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R2014-0153/1

June 25, 2014

Closing Date: Tuesday, July 15, 2014 at 6 p.m.

FROM: The Corporate Secretary

Azerbaijan - Second National Water Supply and Sanitation Project

Additional Financing and Restructuring

Project Paper

Attached is the Project Paper regarding a proposed additional loan and restructuring to Azerbaijan for the Second National Water Supply and Sanitation Project (R2014-0153), which is being processed on an absence-of-objection basis.

Distribution:

Executive Directors and Alternates
President
Bank Group Senior Management
Vice Presidents, Bank, IFC and MIGA
Directors and Department Heads, Bank, IFC and MIGA

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The World Bank

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Report No: 86398-AZ

PROJECT PAPER

ON A

PROPOSED ADDITIONAL LOAN

IN THE AMOUNT OF US$150 MILLION

AND RESTRUCTURING

TO THE

REPUBLIC OF AZERBAIJAN

FOR THE

SECOND NATIONAL WATER SUPPLY AND SANITATION PROJECT

June 11, 2014

Sustainable Development Department
South Caucasus Country Unit
Europe and Central Asia Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective April 23, 2014)

Currency Unit	=	Azerbaijani New Manat
AZN0.78	=	US$1
US$1.28	=	AZN1

FISCAL YEAR
January 1 – December 31

ABBREVIATIONS AND ACRONYMS

AAWM	Azerbaijan Amelioration and Water Management Open Joint Stock Company
ADB	Asian Development Bank
AF	Additional Financing
AZERSU	Azersu Open Joint Stock Company
AZN	New Azerbaijan Manat
BoQ	Bill of Quantities
BP	Bank Procedures
CPS	Country Partnership Strategy
DA	Designated Account
DO	Development Objective
EIA	Environmental Impact Assessment
EMF	Environmental Management Framework
EMP	Environmental Management Plan
EU	European Union
FM	Financial Management
FY	Fiscal Year
GCC	General Condition of the Contract
GDP	Gross Domestic Product
IBRD	International Bank for Reconstruction and Development
IDA	International Development Association
IDB	Islamic Development Bank
IFI	International Financial Institutions
IFR	Interim Un-audited Financial Report
IP	Implementation Progress
İSDS	İntegrated Safeguards Data Sheet
ISR	Implementation Status Report
MS	Moderately Satisfactory
NWSSP	National Water Supply and Sanitation Project
JICA	Japanese International Cooperation Agency
KfW	German Federal Development Bank
MS	Moderately Satisfactory
MTR	Mid-Term Review
OJSC	Open Joint Stock Company
OP	Operational Policy
ORAF	Operational Risk Assessment Framework
PAD	Project Appraisal Document

PDO	Project Development Objective
PIE	Project Implementing Entity
PIU	Project Implementation Unit
PP	Procurement Plan
RAP	Resettlement Action Plan
RF	Results Framework
RPF	Resettlement Policy Framework
SAWMA	State Agency for Water Management and Amelioration of Nakhchivan AR
SNWSSP	Second National Water Supply and Sanitation Project
SSS	Single Source Selection
USD	United States Dollar
VAT	Value Added Tax
WTL	Water Transmission Line
WS	Water Supply
WTP	Water Treatment Plant
WWS	Waste Water System
WWTP	Waste Water Treatment Plant

Vice President:	Laura Tuck
Country Director:	Henry G. Kerali
Country Manager	Larisa Leshchenko
Sector Manager:	Sumila Gulyani
Task Team Leader:	Hadji Huseynov

AZERBAIJAN

SECOND NATIONAL WATER SUPPLY AND SANITATION PROJECT

ADDITIONAL FINANCING AND RESTRUCTURING

CONTENTS

Additional Financing Datasheet

Azerbaijan

Second National Water Supply & Sanitation Project - AF (P147378)

EUROPE AND CENTRAL ASIA

ECSUW

Basic Information – Parent			
Parent Project ID:	P109961	Original EA Category:	A - Full Assessment
Current Closing Date:	31-Dec-2014		

