

Cairo Metro Line II Purchase of trains

State Sector Project Assessment

Prepared in line with the EBRD's Access to Information Policy¹

Country	Egypt
Sector	Transport and Municipal Infrastructure
Op ID	46875
Distribution Date	25/05/2023
Disclosure Date	24/07/2023

Operation Description

The Borrower is the Arab Republic of Egypt. The beneficiary is the National Authority for Tunnels ("NAT"), an implementing agency under the jurisdiction of the Ministry of Transport in Egypt, responsible for the implementation of the Project. The operator is the Egyptian Company for Metro (the "ECM"), 49% owned by the Egyptian National Railways ("ENR") and 51% by NAT.

The facility consisted of a sovereign loan to Egypt in the amount of up to EUR 175 million divided into two tranches (i) a committed tranche of EUR 100 million and (ii) an uncommitted tranche of EUR 75 million to co-finance the procurement of 13 new train-sets under a long-term supply and maintenance contract (the "Project").

In August 2016, the Project scope was amended to include the acquisition of two new locomotives to replace the existing locomotives reaching the end of their useful asset life, with no change in the EBRD financing amount. This was Board approved in July 2016. The Project scope was revised again in December 2016 following a request by NAT, to reduce the number of train-sets to be acquired as part of the Project from 13 to 6 based on an updated demand assessment, which concluded that the demand for additional trains on CML2 would be lower than originally envisaged given the slow development on the construction of Cairo Metro Lines 3 and 4.

¹ As required by Section IV paragraph 1.4.8 of EBRD's Directive on Access to Information (2019), the Bank shall disclose information (excluding confidential information) contained in Operational Performance Assessment (OPA) reports for State Sector Projects selected for extended review, within 60 calendar days after completion of the relevant OPA report.

The original Project was approved under the Bank's Integrated Approach ("IA") to address key challenges to transition in the urban transport sector in Cairo. Transition impact of the Project itself, approved under the Bank's previous TI methodology, focused on introducing new frameworks for the urban transport sector, increasing private sector participation, corporate restructuring, institutional strengthening and youth inclusion. More specifically, the Project TI focused on:

- Framework for markets, namely through (i) use of a supply and maintenance approach in contracting the rolling stock to ensure improved long-term availability of assets; (ii) the introduction of a Public Service Contract ("PSC") for metro operations between NAT and the operator ECM.
- Demonstration of successful restructuring, namely through the implementation of a grant funded Financial and Operational Performance Improvement Programme ("FOPIP") designed to assist ECM in improving its financial sustainability, with the outputs relating to measures to control the cost base and increase revenues and focus on improving the fare box ratio to achieve a better operational sustainability.
- Inclusion, namely through the introduction of best corporate standards and practices to the public procurement process to encourage private sector contractors to open up on-site training opportunities for unemployed young people to enhance their skills and overall employability.

Relevance

The Project is/ was in line with the Bank's Strategy for Egypt, the Municipal and Environmental Infrastructure Sector Strategy and with the Agreement Establishing the Bank.

The Project is fully in line with MEI Sector Strategy which stresses the importance of achieving: "...sustainable delivery of essential services throughout the EBRD region..." and states that "...the Bank will place environmental, health and safety, social and low-carbon imperatives at the core of operations; this will contribute to address concerns of infrastructure users." Cairo Metro also contributes to the Sustainable Energy Initiative ("SEI") component of the Bank's Sustainable Resource Initiative ("SRI"). The SEI (Phase 3) document states that in order to capture the enormous energy efficiency potential in the transport sector, "...the Bank will focus on transport-related sustainable energy components of major infrastructure and public transport." In addition, the Project is in line with the Green Economy Transition Approach ("GET"), which states that "...significant opportunities for the GET are in assets owned by the public sector including for example municipal infrastructure in the water, wastewater, waste and public transport sectors, and in public buildings."

Cairo Metro is the first transaction presented under the IA and was designed to address some of Cairo's stifling traffic problems by alleviating congestion and improving regulation. Specifically, the Project increases the capacity of Cairo Metro Line II as more trains become available for transportation of passengers and fleet availability improves. The Bank, at the time of structuring, developed an integrated approach to support Egypt's efforts in addressing the challenges faced and to respond to the critical need to invest in the urban transport sector of Cairo.

The Project allowed NAT to secure financing required to address Cairo's urgent infrastructure needs, improve the metro's level of service and contribute to decreasing the carbon emission profile of the sector. It was also designed to include gender and inclusion elements and included on-site training opportunities for unemployed young people.

There has been considerable progress in relation to the Transition Impact of the Project, notably including (i) successful delivery of the rolling stock financed through the Project under supply and maintenance contract improving private sector participation in the O&M of the metro system; (ii) the signing of the PSCs between ECM and NAT for the operations and maintenance of Cairo Metro Lines 1 and 2; (iii) training of more than 83 youths to enhance their skills and overall employability, and (iv) increase in fare box ratio demonstrating better operational sustainability on the line.

