# **Environmental and Social Data Sheet**

### **Overview**

Project Name: Georgia East-West Highway II

Project Number: 20150426 Country: Georgia

Project Description: The project consists of the construction of a section of approximately 14.1 km of dual two lane carriageway highway on a new alignment between Zemo Osiauri and Chumateleti, along with associated access roads in Georgia. The project is part of the overall development of 388 km of the E-60, East-West highway (EWH).

EIA required: ves

Project included in Carbon Footprint Exercise<sup>1</sup>: no

# Summary of Environmental and Social Assessment, including key issues and overall conclusion and recommendation

The project involves Greenfield construction of 14.1 km of 2x2 concrete Highway in Georgia and includes three tunnels and 12 new bridges, with 11 located in the last 3 km of the road. If the project was located in the EU it would fall under Annex I of the EIA Directive 2011/92/EU. An EIA/NTS was completed and submitted to the Bank in June 2015. Although an SEA has not been done the Promoter with the assistance of the World Bank (WB) has undertaken a major feasibility study on the entire corridor (Zemo Osiauri to Argveta: 81km) and which has been presented to stakeholders. Environmental and building permits are outstanding and will be the subject of disbursement conditions.

Although the schemes will have some negative impact during construction, these have been assessed and adequate mitigation and management measures have been identified in consultation with relevant stakeholders and included in the final designs. The procedures followed by the Promoter are satisfactory and the project is acceptable for Bank financing with conditions.

A Land Acquisition and Resettlement Plan (LARP) has been prepared and is to be submitted to the Bank as a disbursement condition. Five families are to be relocated. In addition the project has the potential to affect local vendors (in vicinity of Khashuri, Surami) located along the old route who may be affected when traffic diverts to the new/project route. Prior to construction compensation will be determined for the expected loss of crops, agricultural land, business and property resulting from land take.

With regard to Biodiversity (Habitats Directive (92/43/EEC) and the Birds Directive (70/409/EEC) the EIA has confirmed that the project does not fall in any special protected areas.

The main impact relates to the cutting of trees (mainly pine forests). Compensation measures are planned with the requirement being that a ratio of 1:3 will be maintained between trees cut and replanting exercises. Mandatory maintenance is planned for 3 years.

Most of the protected species (red book) of flora and fauna occur in the mountainous area which is bypassed by the three tunnels. These will receive special attention during the implementation of the Environmental Monitoring Plan (EMP) which is to be prepared by the

<sup>&</sup>lt;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 CO2e/year absolute (gross) or 20,000 tons CO2e/year relative (net) – both increases and savings.

contractor and submitted to the Bank. The Bank will require that the Competent Authority provides signed declarations (Forms A/B) as a condition for disbursement. There were no outstanding complaints at appraisal.

# **Environmental and Social Assessment**

#### **Environmental Assessment**

Various alternatives of the highway alignment carry different levels of environmental risks, which has been critical in environmental analysis of project alternatives.

Four alternative routes were examined for the project. Two were discarded due to the anticipated significant negative impacts. An alternative alignment with minimum impact on trees and residential areas, avoiding the sensitive areas such as pine forest, a cemetery, landslide sites, also with minimum impact on water environment including the river Suramula has been selected as a preferred option and was analysed in depth. The selected alignment bypasses most of the sensitive areas which contain flora and fauna in the Georgian Red Book list. The section passes through rolling and hilly terrain. Most challenging sections were identified through a comprehensive assessment of a wider corridor of EWH's possible alignment between Zemo Osiauri and Chumateleti. The no-go option is not considered viable given the importance of the corridor. These alternatives are also proposed to mitigate and preserve the importance and significance of the sites archaeological, historical and cultural values.

The Highway section Zemo Osiauri and Chumateleti is an integral part of the E-60 route. The project involves the construction and upgrading of 24 structures including 12 bridges, 3 tunnels, 9 animal passes, drainage and runoff treatment facilities, fencing and landscaping measures and landslide areas in need of protection

The project is expected to have positive impacts for the environment along the existing route and along the roads from which traffic will divert. Communities adjacent to the old route will benefit by way of improved safety, reduced noise, vibration, local pollution, and reduced vehicle operating costs. The noise levels along the route and in the area of influence are not expected to exceed local thresholds and so few mitigation measures are planned. This will be monitored during the operation period by the PIU.

There are several red book (flora) species endemic to the project area (including Critical habitats for Imeretian oak, chestnut, field elm and orchids (incl, species protected under CITES) which are registered within the broader project area, and are bypassed by the selected alignment. Small groves, ravines, Shukghele stream and Suramula River, which are crossed by the new alignment and fall under the project's direct impact zone, are ranked as sensitive receptors and baseline inventories taken. Removal of 3500 trees for project needs will not cause functional damage to the ecosystem, however compensatory tree planting will be carried out with in the EWH corridor at the ratio of 1:3 (except for the trees cleared from the private land plots). Selection of species for planting will be based on the natural composition of local flora. Clearance from the National Forestry Agency will be obtained authorizing tree felling in the forested areas which are registered with the State Forest Fund. The habitats for endangered as well as migratory species (listed in

Annex I of Bird Directive) will not be affected by the planned development. Implementation of works during the periods sensitive for the wildlife (including birds), deliberate killing or capture, destruction of bird nests (if came across) and taking eggs will be banned.

Special mitigation measures are to be included in the EMP to minimise the negative impact on flora and fauna and to avoid any detrimental effects on the plants and animals. The contractor would be required to engage a specialist to locate the red book species and mitigate any potential damage including replanting in suitable locations if needed. Migration routes have been identified and where possible drainage elements used to provide animal migration passages.

All known historical and cultural monuments along the RoW were identified during the ESIA. The Highway alignment will not cause physical or aesthetic damage to these monuments.

## Social Assessment, where applicable

The contractor will be required to adhere to a Human Resource policy for Georgia. 70% local unskilled labour is a requirement in Georgia. Five families are to be resettled. Details are to be presented in the LARP and the RAP which are to be submitted to the bank.

## Public Consultation and Stakeholder Engagement, where required

A stakeholder meeting was held on November 12, 2014 at the office of RD in Tbilisi. Two meetings (in Khasuri and Roads Department office in Tbilisi) to present findings of the ESIA process were held on May 25 and May 27, 2015 respectively. RD will organize a public consultation meeting to discuss the draft ESIA report as well as the draft Resettlement Action Plan (RAP) The meeting was scheduled between the 50<sup>th</sup> and 60<sup>th</sup> day after disclosure of the draft document. Members of the communities in the project area, including elected officials, as well as representatives of the local small and medium businesses and other stakeholders were invited. RD sought questions and comments from the stakeholders and the general public. The main issues raised included employment during construction, compensation for vendors (mainly women) arising from loss of traffic on old route, road safety for vulnerable people.

# Other Environmental and Social Aspects

Greening of the construction sites along the RoW, as well as maintenance of the re-planted areas for three years will be included in the contractor works. A stage I road safety audit has been done at the design stage. The Tunnel Safety Directive guided the design of the three tunnels. A detailed EMP has been prepared in the ESIA. This is to be adopted by the contractor. Monitoring is planned and will be done by the contractor, the RD staff and the Ministry of the Environment (the Competent Authority).

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