Basic Information – Additional Financing (AF)			
Project ID:	P147378	Additional Financing Type (from AUS):	Scale Up, restructuring
Regional Vice President:	Laura Tuck	Proposed EA Category:	A - Full Assessment
Country Director:	Henry G. R. Kerali	Expected Effectiveness Date:	30-Sep-2014
Sector Director:	Laszlo Lovei	Expected Closing Date:	31-Dec-2017
Sector Manager:	Sumila Gulyani	Report No:	86398-AZ
Team Leader:	Hadji Huseynov		

Borrower

Organization Name	Contact	Title	Telephone	Email
Ministry of Finance	Azer Mammadov	Head of Div	94412 404-46-99	

Project Financing Data–Parent (Second National Water Supply and Sanitation Project-P109961)

Key Dates

Project	Ln/Cr/TF	Status	Approval Date	Signing Date	Effectiveness Date	Original Closing Date	Revised Closing Date
P109961	IBRD-75180	Effective	27-May-2008	05-Sep-2008	13-Jul-2009	28-Feb-2013	31-Dec-2014
P109961	IDA-43970	Effective	27-May-2008	05-Sep-2008	13-Jul-2009	28-Feb-2013	31-Dec-2014

Disbursements

Project	Ln/Cr/TF	Status	Currency	Original	Revised	Cancelled	Disbursed	Undisbursed	% Disbursed
P109961	IBRD-75180	Effective	USD	230.00	230.00	0.00	161.99	68.01	70.43
P109961	IDA-43970	Effective	USD	30.00	30.00	0.00	14.67	14.40	48.89

Project Financing Data –Additional Financing Second National Water Supply & Sanitation Project - AF (P147378)			
[X] Loan [ ] Grant [ ] IDA Grant [ ] Credit [ ] Guarantee [ ] Other			
Total Project Cost:	234.00	Total Bank Financing:	150.00
Financing Gap:	0.00		

Financing Source – Additional Financing (AF)	Amount
Borrower	84.00
International Bank for Reconstruction and Development	150.00
Total	234.00

Policy Waivers

Does the project depart from the CAS in content or in other significant respects?	No
Explanation	
Does the project require any policy waiver(s)?	No
Explanation	

Team Composition

Bank Staff

Name	Title	Specialization	Unit
Deepal Fernando	Senior Procurement Specialist		ECSO2
Sabina Guliyeva	Temporary		ECCAZ
Gulana Enar Hajiyeva	Senior Environmental Specialist		ECSEN
Hadji Huseynov	Senior Infrastructure Specialist	Team Lead	ECSUW
Tural Jamalov	Financial Management Specialist		ECSO3
Manuel G. Marino	Lead Water and Sanitation Specialist		ECSUW
Jasna Mestnik	Finance Officer	Finance Officer	CTRLA
Karina Mostipan	Senior Procurement Specialist	Senior Procurement Specialist	ECSO2
Aly Zulficar Rahim	Social Development Specialist		ECSSO
Milane De Jesus Reyes	Program Assistant		ECSSD
Guy Tchakounte Tchabo	Senior Program Assistant	Senior Program Assistant	ECSSD

Non Bank Staff

Name	Title	City

Locations

Country	First Administrative Division	Location	Planned	Actual	Comments
Azerbaijan	Yardimli Rayonu	Yardimli Rayonu		X	
Azerbaijan	Masalli Rayonu	Masalli Rayonu		X	
Azerbaijan	Lerik Rayonu	Lerik Rayonu		X	
Azerbaijan	Dzhalilabadskiy Rayon	Dzhalilabadskiy Rayon		X	
Azerbaijan	Ismayilli Rayonu	Ismayilli Rayonu		X	
Azerbaijan	Divichinskiy Rayon	Divichinskiy Rayon		X	This rayon is renamed as Shabran
Azerbaijan	Agsu Rayonu	Agsu Rayonu		X	
Azerbaijan	Siyazan Rayonu	Siyazan Rayonu		X	

Sector Board

Water

Sectors / Climate Change

Sector (Maximum 5 and total % must equal 100)

