

Nakkas - Basaksehir Motorway PPP Project

Location:	TÜRKIYE
Project ID:	52502
Business Sector:	Transport - Intermodal
Notice Type:	PRIVATE
Environmental Category:	A
Approval Date:	24 Jul 2024
Status:	Disbursing
Disclosure Date in English:	24 Aug 2023

Project Description

The provision of a senior loan of up to EUR 200 million in favour of Nakkas Otoyol Yatirim ve Isletme A.S. (the "Borrower", or "SPV"), a special purpose vehicle ultimately owned by Ronesans Holding A.S. ("Ronesans" or the "Sponsor"). Ronesans was awarded in 2020 a 20-year concession by the General Directorate of Highways of Turkiye ("KGM") for the construction and operation of a motorway connecting Nakkas and Basaksehir junctions in Istanbul.

Project Objectives

EBRD proceeds will be used to partially finance the Borrower's development, financing and other expenses to complete construction of the Nakkas - Basaksehir Motorway (the "Motorway"), within the scope of the implementation contract signed between KGM and the Borrower under the build-operate-transfer scheme.

The Project constitutes a section of the Northern Marmara Motorway ("NMM") which spans over the Asian and European sides of the wider Istanbul and Marmara regions, providing an alternative transit route bypassing the existing traffic, increased due to the growing population and economic activity. The section to be constructed as part of the Project is expected to provide a corridor between the heavily congested urban areas of Istanbul, and increase connectivity from these areas to the wider NMM network.

Transition Impact

ETI score: 60

The Project will contribute to Competitive and Integrated transition impact qualities.

1. **Competitive:** The Project will facilitate completion of the concession agreement awarded to the Sponsor on time and within budget.
2. **Integrated:** The Project will provide better connections to the NMM and alleviate congestion in the existing east-west corridors, leading to significant travel time savings, and connect industrial zones in the area.

Client Information

NAKKAS OTOYOL YATIRIM VE ISLETME AS

Nakkas Otoyol Yatirim ve Isletme A.S. is a special purpose vehicle holding the concession to design, finance, build, operate and maintain the Motorway. The Client is ultimately owned by Ronesans Holding A.S., an existing client of the Bank, and a diversified holding company incorporated in 1993, with activities in construction, real estate development and investments in energy and healthcare.

EBRD Finance Summary

EUR 250,000,000.00

Total Project Cost

EUR 1,469,286,600.00

The total project cost is estimated at circa EUR 1.3 billion to be financed by a combination of equity and debt.

Additionality

The Bank's financial additionality derives from offering a large volume needed to structure the Project and providing a long tenor. Non-financial additionality stems from ensuring application of international standards towards mitigating the environmental and social risks and promoting gender equality and economic inclusion.

Environmental and Social Summary

The Project is categorised A under EBRD's Environmental and Social Policy (2019) as it has the potential to have significant environmental and social (E&S) impacts associated with the construction and operation of the motorway. The Project is the final section (8th section) of the Northern Marmara Motorway (NMM). The motorway and the cable stayed bridge have been designed to meet current Turkish and international earthquake codes and regulations as well as the American Society of State Highway and Transportation Officials (AASHTO) Load and Resistance Factor Design (LRFD).

The Project is located in the western part of Istanbul and passes through 15 settlements in four districts (Basaksehir, Arnavutkoy, Avcilar and Catalca). Temporary construction components (i.e. two camp sites, surplus material dump sites, etc) will only be needed during the construction and temporarily affected lands will be reinstated to its original condition upon completion of the construction activities.

Benefits of the Project include but not limited to; enhanced transport links within the regions in Turkiye (i.e. increased connection of the Marmara Region to the Aegean and Central Anatolia Region via a motorway network; relief of transportation problems occurring in three Industrial Zones located on the Project route; an increase in service quality and safety in transportation by separating regional traffic; a reduction in the traffic load in the existing transportation networks, especially the Bosphorus crossings; reduction in greenhouse gas emissions (GHGs) caused by traffic density in other road networks around the Project vicinity; and creation of jobs during construction.

The project is exempted from the Turkish Environmental Impact Assessment (EIA) Regulation due to the inclusion of the NMM project in the public investment program in 1991 prior to the enactment of the first EIA Regulation in Turkiye in 1993. Despite, a comprehensive environmental and social impact assessment has been conducted, an Environmental and Social Impact Assessment (ESIA) and Environmental & Social (E&S) management plans have been developed by international and local experts assigned by the SPV in accordance with lenders' requirements.

