

INTEGRATED SAFEGUARDS DATA SHEET APPRAISAL STAGE

Report No.: ISDSA186

Date ISDS Prepared/Updated: 08-Aug-2012

I. BASIC INFORMATION

1. Basic Project Data

Country:	Uzbekistan	Project ID:	P118197
Project Name:	Alat and Karakul Water Supply Project (P118197)		
Task Team Leader:	Pier Francesco Mantovani		
Estimated Appraisal Date:	15-Aug-2012	Estimated Board Date:	01-Nov-2012
Managing Unit:	ECSS6	Lending Instrument:	Specific Investment Loan
Sector:	Water supply (100%)		
Theme:	Urban services and housing for the poor (100%)		
Financing (In USD Million)			
Financing Source			Amount
BORROWER/RECIPIENT			38.50
International Development Association (IDA)			75.00
Total			113.50
Environmental Category:	B - Partial Assessment		
Is this a Repeater project?	No		

2. Project Objectives

The proposed project development objective (PDO) is to improve the coverage, quality and efficiency of public water supply service in the two districts of Alat and Karakul in the Bukhara region. The objective will be achieved through the rehabilitation and expansion of water production, transmission and distribution infrastructure in urban and rural areas.

3. Project Description

AKWSP will comprise the following components:

Component A: Improvement of Water Supply Infrastructure (US\$108.6 million): This component will finance works and related design and consulting services for (i) the rehabilitation and expansion of existing water production, transmission and urban distribution systems, including metered user connections for Alat and Karakul towns, and (ii) the extension of services to rural areas, including expansion or construction of water transmission and rural distribution systems, with installation of metered connections for households, schools and health centers. This will be achieved through the implementation of works, and the provision of goods and services. This component will also include a technical assistance activity, carried out by the consulting firm responsible for the engineering and implementation consulting services to BVK (the "Implementation Consultant"). The following subcomponents will be financed:

Subcomponent A1: Engineering and implementation consulting services, including technical assistance (US\$7.92 million).

Subcomponent A2: Rehabilitation and expansion of water production and bulk transmission systems (US\$38.6 million).

Subcomponent A3: Rehabilitation and expansion of water distribution systems (US\$62.0 million).

Component B: Institutional Strengthening and Capacity Building (US\$2.21 million). This component will address BVK capacity needs to ensure sustainable management, operations and maintenance of water supply service in the Alat and Karakul service areas, following the merger of AVK and KVK into a new operating division of BVK. By investing in technical assistance, services and goods, the Project will upgrade BVK's capacity in terms of qualifications of management and operational staff, management and customer service systems and methods, operation and maintenance equipment, and water quality monitoring and laboratory capabilities, as required to operate and maintain large rural water supply systems. The following subcomponents will be financed:

Subcomponent B1: Technical assistance (TA) to improve Utility Management and Operational Practices (cost included under Subcomponent A1).

Subcomponent B2: Training of Utility Staff and Management (US\$0.32 million).

Subcomponent B3: Equipment and Software for Utility Management, Operations and Laboratory (US\$1.62 million).

Subcomponent B4: Communication Strategy, Public Awareness Campaigns, Consumer Satisfaction and Gender Surveys (estimated cost US\$0.27 million).

Component C: Studies for Future Investments (US\$0.37 million). This component will finance consulting services for the preparation of a feasibility study for needed sewerage and on-site sanitation investments in the Alat and Karakul districts. The need for such investments will follow the increased provision of water supply service. The study will assess different alternatives including collective network sewerage and individual or decentralized options, for urban and rural areas. It will provide a feasibility-level assessment and preliminary designs for the works, goods and services needed to implement the proposed solutions. These documents will be handed to GOU and used to mobilize relevant sources of

financing.