Major Sector	Sector	%	Adaptation Co-benefits %	Mitigation Co-benefits %
Water, sanitation and flood protection	Water supply	60		
Water, sanitation and flood protection	Wastewater Collection and Transportation	20		
Water, sanitation and flood protection	Wastewater Treatment and Disposal	19		
Public Administration, Law, and Justice	Central government administration	1		
Total		100		

Themes

Theme (Maximum 5 and total % must equal 100)

Major theme	Theme	%
Urban development	City-wide Infrastructure and Service Delivery	67

Environment and natural resources management	Pollution management and environmental health	33

Sector Board

Water

Sectors / Climate Change

Sector (Maximum 5 and total % must equal 100)

Major Sector	Sector	%	Adaptation Co-benefits %	Mitigation Co-benefits %
Water, sanitation and flood protection	Water supply	60		
Water, sanitation and flood protection	Wastewater Collection and Transportation	20		
Water, sanitation and flood protection	Wastewater Treatment and Disposal	19		
Public Administration, Law, and Justice	Central government administration	1		
Total		100		

☐ I certify that there is no Adaptation and Mitigation Climate Change Co-benefits information applicable to this project.

Themes

Theme (Maximum 5 and total % must equal 100)

Major theme	Theme	%
Urban development	City-wide Infrastructure and Service Delivery	67
Environment and natural resources management	Pollution management and environmental health	33
Total		100

AZERBAIJAN

SECOND NATIONAL WATER SUPPLY AND SANITATION PROJECT

ADDITIONAL FINANCING AND RESTRUCTURING

I. Introduction

1. This Project Paper seeks the approval of the Executive Directors to restructure and provide an additional loan (Loan № 8381-AZ) in the amount of US$150 million to the Republic of Azerbaijan for the Second National Water Supply and Sanitation Project (SNWSSP; P109961). The proposed Additional Financing (AF) and restructuring will include an extension of the project's closing date to December 31, 2017, a revision of the Project Development Objective, and a revision of the Results Framework. In addition, the disbursement categories would be unified for the additional loan, and the correct name of the implementing agency be reflected in the Loan Agreement. The AF was formally requested by the Government of Azerbaijan in a letter dated June 19, 2013.

2. The proposed AF would finance additional works under existing civil work contracts for the rehabilitation of water supply and sanitation systems in Siyazan, Shabran, Aghsu, Ismayilli, Lerik, Yardimli, Masalli and Jalilabad rayons (Component A). The additional activities include: additional household connections, additional metering, larger capacity of water and wastewater treatment plants and other activities to scale up achieved results towards reaching current Project Development Objective (PDO). The proposed investments would not go beyond the original objectives of the project, but would allow more people to benefit from project activities. The proposed AF would also finance additional costs associated with construction supervision, institutional modernization and project management (Components B and C).

3. The proposed refinement of the Development Objective (DO) would better align it with the existing baseline and expected results of additional works, which would include more villages and settlements adjacent to the main rural centers covered under the original project, thereby allowing more beneficiaries to benefit from the project. The Results Framework (RF) would also be revised to (i) reflect the additional activities; (ii) refine the original performance indicators; and (iii) introduce sector core indicators. The extension of the project's closing date until December 31, 2017 is required to allow Borrower to implement the on-going and additional activities. Because on-going and original activities are to be implemented within the same existing contracts, the closing date of the original IBRD loan and IDA credit would also need to be extended until December 31, 2017.

4. All additional activities will be financed by the proposed AF loan, with Government co-funding. No multilateral or bilateral agencies will co-finance the project.

II. Background and Rationale for Additional Financing in the amount of US$150 million

Consistency with the Country Partnership Strategy (CPS)

5. The AF to this project is laid out in the Azerbaijan CPS Progress Report FY11-14 (Report Number: 776829-AZ)[1] and is fully consistent with the CPS Strategic Objectives to (i)

[1] discussed at the Board on May 28, 2013

build a competitive non-oil economy; and (ii) improve municipal and rural services (CPS FY11-14; Report Number: 56246-AZ). The Project contributes directly to Outcome 1 "More reliable water supply and sanitation" under the CPS Results Area 4 "Strengthening Municipal and Rural Services".