Environmental and Social Due Diligence (ESDD) has been conducted by an independent international environmental and social consultant assigned by the lenders which included but not limited to; review of the comprehensive ESIA, SPV's policy and procedures, site monitoring of early construction works, initial land acquisition activities, review of the Resettlement Action Plan (RAP) and Stakeholder Engagement Plan (SEP), EPC Contractor's E&S management plans, assessment of the independent road safety audit findings, assessment of the SPV's and EPC Contractor's resources and capacity to implement the Project in line with the Bank's requirements and assessment of the stakeholder feedback through face to face consultation meetings held at site. As a result of the ESDD, the ESIA package including EPC Contractor's management plans have been updated based on additional studies conducted to be fully aligned with the Bank's requirements. The ESIA and management plans are disclosed in English and Turkish for a period of 60 days prior to the Bank's Board approval in line with the Bank's Access to Information Policy (AIP). The construction is paused by SPV in September 2022 to complete the additional ESIA studies including additional surveys and consultations conducted for RAP in accordance with the Bank's PR 5 requirements. The ESIA disclosure package includes the following:

- Environmental and Social Impact Assessment (ESIA) Report
- Non-Technical Summary of the ESIA (NTS)
- Environmental and Social Management and Monitoring Plan (ESMMP)
- Environmental and Social Action Plan (ESAP)
- Stakeholder Engagement Plan (SEP)
- Resettlement Action Plan (RAP)
- Guide to Land Acquisition and Compensation (GLAC)
- Environmental and Social Management Plans of the EPC Contractor including:
 - Construction Environmental and Social Management Plan (CESMP)
 - Biodiversity Action Plan (BAP)
 - Air Quality and Emission Control Plan
 - Blasting Management Plan
 - Waste Management Plan
 - Wastewater Management Plan
 - Landscape Management Plan
 - Noise and Vibration Management Plan
 - Pollution Prevention Plan
 - Traffic Management Plan
 - Community Health, Safety and Security Plan
 - Emergency Preparedness and Response Plan
 - Cultural Heritage Management Plan

- Supply Chain Management Plan
- Gender Action Plan
- Labour Management Plan
- Health and Safety Plan

KGM selected the motorway route based on various E&S criteria, and through obtaining feedback from various state institutions and local authorities including municipalities with an aim to mitigate impacts on both the environment and communities at route selection phase. This early-stage assessment considered geotechnical factors and geohazard risks; road safety and community safety risks; meteorological conditions and climate risks; economic viability of the Project; impact on residential areas, cultural heritage, industrial and military areas, cemeteries, agricultural and forestry areas; biodiversity, marine areas, lakes, streams, dams and water protection areas; existent and planned motorways and seaways, airports, ports; existing and planned infrastructure facilities such as electric energy transmission lines, water pipeline, natural gas and oil pipelines, telecommunication and similar infrastructure; existing and potential transportation infrastructure; and existing and planned development plans within the municipality boundaries. Following the execution of the Implementation Contract, SPV made additional modifications in design and construction methodologies with an aim to further avoid and/or minimize the potential E&S impacts based on additional studies and feedback of local stakeholders. In addition, the Yesilbayir Connection Road (which was part of the initial design) was cancelled by KGM in 2022. The ESIA was amended to address the impacts associated with this design change, although the baseline remained unchanged as the route alignment had not been altered. The cancellation of the Yesilbayir Connection Road on the Project has reduced potential risks and impacts (such as avoidance of the impact to Buyukcekmece Important Bird Area (IBA)) that would have been caused by the Project as well as avoiding other environmental and social risks associated with construction and when the Motorway becomes operational. Detailed assessment of alternatives and route changes are presented in the ESIA.