Component D: Project Management (US\$2.34 million). This component will finance (a) office equipment, furniture and software at BBPCU, (b) incremental operating costs of BBPCU, (c) potentially additional staff, (d) monitoring and evaluation (M&E) of Project activities, including follow up social surveys, (e) annual financial and technical audits of Project accounts and investments. The Bukhara Vodokanal audit is financed from the Bukhara and Samarkand Sewerage Project.

4. Project location and salient physical characteristics relevant to the safeguard analysis (if known)

The project will cover urban and selected rural areas of the Alat and Karakul districts in the Bukhara region of Uzbekistan. The district of Karakul (122,134 people) is located about 60 km south-west from Bukhara city along highway M-37. The Alat district (94,269 people) is located about 20 km further south, adjacent to the border with Turkmenistan.

As of today, only the urban district main towns, Alat-town (pop. 13,000) and Karakul- town (pop. 18,000) are covered by a water supply network. The reliability and safety of water service are extremely compromised, with unfiltered, poorly disinfected water only available a few hours a day. In the surrounding rural areas, communities do not benefit from any water supply infrastructure, and depend on unsafe sources such as irrigation ditches, increasingly saline groundwater wells, or very expensive tanker truck deliveries.

The only substantial source of freshwater for the area is the Amu-Bukhara canal, which brings irrigation water from the Amu Darya River. The Amu Darya River is an international waterway located in Turkmenistan about 15 kilometers south of the border with Uzbekistan. The Project will extensively rehabilitate and expand the existing Dvoinik intake facility located on the Amu-Bukhara canal within the territory of Uzbekistan along the border with Turkmenistan. Although for access purposes, the facility is oddly located in an area between the Uzbek and Turkmen border posts along highway M-37, it is wholly and undisputedly located on Uzbek territory (as confirmed and documented by the Government based on official maps). The Dvoinik site includes several obsolete infrastructure facilities such as the intake lift pumps, sedimentation ponds, and a pumping station. The Client intends to use Project funds to build a new Water Treatment Plan (WTP) for the combined water production needs of the Alat and Karakul districts at this location, instead of rehabilitating the existing highly degraded WTP in Alat-town. Water disinfection will rely on-site generation of hypochlorite solutions, without need for supply, storage and handling of any gas chlorine. Also, a disposal site will be built by the Client in the vicinity of Dvoinik to receive the residuals generated by the WTP, such as non toxic water treatment sludge and sediments. The financing of such disposal site is not included in the proposed Project financing.

Based on available data, and although affected by occasional turbidity peaks, raw water quality at the intake is compatible with Uzbek regulations for water supply source quality. Despite extensive agricultural practices along the Amu-Bukhara canal downstream of Dvoinik, no trace concentrations of pesticides were detected at the Dvoinik location based on monitoring analyses carried out by the Bukhara Regional Center of State Sanitary Epidemiological Control.

Two main water storage reservoirs - Tudakul and Talimarjam - are both located off-stream and at great distance from the project's intake (e.g., 280 km). A small dam is located on the Amu-Bukhara channel near the town of Farab, Turkmenistan, about 10 km upstream of the Dvoinik intake. However, this "hydrocenter" acts mainly as a water distribution facility and does not serve the function of water storage.

5. Environmental and Social Safeguards Specialists

Roxanne Hakim (ECSS4)

Ruxandra Maria Floroiu (EASER)

6. Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	The Project risks (category B) are linked to short term environmental impacts related to reconstruction/rehabilitation works (dust, noise, improper construction waste disposal including asbestos materials, and accidental oil spillage). Also, risks related to water treatment sludge management and final disposal as well as water quality are present. The Borrower has prepared an EIA (with Environmental Management Plan or EMP) that analyzes potential impacts on volume of water abstraction and wastewater generated as a result of the rehabilitation works and covers options for extension of the system including water availability and implications of wastewater impacts. Public consultations on and disclosure of the EIA took place in the country on several occasions, including in February 2011, and June 2012. The Draft Revised EIA was last disclosed in the Bank's Infoshop on July 24, 2012.
Natural Habitats OP/BP 4.04	No	
Forests OP/BP 4.36	No	
Pest Management OP 4.09	No	
Physical Cultural Resources OP/BP 4.11	No	
Indigenous Peoples OP/BP 4.10	No	

