



Luxembourg, 24/01/2023

Environmental and Social Data Sheet

Overview

Project Name:	<i>NAIROBI SUSTAINABLE TRANSPORT PROGRAMME BRT 3</i>
Project Number:	<i>2015-0460</i>
Country:	<i>Kenya</i>
Project Description:	<i>Development and Construction of Bus Rapid Transit (BRT) Line 3 comprising; 13.8km of dedicated bus lanes and bus stops, bus depot at Dandora with charging facilities, construction of an operations centre, procurement of 120 18-metre long articulated electric buses and reconstruction of key junctions along the BRT route to facilitate movement of traffic and pedestrians.</i>
EIA required:	yes
Project included in Carbon Footprint Exercise ¹ :	yes

(details for projects included are provided in section: “EIB Carbon Footprint Exercise”)

Environmental and Social Assessment

Environmental Assessment

Compliance to local environmental legislation: The Kenyan National Environment Management Authority (NEMA) is the primary regulatory body responsible for environmental matters in Kenya. It determined that an ESIA was to be conducted as per the requirements of the Environmental Management and Coordination Act (EMCA), (Amendment) Act, 2015 and the Environmental (Impact Assessment and Audit) Regulations of 2003; Rev. 2018 as well as the requirements of the Lenders. Accordingly, a preliminary ESIA was drafted in 2016, which was then updated in 2021/2022. Final consultation meeting took place in the beginning of 2022, after which the ESIA was finalised, approved by the Promoter and issued for approval to the competent authority, which is expected at the end of 2022 and first disbursement will be subject to receipt of this approval.

The ESIA includes an ESMP and the Promoter undertakes to implement this ESMP and include it in the tender documents for the work and supply contracts.

Assessment of alternatives: the project follows the existing right of way of existing roads and the routes are derived from the Integrated Urban Development Master Plan for the City of Nairobi of 2012, which assessed different mobility alternatives for the city and identified 6 BRT corridors, including the corridor for line 3. The Promoter examined alternative vertical alignments, to reduce in particular the adverse impacts of the BRT on traffic and traffic safety. Critical junctions have been assessed and the proposed design includes elevation of parts of the line. In general, the viaducts are in the middle of the road corridor and apart from the visual impact, other environmental impacts are rated low in the ESIA.

Environmental impacts and mitigation: Overall, the project has positive environmental impacts once in operation, as the partly elevated BRT is expected to provide a clean and competitive urban mobility alternative, allowing people to shift from car or minibus (*Matatu*'s) to electric

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.



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bus transport. This will help to reduce traffic congestion, the emission of noise and air pollutants from traffic in dense urban neighbourhoods and the risk of traffic accidents.

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

- Noise/air quality. Air quality and noise measurements were carried out at 7 predetermined sampling points along the BRT corridor at main receptor points such as dwellings, schools, hospitals, and showed that the current ambient air quality complies with the Environmental Management and Co-ordination (Air Quality) Regulations 2014 except for the concentration of PM10 & 2.5. The baseline survey also showed that current noise levels are above the thresholds in the Environmental Management and Co-ordination Act (LN. 61 of 2009), due to the close proximity of residents to the road and the intense traffic in the corridor. Consequently, the contractor will be required to keep construction noise, air pollution and other nuisances such as dust to a minimum. The Contractor will adhere to the EMCA Noise and Excessive Vibration Pollution Control Regulation, 2009 and will be required to implement noise control measures amongst exposed work force and community.
- Project-related traffic. The project will improve the traffic situation substantially, as the BRT will be elevated at some 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, as stipulated in the ESMP.
- Hazardous waste will only be transported by licensed waste service providers and disposed of in a licensed landfill, in line with Waste Management Regulations (2006) of the Kenya Gazette No. 69, Legal Notice No. 121. A Hazardous Substances Management Program will be prepared and implemented by the Contractor, as stipulated in the ESMP.
- Climate risks: Nairobi experiences frequent floods with significant damage to infrastructure. Flooding is often caused by lack of compatible drainage infrastructure as well as the absence of regular maintenance and cleaning. The design of the BRT includes therefore enhanced drainage, using box culverts at locations with higher risks. Other relevant climate risks are increasing temperatures and heat waves, and the design therefore includes covered bus stops and air-conditioned buses.
- Protected natural areas: the BRT is located in dense urban built-up area, and the ESIA assessed that there are no recorded threatened animals or plants in the Project area. There are no natural protected areas nearby. About 19 species of birds were observed. All the species were listed by the IUCN Red list as least concern thus not under any conservation threat.
- Loss of vegetation: Along the BRT corridor, there are trees that need to be removed. Prior to start of work, a comprehensive vegetation impact survey will be done. The ESMP requires the contractor to avoid cutting down trees when possible, and to initiate a tree planting exercise within the project area, following Nairobi City County Government policies, which stipulate that tree losses will be replaced in a ratio of 3:1.
- Cultural heritage: The Kariokor Market, along the alignment, is gazetted as historical site. The Project is not expected to directly affect the market. Nevertheless, the agreed ESMP requires the contractor to draft a Cultural Heritage Management Plan and a Chance Finds Procedure prior to start of construction.