The Project crosses through two internationally recognised areas; i) Kucukcekmece Basin - International Bird Area (IBA) and Key Biodiversity Area (KBA) and ii) West Istanbul Grasslands Important Plant Area. ESIA studies concluded that, both internationally recognised areas crossed are heavily degraded, and it is considered likely that they no longer support biodiversity which qualifies as critical habitat particularly in the areas affected by the Project. The main area of the IBA/KBA expected to be impacted by the Project is the Sazlidere creek (approx. 5km upstream of the Kucukcekmece Lake) which will be spanned by a cable-stayed bridge. This area is considered largely to consist of modified habitat and therefore it is considered to be a small magnitude of impact as any construction impacts would not result in the loss of viability/function of the qualifying habitat of the IBA/KBA. However, the ESIA took a precautionary approach to identify and mitigate any potential biodiversity impacts. A Biodiversity Action Plan (BAP) has been developed, which includes specific conservation actions aimed at achieving No Let Loss / Net Gain for PBFs and potential critical habitat affected and will be implemented by SPV and its EPC Contractor. As part of this BAP and Construction Environmental and Social Management Plan (CESMP); pre-construction surveys will be undertaken before clearing areas and relocate animals where possible. A specific risk assessment for bird collisions with the cable-stayed bridge concluded that birds will have enough space to fly around, over, or under the structure. The bridge's length will allow for effective bird movement beneath it. Mitigation measures include floodlighting the bridge cables and support structures, lighting the underside of the bridge to increase visibility for birds at night, and avoiding suspending power lines above the bridge deck.

A specific risk assessment was conducted considering the risk of collision of birds with the cable stayed bridge. Based on the assessment, it was concluded that there will still be sufficient room for birds to fly around, over or under the bridge structure and the bridge length will be sufficient to provide for effective bird movement beneath the structure over a relatively broad area. The

assessment also included mitigation measures to be undertaken during the design of the bridge such as (i) bridge cables and support structures to be flood-lit to increase their visibility at night, (ii) undersurface of the bridge to be lit to increase visibility of the piers and deck undersurface to birds that fly beneath the bridge at night, (iii) avoidance of power lines to be suspended above the bridge deck.

Noise and vibration impacts have the potential to be significant in certain locations (four locations where current noise levels were found to be above the allowed limits) during construction and noise impacts will be managed in line with the national and international standards and with good practice mitigation measures such as noise barriers and restriction on working times. Where residual impacts are predicted to be significant (i.e., residents of the two houses close to the Sazlidere Bridge) households will be offered the opportunity to relocate during the operation at the cost of the Project. Updated noise modelling has determined that during the operations phase, noise and vibration will be mitigated in accordance with IFC and Turkish standards through installation of noise barriers and through specific track design measures.

Cultural heritage baseline and impact assessment studies were conducted by highly reputable and experienced archaeologists. Based on the field studies, 12 sites are identified on the Project right of way (2 Historical Areas in Kayabasi archaeological area; and 10 historical military bunkers) and mitigations designed in the Cultural Heritage Management Plan. In addition, during early construction works, a cultural heritage site was encountered in Samlar district. In line with the Project Chance Finds procedure, the works were stopped immediately and the authorities were informed. As per the decision of the Cultural Heritage Preservation Regional Board No. I, archaeological excavation has been initiated under the control of experts of the Istanbul Archaeology Museum. As a result of these excavations, 30 rooms of different sizes, stone floors within the space, 4 pithos (storage vessels), 1 kiln structure and the remains of a hand mill workshop, and 4 stone tombs were unearthed. It is considered that the settlement dates back to the Late Roman-Early Byzantine period. Restoration, photography and documentation of the findings have been completed. After the experts' inspection in coordination with the Istanbul Archaeology Museums Directorate, the findings have been delivered to the museum with an official letter. The EPC Contractor will continue to implement the Cultural Heritage Management Plan and the Chance Finds Procedure to manage potential impacts to tangible and intangible cultural heritage along the right of way.

A road safety audit (RSA) of the initial road design was undertaken by an independent road safety auditor and a majority of recommendations have been integrated in the detailed design. Further RSAs will be undertaken as the design and construction progresses in line with the EU Directive 2008/96/EC. A Community Health, Safety and Security Management Plan has been developed and will be implemented during the construction phase and includes several measures to manage risks such as fencing to avoid unauthorised access to the road, traffic management arrangements, all blasting activities will be undertaken in close coordination with local authorities, and in consultation with project affected communities. During operational phase of the road, restrictions will be applied within the safety zone and this will be monitored via centralized electronic camera system.

