Luxembourg, 17 March 2017

Environmental and Social Data Sheet

**Overview**

<table>
<thead>
<tr>
<th>Project Name</th>
<th>MITSUI RAIL EUROPE LOCOMOTIVE LEASING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Number:</td>
<td>20160614</td>
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<tr>
<td>Country:</td>
<td>Germany (50%), Austria (30%), Italy (20%) (Indicative estimate)</td>
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<tr>
<td>Project Description:</td>
<td>Acquisition of a fleet of 67 new electric locomotives for leasing to European rail service operators mainly for freight operations in Germany, Italy and Austria.</td>
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</tbody>
</table>

EIA required: No

Project included in Carbon Footprint Exercise¹: Yes

**Environmental and Social Assessment**

The project consists of the acquisition of 67 new electric locomotives for leasing to European rail service operators (Railway Undertakings in EU terminology) mainly for freight operations. The locomotives will all be authorised for placing in service in Germany and Austria, a large share will also be authorised for placing in service in Italy and Switzerland, which is important for trans-Alpine traffic, and some for operations in Hungary.

Locomotive acquisition is not part of a plan or programme subject to the Strategic Environmental Assessment (SEA) Directive 2001/42/EC. The project does not fall under either Annex I or II of the Environmental Impact Assessment (EIA) Directive 2011/92/EU as amended, as manufacturing and use of rail rolling stock is not included in either list. Therefore, no EIA is required for the project.

The new rolling stock will be operated on European markets, where the average age of the existing locomotive fleet is typically in excess of 20 years. The services that the locomotives will provide will mainly replace existing rail services. This has a positive impact on the environment as the new vehicles will be more energy efficient and generate less noise. In addition, the new, flexible, fully interoperable, and cost-efficient locomotives should be able to improve the competitive position of rail services within the targeted transport market.

The main benefit of the operation thus consists of improving the attractiveness of the railway service. The project is expected to prevent a modal shift of existing rail freight services towards road and also to allow a modest increase of the rail modal share, hence to have positive impact in terms of energy consumption and associated emissions.

In the manufacturing of the locomotives environmentally friendly processes and materials (e.g. water-based paint systems) are used. The recoverability quota is 98% of which 94% through recycling.

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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.
The new locomotives will comply with the relevant European Technical Specifications for Interoperability (TSI) including those for noise emissions. Their maintenance will take place in existing workshops in Europe (mainly full service leases), in accordance with UIC/national railway specifications and EU environmental regulations.

**EIB Carbon Footprint Exercise**

The Project is included on the following basis. Estimated annual greenhouse gas emissions of the financed locomotives in an average year of operation:

- Forecast absolute (gross) new rolling stock emissions are 88,800 tonnes of CO2 equivalent; and
- Forecast emissions savings are 47,500 tonnes of CO2 equivalent.

The project boundaries are:

- In the absolute case, the services provided by the new locomotive fleet procured under the project would be around 12 million train-km per year on the served markets across Europe. It has been prudently assumed that 10% of these services concern transports that – with the new locomotives - can be gained from road transport;
- Emissions savings come from, both (i) the lower emissions resulting from the fact that train services are provided with state-of-the-art locomotives procured under the project instead of older locomotives; and (ii) the lower emissions resulting from the modal shift towards rail, for the element gained from road transport.

The forecasts in the baseline and absolute cases are based on Services’ project specific assumptions about the workload of rail services and energy efficiency of rail operations. In the baseline case, a portion of emissions from heavy goods vehicles is included using Service’s standard emission factors, equivalent to those freight services 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.

**Conclusions and Recommendations**

- The rolling stock is mainly intended to provide service that would be provided in the without project scenario by older locomotives, which has a positive impact on the environment. For the market served, the project is expected to enable the freight railways to avoid a modal shift towards road, and contribute to some strengthening of the rail modal share, resulting in positive environmental impacts. 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 CO2 emissions. The purchase of rolling stock does not fall under either Annex I or II of the Environmental Impact Assessment (EIA) Directive 2011/92/EU, as amended; so an EIA is not required.
- Considering the above, the project is acceptable for Bank financing from an environmental point of view.