6. The proposed AF is primarily targeting the population of secondary cities and suburb villages which are mostly rural and more socially vulnerable compared to the population residing in Baku or large cities. Provision of basic public infrastructure services, such as reliable piped water supply and sanitation, would have a significant impact on the livelihood of the rural population and contribute to WBG's twin goals to reduce poverty and promote shared prosperity. Considering that children and women are most often the primary water users, and that women play a leading role in utilizing, providing and managing water in their households, they are affected most from inadequate water supply and sanitation services. Therefore, the provision of reliable and quality services would significantly benefit them.

Country and Sector Context

7. Since project effectiveness in July 2009, Azerbaijan has continued its path of economic growth driven by the oil-economy, although growth has slowed down from 5.0 percent in 2010 to only 2.2 percent of real GDP growth in 2012. However, growth is expected to increase again and stabilize at a moderate level with projections of annual growth of approximately 3.8 percent during 2013–16 (CPS Progress Report FY11-14). To sustain this growth, Azerbaijan will need to diversify its economy, introduce market-based policies, and strengthen public services. Particularly in rural areas, improving the coverage, quality, and sustainability of water supply and sanitation services remain a key Government priority.

8. Azerbaijan inherited a relatively extensive water supply system from the former Soviet Union. About 95 percent of the population in Baku and about 83 percent of those living in secondary cities and small towns are connected to piped water. However the quality of infrastructure and services has deteriorated severely since independence, due to a lack of investment and deferred maintenance. In many secondary and small towns, water treatment facilities are largely dysfunctional or lacking completely, leaving the population in these towns without access to safe water. In addition, almost everywhere in the country, the piped water supply is unreliable and often available fewer than 12 hours per day. Centralized piped water supply systems are rare in rural areas, where less than 33 percent of the population has access to a piped water supply. Azerbaijan has declared its commitment to using part of its new oil wealth to address infrastructure deficits in water supply and sanitation and to develop the sector to become financially sustainable. Important actions toward this goal include: (i) implementation of a large countrywide water program composed of numerous projects financed by international development institutions and the state budget with aim to rehabilitate, extend or construct the water and sanitation systems in all secondary cities across the country and the Greater Baku area; and (ii) institutional development, including the consolidation of local subsidiaries, the introduction of International Financial Reporting Standards (IFRS), the application of European water supply and wastewater standards, a comprehensive capacity-building program for operational and managerial staff, a new billing and collection system, and the establishment of Geographic Information System (GIS)-based asset management system.

9. The IBRD loan in the amount of US$230 million and the IDA credit in the amount of US$30 million equivalent were approved by the Bank for the Second National Water Supply and Sanitation Project (SNWSSP) on May 27, 2008 following the approval of an earlier US$230 million IBRD loan for the National Water Supply and Sanitation Project (NWSSP). These two projects are very similar in design but implemented by two different agencies. The SNWSSP's loan and credit became effective on July 13, 2009 and was initially expected to close on February 28, 2013. The original PDO *is to improve the availability, quality, reliability and sustainability of water supply and sanitation services of the Borrower*. The project originally included 21 rayons where implementation of investments in mainland was originally assigned to AZERSU Open Joint Stock Company while the Nakhchivan's State Amelioration and Water Management Agency (SAWMA) was responsible for investments in Nakhchivan Autonomous Republic. Immediately after effectiveness, the project faced implementation difficulties. These pertained to: (i) insufficient project preparation caused by the absence of feasibility and environmental studies; (ii) a shortage of funds due to underestimation of investment costs at appraisal caused by limited record of market costs in the water sector, which resulted in a reduction of project scope; and (iii) the inability of the original implementing agency to implement the massive countrywide water program with multiple donors. In addition, project activities were not adequately aligned with the PDO and the results framework. These issues were addressed by a Level II restructuring approved on September 18, 2009 to transfer the implementation responsibility from AZERSU to Azerbaijan Amelioration and Water Management JSC (AAWM) and level I restructuring approved on November 18, 2011 to downsize the original scope to 8 rayons (i.e. Siyazan, Shabran, Aghsu, Ismayilli, Lerik, Yardimli, Masalli and Jalilabad) and modify its PDO and results framework. On February 26, 2013 the project closing date was extended from February 28, 2013 to December 31, 2014 to allow the Borrower to complete the works under on-going contracts and meet the project's development objectives.