The project is Paris aligned according to Annex 2 of the EIB's Climate Bank Roadmap. Moreover, given its potential to reduce GHG emissions of the transport sector through modal shift towards electrified collective transport, the Project provides a substantial contribution to Climate Mitigation according to Annex 4 of the EIB's Climate Bank Roadmap and a substantial contribution to Environmental Sustainability.



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EIB Carbon Footprint Exercise

With the project, the annual emissions in a standard year of operation were estimated at 3 kT CO₂ equivalent per year (absolute emissions). Without the project, namely with the current mode split between fossil fuelled minibuses, private vehicles and mopeds, the annual emissions were estimated at 37 kT equivalent per year (baseline emissions). Therefore, the emissions savings for the project in a standard year of operation were estimated to be approximately (-) 34 kT of CO₂ equivalent per year. These calculations are based on the current country grid.

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.

Social Assessment

The Project is expected to generate important social benefits during the operations phase by enhancing mobility and accessibility within the Nairobi Metropolitan Region, and by reducing travel time and improving comfort and overall service quality for users. Access to a safe, reliable, and affordable public transport system has been shown to alleviate poverty, especially for women and serves as a catalyst for women's economic empowerment. Also during construction and operation the Project will contribute to local employment generation for both skilled and unskilled labour and procurement of local goods and services.

The main adverse social impacts will occur during the construction phase and are related to the acquisition and expropriation of land needed for the Project.

The Project design and planning phases have aimed to minimise as much as possible the acquisition and expropriation of lands and the related negative impacts on the local communities located nearby or on the Project sites. Some private land purchase is foreseen at this stage, though most affected land identified is located within an existing Right of Way (RoW). Nevertheless, there has been significant encroachment into the RoW (30-60 meters in width depending on the location) and adjacent areas by mostly informal commercial traders and vendors who need to be displaced, along with those people whose land will be used for the establishment of the Project. The construction of the Project will therefore result in both physical and economic displacement along the BRT route. Temporary access restrictions along the road working sites will also result in disruption of economic activities and revenue losses, in particular for commercial traders and vendors.

The Promoter prepared a Resettlement Policy Framework and an interim Resettlement Action Plan (RAP) in line with national requirements as well as EIB and AFD regulations and standards. The interim RAP describes affected properties, people and livelihoods, the compensation, and the livelihood restoration for both temporary and permanent impacts arising from the implementation of the Project. The content of the interim RAP was endorsed by the Promoter on 7th September 2022.

According to the interim RAP, the Project will result in 88 affected private parcels of land and the physical displacement of up to 49 privately owned or ancillary structures. Moreover, it is currently understood that the construction of the Project will also result in the economic displacement of approximately 5,700 Project Affected People (PAPs), mostly informal commercial traders and vendors, who use the project corridor for their commercial activities. Considering the high mobility of the PAPs present within the working sites, the Project Promoter has committed to conduct a verification census and revise asset valuation exercise to capture data on these PAPs approximately 8–10 months prior to construction to provide a more accurate baseline. The verification census and stakeholder engagement will also aim to collect additional information on potentially vulnerable groups such as illegal immigrants and refugees present along the route to identify measures to mitigate any potential impacts to



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their livelihood. The interim RAP will be revised with the final numbers and a final RAP Report is expected to be prepared 6–8 months prior to construction.

PAPs will be entitled to different types of compensation as well as additional assistance and livelihood restoration support based on their eligibility and in line with Kenyan requirements and EIB and AFD standards. Agreed entitlements include provision of cash compensation and allowances, replacement of structures (assisted self-build approach), livelihood restoration programme, access to Project development benefits such as formal wage-based employment, and assistance to vulnerable people, all subject to eligibility as defined in the interim RAP.

To ensure adequate livelihood restoration support and adequate assistance to vulnerable people, the Project Promoter will also develop a three-pillar livelihood restoration program which will focus on 1) transitional support; 2) capacity building of PAPs; and 3) infrastructure improvement to develop new trading locations and vendor spaces such as small markets, linear markets widened footbridges and footpaths to accommodate traders. The livelihood restoration program to be developed as part of the RAP will aim to respond to the difficulties that households may face in restoring their livelihoods by complementing the cash and in-kind compensation that will be provided.

In addition to economic and physical displacement due to land acquisition for the Project, the operation of the new bus lines may affect the activity of existing private and informal minibuses operators (“matatus”), especially during the construction period. The Promoter undertakes to recruit a capable BRT operator but also to reorganise public transport, and for this they have already started discussion with Matatu industry. Technical assistance has been, and will continue to be provided to support the promoter and the local public transport industry with this task.

The project will have many work sites inside built up areas. Security enforcement may have implications on the safety and free movement of local communities if not properly managed. The Bank therefore requested that a security management procedure protocol is developed and entered into, between the Project and the competent authorities in order to ensure that site security is managed in a way that is respectful of human rights and to avoid unnecessary restrictions of movement.

