

Environmental and Social Data Sheet

Overview

Project Name: NATIONAL ROADS III
 Project Number: 20180081
 Country: Cyprus
 Project Description: The project consists of the construction and improvement of roads and motorways implemented by the Public Works Department of the Ministry of Transport, Communication and Works in the Republic of Cyprus. The project also includes investment in speed enforcement cameras across the Cypriot road network.

EIA required: yes

Project included in Carbon Footprint Exercise¹: yes

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

Environmental and Social Assessment

Environmental Assessment

The operation includes the new construction of the first phase of four road projects located in different regions of Cyprus. Each project followed separate environmental impact assessments according to their project characteristics and development. The road projects include: Phase A1 of Lefkosia South Orbital Motorway (7.4 km, 2x2 motorway + secondary road network), Phase A1 of Lemesos-Saittas Motorway (3.6 + 2 km, 2x2 motorway), Phase A of Pafos-Polis Chrysochous Motorway (15.5 km, 2x1 interurban road), Phase 1 of Vasilikos Energy Centre road network (5.5 km + 4.7 km, 2x1 interurban road).

The road projects were included in plans that were subject to a strategic environmental impact assessment (SEA) following the national legislation and Directive 2001/42/EC. Lefkosia South Orbital Motorway was included in the Tseri Local Plan (2011), for which an SEA Expert Opinion was issued by the competent authority on 11-06-2013. A part of Pafos-Polis Chrysochous Motorway falls within the Pafos Local Plan. For Lemesos-Saittas Motorway, SEAs were prepared for adjacent areas of the proposed project within the framework of assessing urban plans for the city of Lemesos and nearby villages. For Vasiliko Energy Centre, its Masterplan included an SEA with Expert Opinion issued by the competent authority on 23-01-2017.

¹ Only projects that meet the scope of the Carbon Footprint Exercise, as defined in the EIB Carbon Footprint Methodologies, are included, provided estimated emissions exceed the methodology thresholds: 20,000 tonnes CO₂e/year absolute (gross) or 20,000 tonnes CO₂e/year relative (net) – both increases and savings.

Three of the road projects were considered to fall under Annex I of the environmental impact assessment (EIA) Directive (2014/52/EU amending 2011/92/EC) and subject to mandatory EIA. The fourth road project – Vasiliko Energy Centre road network – is classed as an EIA Annex II project and was subject to determination and screened out from further EIA by the competent authority. The environmental assessments were completed for the full road projects (all phases) considering cumulative impacts.

Declarations by the competent authority have been received by the EIB on all four project phases in relation to impact on Natura 2000 sites. Only Phase A Pafos-Polis Chrysochous Motorway is declared to have significant negative effects on Natura 2000 sites.

The operation also includes investment in speed enforcement cameras across the Cypriot road network. The supply and installation of speed enforcement camera equipment does not fall under EIA Directive. Therefore, no EIA was required for the project component.

Phase A1 of Lefkosia South Orbital Motorway

In the period 2002-2005 feasibility studies including preliminary environmental impact assessments were conducted for Lefkosia South Orbital Motorway evaluating possible alternative route alignments. The competent authority issued an Expert Opinion on 14-06-2005 and included recommendations for further development. Subsequently, after a period of standstill and further maturing of the design, a final EIA for the project was completed in 2014. The competent authority issued a favourable Expert Opinion on 06-04-2015 on the project.

The Lefkosia South Orbital Motorway passes through agricultural and rural areas of generally low ecological interest. Phase A of the Lefkosia South Orbital Motorway includes a river bridge and twin-tube tunnel construction. The main impacts of the project concern the construction and operation phases: change in land use, relevant impacts from use of heavy machinery (air pollutant emissions, noise), solid waste production, sealing of soil by impermeable materials, and visual intrusion of construction site. The possible impact at two points on a Natura 2000 site (CY 20000002 “Aikos-Agios Sozomenos”) were identified. The EIB has received a declaration from the competent authority that the project is not likely to have significant negative effects on Natura 2000 sites.

The main impacts during operation include the following: noise, air pollutant emissions, visual intrusion and surface runoff of liquid pollutants. Mitigation measures are stipulated in the EIA and also by the competent authority in relation to compliance with the best available environmentally efficient techniques and practices. The Expert Opinion also included a provision for PWD to update the project assessment data prior to construction, in order to inform whether the project requires an updated EIA.