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Involuntary Resettlement OP/BP 4.12	Yes	There is a risk that the implementation of this Project will require land acquisition. Works relate to rehabilitation and expansion of existing infrastructure, with development of new transmission and distribution systems across rural areas. The policy is triggered because, based on experience, the rehabilitation and expansion of water supply networks may require temporary or permanent acquisition of land in residential, agricultural, or commercial areas. The Borrower prepared a Resettlement Policy Framework (RPF) describing applicable legislation and regulations and the due process in case land acquisition is needed under the Project. Public consultations on and disclosure of the RPF took place in the country on several occasions, including in February 2011, and June 2012. The Draft Revised RPF was last disclosed in the Bank's Infoshop on July 24, 2012
Safety of Dams OP/BP 4.37	No	
Projects on International Waterways OP/BP 7.50	Yes	The Dvoynik water intake for the Project withdraws water from the Amu-Bukhara irrigation canal which in turn draws from the Amu Darya River, an international waterway. The use of Amu Darya River water, and the operation of shared water management facilities located on the River and along derivation canals, are ruled by international treaties in place between the Republic of Uzbekistan and the Republic of Turkmenistan. The Government of Uzbekistan provided the Bank with copies of such treaties for review. By comparison to the irrigation water flows in the Amu-Bukhara canal, the amount of additional water to be drawn for the purpose of the Project is not large, and does not exceed the level of withdrawal already authorized for the existing Dvoynik facilities. Nevertheless, the Policy is triggered. On February 10, 2011, the Government of Uzbekistan notified the Government of Turkmenistan of the characteristics of the Project to be implemented. No comments or objections were received in return.
Projects in Disputed Areas OP/BP 7.60	No	

II. Key Safeguard Policy Issues and Their Management

A. Summary of Key Safeguard Issues

1. Describe any safeguard issues and impacts associated with the Restructured project. Identify and describe any potential large scale, significant and/or irreversible impacts:

The proposed project is categorized as "B" in line with the OP/BP 4.01 on Environmental Assessment based on the fact that the project involves mainly rehabilitation and expansion of existing water supply infrastructure (e.g., distribution systems, transmission networks, treated water pumping stations, Dvoynik water intake, pre-treatment and treatment facilities) for potable water production and transmission in urban and selected rural areas of the Alat and Karakul districts. The existing Water Treatment Plant in Alat-town is to be replaced by a new expanded treatment facility at the Dvoynik water intake site, while residual assets at the Alat WTP site may be considered for further rehabilitation by Client under different financing or decommissioned.

AKWSP construction and rehabilitation-related impacts are localized and will be efficiently mitigated by applying international construction practice and planning. Such potential impacts may be related to: (i) dust, noise, vibration, temporary access restriction and temporary closure of traffic during works; (ii) improper disposal of construction related waste; (iii) temporary pollution of soil, groundwater and surface waters as a result of leaching of chemicals used sometimes as pipe coating or lining, and by accidental spillage of oil and other products used as lubricants and fuel during works; (iv) impacts and risks associated with leaks and spills of chlorine and other chemicals or safety hazards including worker safety specially related to dismantling of asbestos pipes; and (v) chance finds of physical cultural resources. These impacts will need to be properly managed during the rehabilitation phase by the contractor and closely supervised by BVK, the Bukhara Branch PCU, and the designated supervisor engineer.

The sludge and sediments generated from the treatment process of the new WTP will be disposed at a landfill that the Client commits to construct during project implementation at Dvoynik in the vicinity of the newly proposed WTP location. Thus, potential impacts from sludge production pollution should be properly managed at this new landfill constructed in line with national legislation and in agreement with the Bank. Furthermore, water treatment operations will not require any storage or handling of chlorine gas, as water disinfection will be achieved by applying a hypochlorite solution generated on-site by an electrolysis plant.