SPV, the EPC Contractor, and its sub-contractors will also be required to manage risks to workers including labour and working conditions, occupational health and safety in line with the Labour Management Plan, Health and Safety Management Plan and Camp Management Plan. Regular labour audits will be conducted by an independent auditor to ensure workers' rights are respected in line with EBRD's PR2. The SPV has an internal grievance mechanism to address worker complaints in a timely manner. The Project will address any gender issues, including gender-based violence and harassment risks (GBVH) to workers and communities during construction and operations phases and will implement the stand-alone gender action plan (GAP) which is disclosed as part of the ESIA package.

The overall average permanent land-take for the whole Project is a corridor of 80 m, including the 7 m safety buffers zone at each side of the road subject to land acquisition and compensation. The total area of land affected by the Project is estimated at 550ha, which will be acquired on a permanent basis for the construction and operation of the road and associated infrastructure. The Project will affect 1,523 land parcels; approximately 81% of these parcels are privately-owned (1,239 parcels), while the remaining parts are state-owned (156 parcels, such as treasury, or non-registered) or owned by legal entities (128 parcels such as municipalities, public corporations, etc.). Approximately 33.8% of the total affected lands (515 parcels) are registered as agricultural plots. The rest is registered as constructible plots (801), pasture (7), forest (1), and others (199). Total number of actual land users (both informal and formal) is 80 according to the surveys. In addition to economic displacement due to land take, the Project is estimated to result in physical resettlement of 8 structures (2 inhabitable houses, 4 inhabitable structures (no permanent use) and 2 vacant houses) and 14 businesses. In addition, 5 businesses will be partially affected from land take although they will be able to continue their operations. A Resettlement Action Plan (RAP) and associated Guide to Land Acquisition and Compensation (GLAC) has been developed to define mitigation, compensation, and livelihood restoration measures in line with national law and the lenders' requirements. Detailed compensation, resettlement assistance and livelihood restoration measures have been included in the RAP with specific measures to support vulnerable people affected by the Project. Land acquisition activities have been initiated by KGM with the support of the SPV in line with the RAP and 50 per cent of parcels have already been acquired by June 2024. An independent audit was carried out for all past land acquisition activities conducted prior to Bank's involvement and a corrective action plan has been agreed with SPV and KGM to fully align the previous land acquisition activities with the lenders' requirements. The implementation of RAP will be verified through regular internal and external monitoring activities and an independent RAP completion audit at the end of RAP implementation.

A Stakeholder Engagement Plan (SEP) has been prepared to outline future stakeholder engagement activities that will be implemented throughout the Project's lifecycle in accordance with the Bank's PR 10 requirements. A grievance mechanism is also established to address concerns from external stakeholders. Over the ESIA disclosure period, several disclosure meetings were conducted across affected districts and villages (including women only meetings), and through online tools revealing broad community consent for the project. The stakeholder feedback received during disclosure process and after did not reveal any changes to the ESIA however additional clarification and consultation required to address concerns raised by households living at Sularvadis to discuss alternatives for the Sularvadis Viaduct and agree an alternative location for a children park to be built. A Public Consultation and Disclosure Report was disclosed at the Project website upon completion of the process. SPV will continue to undertake further stakeholder engagement activities throughout the lifetime of the project as outlined in the SEP.

An Environmental and Social Management and Monitoring Plan (ESMMP) has been prepared including the mitigation measures and roles and responsibilities between KGM, SPV, EPC Contractor. The ESMMP also establishes a defined process for managing any Project changes. Should future design changes or other factors reveal additional potential impacts, SPV will carefully assess them and implement suitable mitigation measures in accordance with the Design Change Management Procedure. In addition, the EPC Contractor prepared a Construction and Environmental and Social Management Plan (CESMP) specifically as a management tool to be used by the EPC Contractor and its sub-contractors & suppliers to implement the environmental and social (E&S) mitigation measures identified in the ESIA report and ESMMP during the construction phase. The CESMP is supported by a set of environmental and social management plans to implement the mitigation measures identified as part of ESIA/ESMMP. The critical management plans are disclosed as part of the ESIA package for stakeholders' review and feedback. An Environmental and Social Action Plan (ESAP) has been developed based on the ESIA and ESDD results and disclosed. The

Project will be monitored quarterly at site by independent Environmental and Social consultants of the lenders to ensure Project's compliance with the ESAP and the lenders' requirements.

Technical Cooperation and Grant Financing

None.

Company Contact Information

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PSD Last Updated

5 Jul 2024