Other potential risks related to the project are: poor application of obligations and working conditions towards employees during the construction and operation phase; non-compliance or partial compliance with occupational health and safety standards during the construction phase; risks of gender and sexual based violence. Compliance with these aspects will be managed through a robust ESMP, which includes environmental audits and dedicated plans such as a Workers Management Plan and a Gender Based Violence and Harassment (GBVH) plan, all in compliance with Lenders standards. Monitoring will be carried out by the Project Promoter and the project implementation consultant.

A grievance redress mechanism will be established to provide a formal avenue for displaced persons and other affected groups or stakeholders to engage with the promoter on issues of concern. Various points for placing complaints will be established including through the County Governments administration, the local chief’s office, NAMATA office, the contractor’s office, the Ministry of Transport, and representatives at the community level.

Public Consultation and Stakeholder Engagement

ESIA disclosure and consultations with the public for the Project were carried out in the beginning of 2022 in line with national legislation requirements. The ESIA has been published on the official Gazette and in a local newspaper.



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Stakeholder engagement activities for the preliminary RAP were conducted in January 2021 and October and November 2021 with key government and local authority stakeholders as well as selected Focus Group Discussions (FDGs) with potential PAPs along the RoW. Preliminary RAP engagement to date has focused on introducing the Project, discussing potential resettlement issues, and collecting views on potential resettlement concerns and options. Additional engagement was undertaken in July 2022 with trading associations, public benefit organisations, and relevant authorities to collect information on livelihoods and vulnerable PAPs and inform the development of livelihood restoration measures.

A draft Stakeholder Engagement Plan (SEP) that was developed as part of the ESIA is in place and sets out which external parties will be involved in the implementation and when, and what measures for engaging on the Project and associated activities are foreseen; this will be updated by the Project Promoter to incorporate resettlement and livelihood restoration engagement and construction specific activities.

Other Environmental and Social Aspects

To mitigate the limited environmental and social capacity of the Promoter, a Project Implementation Consultant (PIC) will be mobilised and this PIC will become responsible for not only design and work supervision but also for supporting the implementation of all E&S related plans, including RAP, and a responsibility to impose on the contractor(s) all the requirements listed in the ESIA/ESMP. The PIC will also approve the Construction Health and Safety Management Plan (CHSMP) for the works to be prepared by each contractor(s), before the respective contractor may start any activity on site. The PIC 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 RAP to staff members with adequate environmental respectively social expertise.

Conclusions and Recommendations

The project is expected to bring positive effects from both a social and environmental point of view, mainly in relation to the improved quality of public transport services, which on one side, are expected to result in a reduction of local air pollution, GHG emissions and road safety, and on the other side are expected to favour accessibility and social inclusion.

Based on the information provided by the Promoter, the Project is expected to also have some adverse impacts during the construction phase in terms of involuntary resettlement, loss of livelihood, as well as the usual construction impacts such as noise, dust, project-related traffic. These impacts have been taken into account in the ESIA and the ESMP as well as the RAP and will be either mitigated or compensated according to the Bank's environmental and social standards.

The Promoter will provide proof prior to each disbursement that the Project (a) is implemented in compliance with the SEP, the ESMP and the RAP, (b) that the ESMP is incorporated in relevant civil works contracts for the project, and (c) that the Grievance Management Procedure of the Project is operational.

The Promoter also undertakes to (a) implement compensation and livelihoods restoration measures set out in the RAP as validated by the Bank in accordance with the provisions set out in the RAP/LRP before the start of the works, (b) prepare a RAP Monitoring and Evaluation Plan before commencement of RAP implementation, and (c) submit to the Bank quarterly progress reports, an independent RAP Mid-term evaluation and a RAP completion



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audit.

The Promoter undertakes to make reasonable efforts to assess if there are labour risks associated with the primary suppliers of goods and materials essential to the core functions of the project. If the risk assessment identifies the presence of a significant risk in lower tiers of the supply chain, the Promoter shall resort to a primary supplier that can prove it is compliant with the Bank's labour standards.

Prior to first disbursement, the Bank requires the approval of the ESIA/ESMP by the competent authority (NEMA). Prior to first disbursement to works or supply contracts, the Promoter will update the ESMP and SEP, provide a Gender Action Plan, and provide the final version of the RAP that will also include a detailed livelihood restoration program budget, as well as a protocol to ensure that the management of site security is in line with the ESMP and Bank E&S standards.

The Promoter will procure the services of a competent Project Implementation Consultant (PIC) with a comprehensive terms of reference, including work supervision and supporting the implementation of the ESMP, SEP and RAP. Bank finance will be subject to continuous mobilisation of the PIC. The Promoter undertakes to assign the responsibility for the implementation of the ESMP and the RAP to staff members with adequate environmental and social expertise respectively.

Considering the above, the project is acceptable to the Bank.