Projects on International Waterways. The project will rehabilitate and expand capacity of the existing Dvoynik water intake which is located on the Amu-Bukhara irrigation canal that draws water from the Amu Darya River, an international waterway. The rehabilitation works will increase the amount of water abstracted from 14,000 m³ per day currently to 49,816 m³ per day, which will allow service coverage expansion both in the urban and rural areas of the districts of Alat and Karakul. Formal treaties are in place between Uzbekistan and Turkmenistan for the shared management and use of Amu Darya waters. Statements from responsible government agencies were received confirming that the additional volumes to be extracted due to the project are within the share of Amu Darya waters allowed for withdrawal by Uzbekistan from the Amu Bukhara canal at Dvoynik. Nevertheless, in line with OP/BP 7.50, the Government of Uzbekistan has notified riparian countries (Turkmenistan) about the scope of the project and relevant investments. Comments on project information were requested to be shared with the Bank within 30 days from the date of letter submission to riparians (February, 2011). No comments were received by the proposed deadline. A letter from the Government of Uzbekistan dated July 9, 2012, further reconfirmed that the Government of Turkmenistan has not to date responded with any objections or requests for clarifications on the notification.

No major impacts on Physical Cultural Resources (PCR) are expected during the project implementation, yet attention will be paid to the possibility of built PCR or chance finds being affected by dust and vibration during works.

The project will also finance the detailed design and works supervision of rehabilitation and expansion works for urban and rural water supply, as well as a feasibility study (FS) for future sewerage and sanitation investments in the Alat and Karakul districts. The TORs for these studies

will ensure that environmental and social safeguard issues are addressed, such that the resulting design/FS would be acceptable for further World Bank investment.

The water supply system that supplies the Alat and Karakul districts relies on the Dvoynik water intake on the Amu-Bukhara channel. A small structure is located on this channel near the town of Farab, 10 km upstream of the Dvoynik intake, in Turkmen territory. The borrower provided information on the nature of this facility and clarified that the Farab facility is in fact a hydrocenter with the role of irrigation water distribution but with no storage function. Based on the clarification provided by the borrower, the Safety of Dams policy is not triggered.

Land Acquisition. The Project triggers the World Bank's Operational Policy 4.12 (Involuntary Resettlement) because the Project can be expected to involve some land acquisition. During project preparation, the screening by the consultants carrying out the social assessment, the Bukhara Vodokanal, and the World Bank team established that the proposed Project is likely to involve some temporary or permanent land acquisition for the rehabilitation or construction of pipelines and storage and pumping facilities in areas not currently served. Design engineers will minimize works encroachment on private or productive land. If land is needed for these investments, it is envisaged that the Project to the extent possible, would aim to acquire state-owned land located on existing rights of way designated for municipal infrastructure, and not occupied by residents (legal or illegal) or enterprises. Along some rights of way, however, it may be necessary to cut trees or remove other structures that may be close to the rights of way. However, none of the civil works are expected to involve displacement of any residents or enterprises. For the large infrastructure such as the water treatment plant and the Dvoynik intake, land acquisition will not be required because these facilities already occupy their own fenced-in sites used only for these facilities. Since the exact routings and project design is not finalized the specific land acquisition areas are not yet known. For this reason, the Borrower has developed a Resettlement Policy Framework (RPF) which will serve as a guide to resettlement and compensation in the event that land being owned or used by any person is acquired temporarily or permanently by works contracts financed under the Project. In this event, the Borrower will further develop Resettlement Action Plans (RAP), specific to relevant works contracts, with details of the compensation and impacts. These documents will be cleared by the World Bank and disclosed prior to commencement of any civil works.

