

## Environmental and Social Data Sheet

### Overview

Project Name:	ESTONIAN ROLLING STOCK (FL 2008-0704)	
Project Number:	2013-0265	
Country:	Estonia	
Project Description:	The project is a major allocation under the structured programme loan "EU FUNDS CO-FINANCING 2007-2013 (EST) (2008-0704)" and concerns the acquisition of 18 Electric Multiple Units (EMU) for AS Eesti Liinirongid (Elron). The EU Commission's co-financing decision has been issued on 01/27/2010.	
EIA required:	no	
Project included in Carbon Footprint Exercise <sup>1</sup> :	no	

(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 project does not fall under either Annex I or Annex II of the Environmental Impact Assessment directive 2011/92/EU, not applicable to manufacturing and use of rail rolling stock.

The project is expected to include some positive environmental impact by helping the railways to maintain modal share in key sections of the passenger markets. The new trains have the potential to generate significant energy savings, emission reductions and safety improvements compared to the old fleet. Rail transport may also improve noise levels on an aggregate basis.

Manufacturing of these passenger trains is expected to take place in existing plants. The Promoter requires that the passenger trains be manufactured in accordance with the Technical Specifications for Interoperability (TSI) and applicable EU environmental regulations as transposed in Estonia regarding noise emissions and safety. Overall, the project complies with relevant EU and national environmental legislation.

### Environmental and Social Assessment

The project concerns the acquisition of 18 Electric Multiple Units (EMU) and purchase of special diagnostic and depot equipment. In addition, small reconstruction works in the existing depot have been carried out. Hence the project does not fall under Annex I or II of directive 2011/92/EU. Given the nature of the project, a biodiversity assessment was not required.

The passenger trains will fulfil the EU TSI interoperability standards, but considering the specific characteristics of railways in the Republic of Estonia. The design of the new EMUs has been assessed against the requirements of Directive 2008/57/EC on the interoperability of the rail system within the Community. Concerning this, the maximum levels of noise for rolling stock for railways have been established by the Commission. According to these, the established limits should be applied to the new rolling stock.

<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.

The vehicles that are registered in Member States require authorisation from the national railway authorities for starting operations. One of the conditions for granting authorisation is compliance with health and safety standards, environmental protection and technical compatibility with infrastructure. Within this context, the trains will be equipped with electrodynamic braking, avoiding cast iron dust emission and lower noise levels in the bogies, inter car links, noise reduction in gears and in traction motors, which will comply with the regulations in force.

The project predominantly involves replacing assets nearing obsolescence with new assets, rather than the provision of additional rail capacities. The increased comfort and attractiveness of the new passenger trainsets is hoped to stem the long term trend of declining passenger numbers and may temporarily increase ridership, but the competitive situation vis-a-vis car travel will not change significantly. Nevertheless, implementation of the project will have a positive impact on the environment, as due to higher environmental performance of the new vehicles.

The trains will be more energy efficient than the old fleet as a result of avoiding losses in starter resistors, reusing of energy stored in electrodynamic braking and reducing the energy used for heating the passenger compartment in the winter. The thermal insulation of the railcar will comply with climatic requirements, resulting in less heat loss through railcar body.

The passenger compartments will be equipped with air conditioning facilities, ensuring stable temperature in summer as well as winter. The compartments will have dedicated spaces for baby carriages, wheelchairs and bicycles and the trains with low platforms ensure accessibility to persons with reduced mobility (TSI PRM).

The Promoter decommissions the trains to be scrapped according to its standard scrapping and sale of train procedure, ensuring a consistent handling of scrapping and sale of vehicles in line with their technical conditions, safeguarding the operating safety and optimising the fleet structure. Usually, it needs to outsource this activity to a registered company that will be in charge of vehicle scrapping according to national Estonian legislation.

New electric trains offer clean and high quality transport service. The purchase of new environmentally friendly trains contributes to increasing the attractiveness and safety of alternatives to private cars in Tallinn and its vicinity. This creates the conditions for better regional coverage of the public transport service in the whole area. The purchase of environmentally friendly and energy efficient electric trains also directly contributes to achievement of the objectives set for the Baltic Sea Region.