by means of issuing formal declarations (Form A) or in the screening out or environmental approval decisions.

Rolling stock component

The project consists of the acquisition of new rolling stock for replacement of the existing obsolete rolling stock for regional services, mostly on the Vilnius – Klaipeda route.

The old rolling stock to be replaced does not correspond to current passengers expectations of performance and comfort and is a deterrent for those who would potentially switch from road transport to rail. The main benefit of the operation consists in increasing the attractiveness of the railway service and contributing to prevent further modal shift towards the road transport. In the absence of such investments, the rail service quality would deteriorate further and encourage the use of road transport with the associated negative impacts in terms of safety, noise, energy consumption and associated emissions.

In addition, the new rolling stock will be equipped with the state-of-art technology and is expected to be more energy efficient than the existing one; despite higher performance of the new rolling stock the energy consumption is not expected to increase and may be even reduced. The new rolling stock has lower noise emissions than those of the rolling stock to be replaced, so the noise emissions of the railways themselves are expected to be lower.

The new rolling stock will be maintained in existing workshops. The project does not require the construction of a new depot or the extension of the existing ones.

EIB Carbon Footprint Exercise

The project 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 infrastructure component of the project and the

emission of the financed rolling stock in an average year of operation over a 34 year assessment period:

- Forecast absolute (gross) emissions are 88,700 tonnes of CO2 equivalent of which about 84,600 tonnes are third party emissions; and
- Forecast emissions savings are 32,500 tonnes of CO2 equivalent.

The project assessment boundaries are:

- In the absolute case:
  - the railway sections Kena – Vilnius, Kaisiadorys – Siauliai and Telšiai – Lieplaukė, totalling 186 km along the existing infrastructure,
  - new rolling stock (diesel multiple units) with annual mileage of approximately 1,400,000 km/year for the 7 new units.
- In the baseline case:
  - the same railway sections and road network of approximately the same length,
  - rolling stock that will be replaced (locomotives and passenger coaches) with annual mileage of approximately 1,100,000 km/year for the fleet of the replaced locomotives.

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

For the schemes that were subject to EIA the public consultation was carried out within the framework of the EIA.

For the schemes that were screened out by the Competent Authority, the Promotor, published the relevant information, including the reference to the screening out decision in the most printed newspapers in Lithuania.

No complaints have been launched concerning the environmental approvals of the project.