Phase A1 of Lemesos-Saittas Motorway

The project feasibility study including EIA was completed in 2006. The EIA was submitted to the competent authority and an Expert Opinion issued on 18-06-2008. This is the latest opinion and valid for the project. For Phase A1 and A2, the competent authority issued a positive opinion. The opinion identified impacts due to construction on the natural as well as anthropogenic environment, both for construction and operation phases. Main impacts are due to change in land use, relevant impacts from use of heavy machinery (air pollutant emissions, noise), solid waste production, sealing of soil by impermeable materials, and visual intrusion of construction site. The main impacts during operation include the following: noise, air pollutant emissions, visual intrusion and surface runoff of liquid pollutants. Mitigation

measures are stipulated in the EIA and also by the competent authority in relation to compliance with the best available environmentally efficient techniques and practices.

Phase A of Pafos-Polis Chrysochous Motorway

Detailed feasibility for the Pafos-Polis Chrysochous Motorway started in 1997. After an initial decision by the Environmental Authority was rejected by local authorities in 1999, a new alignment was proposed by the Ministry of Transport, Communication and Works in 2001. An EIA was undertaken for this project in 2003 and evaluated by the Environmental Authority which required changes, conditions and an appropriate assessment consistent with Law 153 (I)/2003 on the Protection and Management of Wildlife and the Habitats Directive 92/43/EEC and – due to crossing areas of the Natura 2000 network.

In 2017, the Public Works Department (PWD) adjusted the design of the project and prioritised Phase A of the Pafos-Polis Chrysochous Motorway. Phase A is proposed to be constructed as a single-two lane carriageway. The EIA for the revised project was submitted to the competent authority in 2018. This study also included a Special Ecological Evaluation Study (appropriate assessment) of the impact on Natura 2000 areas. The proposed project is adjacent for approximately one km and crosses at two points the Special Protection Area “Valley Ezusa-CY4000021” for 400 metres and 150 metres. It is also 450 metres from the “Mavrokolympus-CY4000008” Special Conservation Area.

The Special Ecological Evaluation Study was evaluated at an ad-hoc Committee on 9-11-2018. The authority concluded that the project is expected to have significant negative irreversible impacts on the Natura 2000 network at “Valley Ezusa-CY4000021” The main impacts were related to loss and fragmentation of the habitat of fauna (bird) species and loss of wild vegetation resulting in degradation of the natural environment, in addition to enhanced pressure from potential future changes in land use.

The competent authority issued a negative Expert Opinion on 13-03-2019 on the grounds of significant adverse effects on the environment. Considering this opinion, the Council of Ministers, through decision no. 87/113 dated 15th March 2019, approved the project, in the absence of alternative solutions, based on imperative reasons of overriding public interest under the provisions of Article 16 of Law 153 (I)/2003. Environmental compensatory measures were declared and implemented in May 2019 including the expansion of the two Special Protection Areas in the “Ezusa Valley” (910 hectares) and “Xeros Potamos” (161 hectares). The implementation and monitoring of sites lies with the Department of Hunting and Wildlife Service. Other environmental and monitoring/management measures were specified for the project.

The Cypriot government notified the European Commission on 21-11-2019 within the meaning of Article 6(4) of the Habitats Directive the reasoning of the decision and presented the impacts, reasons of overriding public interest, absence of suitable alternatives and compensatory measures. The notification was for information as no priority species/habitats were identified to be affected.

Phase 1 of Vasilikos Energy Centre road network

The Ministry of Energy, Commerce and Industry, the responsible authority for the overall industrial project, submitted the documentation for determination for the Vasilikos Energy Centre road network in May 2019. The competent authority issued an Expert Opinion on 11-06-2019 and was screened out for a requirement for a full EIA. The opinion identified impacts during construction and operation. Main impacts during construction are due to change in

land use, relevant impacts from use of heavy machinery (air pollutant emissions, noise), solid waste production, sealing of soil by impermeable materials, and visual intrusion of construction site. The main impacts during operation include the following: noise, air pollutant emissions, visual intrusion and surface runoff of liquid pollutants.

Measures proposed in the Expert Opinion are in line with the relevant SEA of the Vasilikos Area Masterplan. The Expert Opinion also included a condition that the environmental authority shall be informed of any changes to the project before the start of any works for investigation as to whether the work falls within the scope of EIA law.

EIB Carbon Footprint Exercise

The project is included on the following basis:

Aggregate estimated annual third party greenhouse emissions (vehicular use) from the use of the three larger project components in a standard year of operation:

- Forecast absolute (gross) emissions are 77,000 tonnes of CO₂ equivalent per year; and
- Forecast emissions decrease is 8,000 tonnes of CO₂ equivalent per year.

