

## Environmental and Social Data Sheet

### Overview

Project Name:	ALEXANDRIA RAML TRAM
Project Number:	20160125
Country:	Egypt
Project Description:	Rehabilitation of the 'Raml' tram line in Alexandria, Egypt, including grade separating parts of the tracks and purchase of new rolling stock.
EIA required:	yes
Project included in Carbon Footprint Exercise <sup>1</sup> :	no

### Environmental and Social Assessment

The prime objective of the project is to turn the existing ill-functioning Raml tram in Alexandria into a modern and efficient tram line with up to-date infrastructure, systems and rolling stock. The existing Raml Tram is a at grade 14.4 km long with 31 stops and runs east-west across the city from Victoria Station in the east to Raml Station in the west. After project completion, the reconstructed and modernised tram line will have the same length and 25 stops, while services are done by modern 65 meter trams with double the transport capacity. The number of services per hour as well as the average driving speed will be doubled. About half of the tram line is foreseen to be elevated, to reduce conflicts with mixed traffic and ensure a more reliable service. The depot will be modernised and enlarged to accommodate the new and larger tram vehicles.

#### Environmental Assessment

*Compliance to local environmental legislation:* The Egyptian Environmental Affairs Agency (EEAA) is the primary regulatory body responsible for environmental matters in Egypt. It operates in accordance with the Law on Protection of the Environment (Law No. 4, 1994) and amendment by Law No. 5, 2009. According to the EEAA the Project falls under Category C, a project for which it is compulsory to submit the full Environmental and Social impact Assessment study (ESIA) including consultations and disclosure. Accordingly, an ESIA was drafted in 2016, which was then updated in 2021/2022. Final consultation meeting took place on 27 June 2022, after which the ESIA was finalised and issued for approval to the competent authority. The EEAA approval is expected in September 2022 and disbursement will be subject to receipt of this approval.

<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.

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The ESIA includes an ESMP and the Promoter undertakes to implement this ESMP, among others by including it in the tender documents for the work and supply contracts.

*Assessment of alternatives:* the project will use the existing right of way of the current tram line but the Promoter examined alternative vertical alignments, to reduce in particular the adverse impacts of the tram on mixed traffic and on traffic safety. Each critical junction has been assessed, and the proposed design includes elevation of about half the line. In general, the viaducts are in the middle of the road corridor (where the current tracks are) and apart from the visual impact, other environmental impacts are rated low in the ESIA. If the viaducts are however in proximity to buildings, noise and vibration impacts are planned to be mitigated by special measures (sleeper pads, noise barriers).

*Environmental impacts and mitigation:* Overall the project has positive environmental impacts once in operation, as the rehabilitated and partly elevated tramline is expected to provide a clean and competitive urban mobility alternative, allowing people to shift from car or minibus to electric collective transport. This will reduce traffic congestion and reduce the emission of noise and pollutants from traffic in dense urban neighbourhoods and the risk of traffic accidents.

The project is Paris aligned and contributes to climate action objectives, given its potential to reduce GHG emissions of the transport sector through modal shift towards electrified collective transport.

Construction activities will result in some community disturbance and nuisance, mainly:

- **Noise/dust.** The baseline survey shows that current noise levels in the tram corridor are already high, due to the high density nature of the surrounding urban area, the intense traffic in the corridor but also due to the obsolete tram tracks and old rolling stock. The project is expected to reduce noise emissions from the tram significantly, amongst other by using non-metallic disc brakes, jointed tracks with continuously welded rail and where needed other noise reducing techniques such as ballast mats or floating slabs. During construction, the contractor will be required to keep construction noise and other nuisances to a minimum. Localized noise barriers will be erected as necessary around items such as generators or high duty compressors. A dust management plan is envisaged for each specific site as part of the Contractor ESMP.
- **Project-related traffic.** The project will improve the traffic situation substantially, as the tram is to be elevated at all of the critical junctions. During construction, there will be disturbance of the traffic flow that may affect the local communities and local environmental conditions. Also public transport provision will be affected. A traffic management plan will be developed to minimise impacts.
- **Recycling of material, and storage of possibly contaminated ballast and sleepers.** Hazardous waste will only be transported by licensed waste service providers and disposed of in a licensed landfill, in line with art 28, 31 and 33 of the Egyptian law 9/2009. A Waste Management Plan for hazardous and non-hazardous waste will be developed and implemented by the contractor and its workers will be trained on proper handling procedures.
- **Cultural heritage:** Alexandria is rich in cultural heritage, and several sites are on walking distance from the tram line. It is however not expected that the rehabilitation works will affect any cultural heritage. In case something is found during excavation works, Egyptian Law 17/1983 and the regional department of the Antiquities Directorate regulate and supervise its handling.
- **Natural disaster risks:** Although the city normally does not experience annual rainfall greater than 200mm, flooding does sometimes occur due to the lack of compatible infrastructure, the sinking ground-levels, and rising wave levels.