2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:

Water and soil pollution could remain temporarily affected during the operational phase of the Project (once works are finalized) due to accidental water bursts (at pumping stations or along the rehabilitated water supply networks) potential natural disasters and extreme climate events (e.g. floods, earthquakes) or improper household wastewater management generated due to the new domestic water use in the Project area. Overall and in the long-term, the Project is however expected to have a vastly positive impact on the environment and on the beneficiaries' quality of life.

3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.

The AKWSP Feasibility Study has undergone several iterations, and was last revised in June 2012. The FS process has analyzed various project alternatives, including phased implementation. The current proposed technical solution is deemed the least-cost solution to afford safe and reliable water supply service for the urban and rural communities of Alat and Karakul. If AKWSP is not implemented, 220,000 people will continue to depend on scarce, unsafe and costly water supplies, with far reaching public health impacts and curtailed social and economic development. Options considered related to the overall water supply infrastructure architecture (regional transmission system vs. local, decentralized systems), optimization of facilities location and infrastructure sizing (Dvoynik WTP vs. Alat WTP), the choice of materials and the level of technology. The option of using groundwater sources (rather than Dvoynik water intake) was considered but abandoned in light of pervasive and increasing groundwater salinity, contamination issues in an area of intensive irrigated agriculture. The option of using gas chlorine for water disinfection was abandoned in favor of the safer hypochlorite disinfection option.

4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.

The implementing agency will be BVK. Implementation arrangements will generally replicate those tested for the on-going Bukhara and Samarkand Sewerage project (BSSP), through the Project Coordination Unit (PCU) of the Uzbek Communal Services Agency Uzkomkhizmat, and the Bukhara Branch of the PCU (BBPCU), and will follow similar procedures. Both AKWSP and BSSP are "Environmental Assessment (EA) category B" projects, thus these entities are exposed to Bank safeguard procedures on OP/BP 4.01 including preparation, disclosure and implementation of Environmental Management Plan (EMP). The Bank's safeguards supervision reviews, based on missions, site visits and evaluation of progress monitoring reports, have found that the Borrower has relatively good capacity to implement mitigation measures and monitoring actions that are agreed in the EMP. These measures and their monitoring will be incorporated in the terms of references of design and supervision consultants and in the responsibilities of contractors in the bidding documents.

A draft Environmental Impact Assessment (EIA) study with EMP satisfactory to the Bank requirements and related national laws was prepared by BVK in line with the February 2011 Feasibility Study (FS) to help implement the necessary measures to minimize potential negative environmental impacts and implement the project in an environmentally sound and sustainable manner. This draft EIA was revised accordingly based on the June 2012 updated FS that reflects expanded project coverage in selected rural areas of Alat and Karakul districts. The related EMP with updated environmental baseline information (e.g., water quality) will be revised in line with the detail designs' findings once they are prepared during project implementation.

Although the Bukhara Vodokanal (BVK) produced a RPF satisfactory to the Bank, both neither BVK nor the local PCU branch have had direct experience preparing or implementing a RAP. Thus the Project Launch will include clear guidance to these entities on how to carry out its OP 4.12 responsibilities during project implementation. In addition, the Bank's missions will include a social development and safeguard specialist to provide continued guidance to the local PCU in implementing the RPF, and in preparing and implementing any subsequent RAPs.

5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.

The main stakeholders include the Government of Uzbekistan (GOU), Uzkomkhizmat, BVK Bukhara Vodokanal, the existing Alat and Karakul district vodokanals, local institutions involved in monitoring of environmental and social aspects, and Alat and Karakul population located in the project area.

In preparing a Resettlement Policy Framework (RPF), the client, in January 2011, carried out discussions with a range of stakeholders about the project and potential impacts. In February 2011, the borrower disclosed the draft RPF on the national website and carried out public consultations in the project area. On February 25, 2011, the Bank cleared the final RPF, and both the English and Russian versions of the RPF were sent to the Bank's InfoShop. The Bank team informed the client that as soon as the specific locations of land to be acquired are known,

the borrower will need to prepare a specific Resettlement Action Plan (RAP) consistent with the principles of the RPF, obtain the Bank's clearance of the RAP before it may be implemented, and then deliver the agreed compensation to all affected parties before any of the planned civil works may commence.