No calculation of emissions has been conducted for the component *Phase 1 of Vasilikos Energy Centre road networks*. Considering the small scale of this road project and the expected demand in a standard year of operation, the Bank's Services estimate that the project emissions will be below the threshold for inclusion in the Exercise.

The project boundaries for each of the road components considered in the calculations are as follows:

Phase A1 of Lefkosia South Orbital Motorway

- Existing network synthetically modelled through some 9 km of the A1 motorway, a section of 2 km of Kyprianou Avenue between the A1 and Tseriou road (E901) and 12 km of the E120 and E901 local roads between the A1 and Kyprianou Avenue;
- In the "with project" scenario, the existing network described above plus the 7.4 km of the Phase A1 of the new orbital.

Phase A1 of Lemesos-Saittas Motorway

- In the baseline scenario: the existing B8 national road between Polemidia and Palodia junctions;
- In the "with project" scenario, the new motorway section fully replacing the existing B8 road between the sections above.

Phase A of Pafos-Polis Chrysochous Motorway

- In the baseline scenario: 19 km of the existing B7 national road between Agia Marinouda and Stroumbi;
- In the "with project" scenario, the aforesaid section of the B7 plus the new motorway section to the East of the national road.

The baseline is the forecast third party emissions, in the absence of the project, from the existing network only within the boundaries defined above. The forecast for absolute emissions includes both the existing and additional network. The forecast reflect the Bank's Services assumptions on traffic, traffic growth, speed/flow, infrastructure capacity and fuel consumption.

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, where applicable

Social impacts of each road project were assessed as part of the project preparation and design stages. No adverse social impacts are expected. During construction and operation, the project shall comply with requirements stipulated in planning and environmental decisions, and in relation to applicable health and safety legislation for workplaces and temporary and/or mobile construction sites.

Public Consultation and Stakeholder Engagement

Public consultation for the road projects were carried out through their respective SEA and EIA procedures, design and planning application stages. Information was made publically available during public hearings and presentations to their respective elected Councils of affected municipalities and communities. Expert Opinions of the competent authority were uploaded to the Ministry of Environment website and also distributed to interested stakeholders.

Other Environmental and Social Aspects

The Public Works Department (PWD) is the contracting authority responsible for the construction and management of roads under this operation including fulfilling environmental obligations according to relevant national legislation and EU Directives. The Department of Environment, falling under the Ministry for Agriculture, Rural Development and Environment, acts as a Regulatory Authority and is the competent authority for the environment.

Each road project includes specific environmental and social monitoring arrangements, including plans and indicators, as stipulated in their respective EIA, SEA and/or Expert Opinions from the competent authority. Indicators covering the range of environmental parameters are specified for each project.

Conclusions and Recommendations

The four road projects under this operation have followed applicable environmental procedures consistent with national legislation and EU Directives. Three of the four road projects included full EIA studies, and for the fourth a screening was undertaken. One of the road projects – Phase A of Pafos-Polis Chrysochous Motorway – is identified to have significant negative effects on Natura 2000 sites. In the absence of alternatives, the project proceeds with approval under imperative reasons of overriding public interest grounds and compensatory measures in compliance with Article 6(4) of the Habitats Directive.

Based on the Bank's review, the road projects under this operation, including the supply and installation of speed enforcement cameras, are acceptable in relation to environmental and social issues subject to the following conditions and undertakings:

- The Promoter shall provide an update on the communication with the Commission in the context of Article 6 of the Habitats Directive, in relation to Phase A of Pafos-Polis Chrysochous Motorway. The result shall be to the satisfaction of the Bank.

Luxembourg

- The Promoter shall report on climate change risk management. This shall include any risks identified and measures undertaken/proposed for the road projects following the Cyprus National Adaptation Strategy / Plan on assessing the vulnerability of Cyprus' infrastructure against future projections and climate change scenarios. In particular for any proposals to revise/adapt the design and construction standards for the road projects to increase climate resilience. Reporting to be included as part of an annual progress report or as required.
- A progress update is to be provided on the implementation of environmental mitigation and compensatory measures (under Article 6 of Habitats Directive) for Phase A of Pafos-Polis Chrysochous Motorway, as part of an annual progress report or as required.
- Prior to construction of the relevant projects, confirmation is to be provided that Environmental Approvals are complete and valid, and the provisions and conditions of the Expert Opinions issued by the competent authority are satisfied in relation to any project update or change that may require an updated EIA or falls within the scope of EIA law.