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The area is also considered to be a high-seismic area, with high earthquake and tsunami hazard. A climate vulnerability assessment was made and final design will use Earthquake-Resistant construction techniques and climate adaptation measures, in particular the inclusion of additional open-cut storm drains to collect and discharge storm water.

- Protected natural areas: the tram is located in dense urban built-up area, and the ESIA assessed that there are no recorded threatened animals or plants presence in the Project area. In addition, the area is not located within any Important Bird Area (IBA) or main bird migration routes, the closest IBA being the Mariout Lake, approximately 6 km south of the tram line. The closest natural protected area is 80 km away (Omayed UNESCO designated Biosphere Reserve).

### **Social Assessment**

The project follows the existing alignment of the Raml tram. Only very limited private land purchase is foreseen at this stage, as any affected land and structures identified are owned by government organizations. Nevertheless, shops and religious structures at the current tram stations will be permanently affected and renters and their employees will need to be compensated. Also stations are infrequently used by homeless persons including street children. During the construction, which should last approximately 24 months, some livelihood activities may temporarily be impacted, as fences around construction sites may limit access and, as such, local business and street vendors may experience temporary loss of income due to reduced customer presence. A resettlement policy framework has been prepared and agreed describing affected public properties and people, the relevant policy framework and compensation mechanism for both temporary and permanent impacts. A resettlement action plan will be developed and disbursement will be subject to compliance with the RFP and RAP, and compliance with relevant EIB Social Standards.

The rehabilitation of the tram is expected to coincide in time with the modernisation and transition of the Abu Qir railway into a metro. Cumulative impacts of these concurrent infrastructure developments are expected to result in increased traffic congestion and disruption which has been identified as a source of concern for both the Promoter and the Alexandria authorities. Additional bus services are planned to compensate for the temporary reduction of public transport services.

About 40% of the current passengers of the tram are female. The Promoter will, with the help of Egypt's National Council for Women and a dedicated consultant, identify and implement possible actions to address gender equality issues, in particular in station design, in operational procedures (harassment reporting system) and in awareness (capacity building).

### **Public Consultation and Stakeholder Engagement**

Egypt's Environmental Law no. 4/1994 and its executive amendment no. 9/2009, modified with Ministerial Decrees no. 1095/2011 and no. 710/2012, require that Public Consultation should be held prior to the approval of Projects which need an ESIA Study. Scoping phase consultation was done in 2016 when the transport strategy and feasibility studies were completed, and again in the beginning of 2020. The final public consultation was conducted in June 2022, where the final project design and its impacts were presented.

A stakeholder engagement plan (SEP) was developed and is being implemented. During project preparation in 2016, there have been consultations with the local transport authority (APTA) as well as with local community members through focus group meetings, tram drivers and tenants of shops at the stations, and also in 2021 during the update of the feasibility study and the ESIA there has been engagement with various stakeholders, including vulnerable groups, district heads, shop tenants, traffic authority, directorate of antiquities.

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### **Other Environmental and Social Aspects**

The Promoter will implement the ESMP and will also require the contractor to prepare and implement a Construction Environmental and Social Management Plan (CESMP), which will outline the management programme to be further developed for the project and will address issues such as community relations, community safety, socio-economic disturbance, traffic management, waste management and E&S performance monitoring. The tender documents will require the main works contractor to mobilise a dedicated social engagement team that is tasked with communicating to affected people in a timely manner.

The environmental and social capacity of the Promoter is developing but remains weak, considering the high workload of the Promoter. A Consultant Engineer has been mobilised who's responsibility includes Health and Safety management, Environmental Management, Construction Disturbance Management Plans and imposing on the contractor(s) all the requirements listed in the ESIA/ESMP. The Consultant Engineer will prepare a management system for the monitoring and control of environmental impacts during the execution of the works and carry out regular audits.

The Promoter undertakes to assign the responsibility for the implementation of the ESMP and the RPF to a staff member with adequate environmental respectively social expertise.

### **Conclusions and Recommendations**

The project was subject to an ESIA which was completed in the beginning of 2022 and which includes an ESMP. The promoter will be required to implement the project in accordance to relevant EIB Environmental and Social Standards. Prior to first disbursement, the Bank requires the approval of the ESIA by EEAA and completion of an acceptable RAP and prior to each disbursement to the Project the Bank will require proof that project implementation is in compliance with the ESMP, the RFP and RAP. The promoter will undertake to implement the Project in compliance with the SEP, the ESMP and the RAP and will incorporate the ESMP in relevant civil works contracts for the project.

The Promoter is assisted by a competent consultant Engineer with a comprehensive term of reference, including supervision and implementation of the ESMP. Bank finance will be subject to continuous mobilisation of the Consultant Engineer. The Promoter undertakes to assign the responsibility for the implementation of the ESMP and the RAP to a staff member with adequate environmental respectively social expertise.

The project will improve urban transport operations in Alexandria and is expected to reduce the emission of pollutants by the transport sector, as well as improve road safety. Considering the above, the project is acceptable to the Bank.