The draft EIA with EMP prepared in line with the February 2011 Feasibility Study has been publicly disclosed in local language on February 2, 2011 and discussed during meetings held in Alat and Karakul on February 5, 2011. The draft EIA report including minutes of the public meetings and the Bank review comments was disclosed in Infoshop on March 14, 2011.

Additionally, the March 2011 EIA with EMP and the RPF were revised in line with the updated June 2012 Feasibility Study. New public consultations were held in Alat and Karakul in June 2012 to inform stakeholders of the expanded project scope especially in the rural areas. Updated versions accounting for the results of public consultations were publically disclosed in country, on July 16 and 18, 2012 respectively. The updated EIA and RPF were sent to Infoshop on July 24, 2012. If necessary, further discussions with people project affected at specific sites will be carried out before the related civil works start in rural areas.

B. Disclosure Requirements Date

Environmental Assessment/Audit/Management Plan/Other	
Date of receipt by the Bank	21-Jul-2012
Date of "in-country" disclosure	16-Jul-2012
Date of submission to InfoShop	24-Jul-2012
For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors	
Resettlement Action Plan/Framework/Policy Process	
Date of receipt by the Bank	21-Jul-2012
Date of "in-country" disclosure	18-Jul-2012
Date of submission to InfoShop	24-Jul-2012
If the project triggers the Pest Management and/or Physical Cultural Resources policies, the respective issues are to be addressed and disclosed as part of the Environmental Assessment/Audit/or EMP.	
If in-country disclosure of any of the above documents is not expected, please explain why:	

C. Compliance Monitoring Indicators at the Corporate Level (to be filled in when the ISDS is finalized by the project decision meeting)

OP/BP/GP 4.01 - Environment Assessment			
Are the cost and the accountabilities for the EMP incorporated in the credit/loan?	Yes [<input checked="" type="checkbox"/>]	No [<input type="checkbox"/>]	NA [<input type="checkbox"/>]
OP/BP 4.12 - Involuntary Resettlement			
If yes, then did the Regional unit responsible for safeguards or Sector Manager review the plan?	Yes [<input checked="" type="checkbox"/>]	No [<input type="checkbox"/>]	NA [<input type="checkbox"/>]
OP 7.50 - Projects on International Waterways			
Has the RVP approved such an exception?	Yes [<input type="checkbox"/>]	No [<input type="checkbox"/>]	NA [<input checked="" type="checkbox"/>]
The World Bank Policy on Disclosure of Information			
Have relevant safeguard policies documents been sent to the World Bank's Infoshop?	Yes [<input checked="" type="checkbox"/>]	No [<input type="checkbox"/>]	NA [<input type="checkbox"/>]
Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?	Yes [<input checked="" type="checkbox"/>]	No [<input type="checkbox"/>]	NA [<input type="checkbox"/>]
All Safeguard Policies			
Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?	Yes [<input checked="" type="checkbox"/>]	No [<input type="checkbox"/>]	NA [<input type="checkbox"/>]
Have costs related to safeguard policy measures been included in the project cost?	Yes [<input checked="" type="checkbox"/>]	No [<input type="checkbox"/>]	NA [<input type="checkbox"/>]
Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?	Yes [<input checked="" type="checkbox"/>]	No [<input type="checkbox"/>]	NA [<input type="checkbox"/>]
Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?	Yes [<input checked="" type="checkbox"/>]	No [<input type="checkbox"/>]	NA [<input type="checkbox"/>]

III. APPROVALS

Task Team Leader:	Pier Francesco Mantovani		
Approved By:			
Regional Safeguards Coordinator:	Name:	Date:	
Sector Manager:	Name Manuel G. Marino (SM)	Date: 13-Aug-2012	