

## Environmental and Social Data Sheet

### Overview

Project Name: YEREVAN WATER SUPPLY IMPROVEMENT  
 Project Number: 2012-0316  
 Country: Armenia  
 Project Description: An investment programme to improve the water supply services provided in Yerevan and several surrounding villages. Loan proceeds will be used for the rehabilitation and zoning of the water supply network and the replacement of pumping stations and household connections.

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 is expected to have predominantly positive long term environmental and social effects, resulting from: (i) reduced water losses in the areas where replacement of pipes and individual connections will be made, being two areas dominated by private houses and identified as having the largest volume of water losses; (ii) reduced water demand through reduced leakage and water demand management following the installation of meters; (iii) reduction in groundwater abstraction and energy savings and improved health through enhanced quality in drinking tap water.

The EBRD led feasibility study included an audit of the operator - Yerevan Djur CJSC's current operations and an appraisal of the expected impacts and benefits of the investment programme: overall the project will have significant environmental and social benefits. The feasibility study concluded that the project will meet Armenian drinking water standards, which are based on World Health Organisation guidelines and is also anticipated to meet EU standards.

Most works, which consist of upgrading/replacement of old infrastructure will take place on existing "sites" and have limited impact, other than during construction (dust, noise, traffic). Whilst no EIA's are understood to be required, an Environment and Social Action Plan (ESAP) and a stakeholder Engagement Plan (SEP) have been developed. Adoption and adherence to the ESAP and SEP shall be a contractual requirement. This approach is acceptable for EIB.

### Environmental and Social Assessment

#### Environmental Assessment

The EBRD led feasibility study included an audit of the operator - Yerevan Djur CJSC's current operations and an appraisal of the expected impacts and benefits of the investment programme: overall the project will have significant environmental and social benefits, resulting from: (i) reduced water losses in the areas where replacement of pipes and individual connections will be made, being two areas dominated by private houses and

<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 CO<sub>2</sub>e/year absolute (gross) or 20,000 tons CO<sub>2</sub>e/year relative (net) – both increases and savings.

identified as having the largest volume of water losses; (ii) reduced water demand through reduced leakage and water demand management following the installation of meters; (iii) reduction in groundwater abstraction and energy savings and improved health through enhanced quality in drinking tap water. The feasibility study also concluded that the project will meet Armenian drinking water standards, which are based on World Health Organisation guidelines and is also anticipated to meet EU standards.

There are two main laws administered by the Ministry of Nature Protection of the Republic of Armenia:

1. Law on the Principles of Environmental Protection (1991) and the
2. Law on Environmental Impact Assessment (EIA) (1995).

Additional legislation also exists, for example on protected areas, on flora and fauna, however there is not (yet) full alignment with EU environmental legislation. A draft "Law on Environmental Expertise" is being discussed, including SEA and trans-boundary EIA's.

Most works, which consist of upgrading/replacement of old infrastructure will take place on existing "sites" and have limited impact, other than during construction (dust, noise, traffic). Whilst no EIA's are understood to be required, an Environment and Social Action Plan (ESAP) and a stakeholder Engagement Plan (SEP) have been developed by the EBRD led TA, addressing the main shortcomings with best international practice on environmental and social matters identified during their due diligence. Adoption and adherence to the ESAP and SEP by Yerevan Djur CJSC shall be a contractual requirement from the financiers. This approach is acceptable for EIB.

#### Adaptation to climate change

By way of reducing losses and hence needing less water resources, the investments will lead to an improvement in the security of supply in case of extreme climate phenomena (e.g. droughts, severe frost).

#### Climate change mitigation

Replacement of obsolete pumps, reduction of non-revenue water and of demand (as a result of improved metering) will all lead to less energy consumption for abstraction, treatment and pumping. Emissions created in the energy production process will hence be eliminated - however, these amounts are below the Bank's footprint threshold, all the more so given the high nuclear power component in Armenia's energy mix.

### **Social Assessment, where applicable, Public Consultation and Stakeholder Engagement**

Most works consist of upgrading/replacement of old infrastructure. The main social impacts will come from nuisances during construction on existing "sites" and have limited impact, other than during construction (dust, noise, traffic). The ESAP includes measures to minimise dust and noise impacts and requires the client to notify residents and businesses in advance of the start of construction activities. No land acquisition or economic displacement is currently anticipated but provisions are in place if this turns out not to be the case. The SEP requires the promoter to distribute information about the project to residents and customers, organise public consultation meetings and provide a mechanism for members of the public to have any grievances addressed. The EBRD TA's audit concluded that the client's overall environmental, social and health and safety management systems are good.

The Terms of reference for the Engineering, Design and Contracts Supervision Consultant also includes adherence to the ESAP and SEP during the design and construction phase.