## **Environmental and Social Data Sheet**

| Overview |  |
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| Project Name:   | Armenia M6 Interstate Road |
|-----------------|----------------------------|
| Project Number: | 20110566                   |
| Country:        | Armenia                    |

Project Description: The project consists of the rehabilitation and upgrading of the M6 interstate road (M6) on a length of about 90 kilometres between Vanadzor in central Armenia and Bagratashen on the North-Eastern border between Armenia and Georgia.

EIA required:

No

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

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

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

The project involves 90km of 2x1 road upgrading in North Eastern Armenia. If the project was located in the EU it would fall under Annex II of the EIA Directive 2011/92/EU. An EIA was completed and submitted to the Bank in May 2015. As most of the project follows the old alignment, and no new tunnels are to be built, the new impacts were few and very little land is to be acquired for the exercise.

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. Although the schemes will have some negative impact during construction, these have been assessed and adequate mitigation compensation 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.

The project aims to improve existing negative impacts such as noise and vibration, visual intrusion, water runoff and severance. The improved designs will result in a reduction in noise overall. As a condition to second disbursement or prior to construction, a detailed land acquisition report is to be submitted to the Bank. This will be used to determine whether a Land Acquisition and Resettlement Plan (LARP) is required prior to construction. In addition prior to construction a copy of the environmental permit signed by the Competent Authority and a copy of Building permit would be required.

With regard to Biodiversity (Habitats Directive (92/43/EEC) and the Birds Directive (70/409/EEC). The EIA has stated that the project does not fall in any special protected areas. Some protected species (red book) of flora and fauna occur in the project area. These will receive special attention during the implementation of the Environmental Monitoring Plan (EMP).. The Bank will require that the Competent Authority provides signed declarations (Forms A/B) as a condition for disbursement. At appraisal there were no ongoing complaints

<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.

concerning the environment and all queries seemed to have been adequately addressed during public consultation.

### **Environmental and Social Assessment**

#### **Environmental Assessment**

The highway, Vanadzor- Alaverdi- Georgian Border section is an integral part of the Yerevan to Tbilisi route. The project involves the upgrading of 40 bridges and 13 long culverts, three tunnels (one in need of lining), several rock-fall and landslide areas in need of protection, numerous road safety "black spot" areas that are to be corrected or adequately signed The project follows the route of the existing M6 road consequently there are no practicable alternatives in terms of general alignment and construction methodology and the no-go option is not considered viable given the importance of the corridor. Proposed alternatives relate to interchanges, road geometry, alignment and road widening. These alternatives are proposed to mitigate and preserve the importance and significance of the sites archaeological, historical and cultural values.

There are several red book (flora) species endemic to the project area (including date plum tree, and Trifolium). Protected fauna in the vicinity of the project include wildcat, bear, wild bore, stag, deer and porcupine among others. Bird species include eagles, cranes, storks, and pheasants. Fish species listed in the Debed river (152 km long and which follows and crosses the project) include salmon. 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.

A number of archaeological objects occur along the route. These include tombs, water springs and other monuments some of which might be impacted by the project. This will be further detailed and will be included in the EMP.

#### Social Assessment, where applicable

The project is not expected to involve significant land acquisition as it follows an existing alignment. The final assessment will be made prior to second disbursement or construction including a determination whether a LARP will be required.

#### Public Consultation and Stakeholder Engagement, where required

During the EIA process public consultation was held (March 4, 2014 and February 24, 2015) with key stakeholders. Issues relating to landscaping, storage of construction materials including asphalt and the danger of pollution affecting the river and noise, were discussed and adequately dealt with by the consultants.

#### Other Environmental and Social Aspects

An EMP guide was prepared by the consultant. The contractor will be expected to prepare a detailed Environmental Management Plan. Environmental monitoring will be done by the Competent Authority with support from the contractor's agent(s)