The Project ensures momentum given the significant progress made towards the achievement of the ambitious Transition Impact agenda under the Project.

The Bank's financing is additional through financing structure as it offers a tenor, which is longer than available to the Client in the market on reasonable terms and conditions. Additionality is also represented by the Bank's detailed industry knowledge and the ability to evaluate and assess the risks related to the public transport sector including support to strengthen the capacity of the client as well as standard setting given operational safeguards and environmental and social requirements.

As a result of EBRD's investment, NAT improved its metro operations and moved into a commercialised relationship with the operator ECM under a Public Service Contract (PSC) based on KPIs.

It is also important to highlight the inclusion aspect, where best corporate standards and practices to the public procurement process were introduced encouraging the private sector suppliers to open up site training opportunities for unemployed young people to enhance their skills and overall employability.

Effectiveness

The Project Loan Agreement was declared effective on May 2018. Following the Bank's no-objection, NAT signed the supply contracts for (i) the procurement of 6 train-sets from Hyundai Rotem ("HR") as well as (ii) the procurement of 2 locomotives from Socofer.

All 6 train-sets as well as their spare parts were successfully delivered to NAT by June 2022. The train-sets are now fully operational on the CML2. The 2 locomotives were delivered in December 2021 and are fully operational since March 2022. Batch 1 and 2 of spare parts have arrived in Egypt in September 2022 and April 2023 respectively.

As all 6 train-sets and 2 locomotives are fully operational on line 2 therefore impacting service levels of reliability, efficiency and safety and

as such increased ridership. Also, the introduction of the PSC and the implementation of the long-term outsourced maintenance contract are factors which have contributed to the sustainability of metro services and are resulting in improved financial and operational performance of the ECM.

The Project, through the procurement of new rolling stock ensured the following:

- 1) Increased capacity on line II responding steadily to the increasing demand;
- 2) Improved sustainability of Line II operation by the procurement of new rolling stock;
- 3) Enhanced efficiency of fleet maintenance through the long-term outsourcing to the private sector leading to financial sustainability of ECM by reducing its in-house maintenance task.
- 4) In addition, a training was conducted for 83 young unemployed people, who received vocational and on-site trainings that include maintenance skills in asset intensive sectors, which improved their skills and overall employability.

Efficiency

The Project implementing entity is the NAT. ECM is the principal operator of Cairo Metro Lines 1 and 2 under a PSC arrangement with the NAT.

It is worthy to mention that the increase in fare box ratio demonstrates better operational sustainability on the line. ECM's Farebox ratio (defined as the ratio of (i) ECM's revenues from fares to (ii) its total operating costs.) has been steadily rising from FY 2016/2017 to FY 2018/2019 and the Working Ratio (defined as the ratio of (i) ECM's total operating cost (not including depreciation) to (ii) its total revenues) has been declining. EBRD's committed tranche of EUR 100m has been fully disbursed against the supply contracts as of December 2022. However, the loan is not yet fully repaid as per the signed loan agreement.

The supply contract for the 6 train-sets and their spare parts was signed with Hyundai Rotem on 6 August 2019. The completion period is 27 months from the effective date of the supply contract in addition to 24 months maintenance during the warranty period and the supply contract for the 2 locomotives and their spare parts was signed with Socofer on 6 August 2019. The completion period is 17 months from the effective date of the supply contract in addition to 24 months maintenance during the warranty period.

In January 2021, the final delivery of the goods was extended to 30 June 2021 and the final date of completion tests and commissioning of the goods was extended to 30 September 2021, due to delays related to COVID-19 restrictions.

Given that this Project is the first sovereign transaction with NAT, the public tender to award the supply contracts of the train-sets and the two locomotives took more time than anticipated. In addition to that and during contracts' implementation, further delays took place due to Covid19, which was a force majeure case. Despite the above-mentioned delays, the Project is now completed and accordingly fully disbursed with all rolling stock/ locomotives operational on line 2.

- 83 young unemployed people finished the training in September 2022 as part of the inclusion component in the rolling stock contract with Hyundai Rotem. This helped enhance their skills and overall employability by receiving vocational and on-site training that meets the quality standards for rolling stock maintenance in asset intensive sectors.
- The PSC was signed between ECM and NAT defining the relationship between both entities and setting clear roles with KPIs for each as well as the use of supply and maintenance approach in contracting the rolling stock to ensure improved long-term availability of assets.

Demonstration of a successful restructuring, namely through the implementation of a grant funded Financial and Operational Performance Improvement Programme ("FOPIP") designed to assist ECM in improving its financial sustainability, with the outputs relating to measures to control the cost base and increase revenues and focus on improving the fare box ratio to achieve a better operational sustainability.

Implementation This is not a Resilience Framework project. **Summary**

This is a sovereign transaction to the Government of Egypt. The loan financed the procurement of 6 air-conditioned train sets and 2 locomotives to be operated on Cairo Metro Line II as well as its spare parts and maintenance equipment. This transaction is an investment in the public transport infrastructure within Cairo to address some of Cairo's traffic problems by alleviating congestion and improving regulation.