10. The cost per component and funds allocated under the original loan are summarized in Table 2. The description of projects components which are collectively financed under the original loan and AF is given below:

Component A: Rayon Investment

This component finances the Rehabilitation and reconstruction of water supply and sewerage systems as well as water, wastewater and septic sludge treatment facilities in the Selected Rayons (i.e. Siyazan, Shabran, Aghsu, Ismayilli, Masalli, Jalilabad, Yardimli, and Lerik rayons). The project covers the rayon centers and the villages located in close proximity of the urban centers or along the transmission mains supplying the centers.

Component B: Institutional Modernization

This component supports capacity building and modernization of: (a) the Project Implementing Entity and AZERSU, through the provision of consultants' services and Training for management, financial management, customer service, procurement, preventive maintenance and other subjects pertinent to effective and efficient management of the utilities; (b) AZERSU through development of performance monitoring, preventive maintenance and leak detection and repair; and (c) the Project Implementing Entity through design and technical support for construction management, including procurement support and contract supervision for the investments.

Component C: Project Implementation and Management
This component supports provision of consultants' services to assist the PIU for the purposes of effective management and implementation of Project activities.

Project performance

11. Project implementation has turned around over the last two years, after implementation responsibility was transferred to AAWM. All available funds have been committed and disbursements exceed 65 percent. The Project is on track to achieve the PDO. The Project Implementation Status Report (ISR) ratings for implementation progress (IP) and development objectives (DO) are currently rated as Moderately Satisfactory. Procurement has been completed and construction is progressing in all rayons covered under the project's current scope. About half of the ongoing civil work contracts are expected to be completed by the current closing date of December 31, 2014. The Government has recently completed the construction of new water supply and sanitation networks financed by the Project in Siyazan, Shabran, Aghsu, Ismayilli and Lerik, and design and construction is progressing in other sites. The Project's impact to date has been broadly consistent with expectations set out in the original Project Appraisal Document (PAD). The Government's commitment to the project remains strong and good progress has been made under all components. Most of key performance indicators demonstrate progress towards achieving the PDO. In particular, the following results are noteworthy:

a. Water supply and sanitation networks in three rayons centers (Siyazan, Shabran, water supply transmission line to Yardimli) have been inaugurated;

b. More than 120,000 project beneficiaries have been provided with reliable piped water supply and sanitation services;

c. EU water supply and wastewater standards have been introduced in Azerbaijan. The capacity-building program for field based operational and managerial staff of water utilities has been prepared. In addition, a number of institutional development activities to strengthen key stakeholder institutions are being implemented under the first water project (NWSSP) and Public Investment Capacity Building Project (PICBP).

12. The Mid-Term Review (MTR), in November 2012, confirmed overall project implementation progress and the identified additional funding needs to finance the scaling up of water supply and sanitation coverage in the original project rayons. The formal Government request for AF was submitted to the Bank on June 19, 2013.

13. The project is in compliance with all legal covenants under the Loan Agreement (IBRD-75180-AZ) and Credit Agreement (IDA-43970-AZ). The fiduciary management system is satisfactory, and there are no pending financial audit reports. Auditors issued an unqualified opinion for the latest audited project accounts covering the period ending December 31, 2012. Safeguards compliance for Operational Policy (OP)/Bank Procedures (BP) 4.01 (Environmental Assessment), OP/BP 4.47 (Safety of Dams) and OP/BP 4.12 (Involuntary Resettlement) is satisfactory. There are no unresolved environmental, social, or other safeguard issues as confirmed during the MTR and latest project implementation support mission completed in March, 2014.

Rationale for Additional Financing

14. Investments under the AF include: (i) additional household connections; (ii) additional metering; (iii) increased water and wastewater treatment plant capacity; and (iv) additional institutional modernization components and construction supervision and management. The proposed investments do not go beyond the original objectives of the project, but would allow more people to benefit from project activities.

15. The AF will support additional activities to scale-up on-going civil works in selected rayons. These activities are expected to increase the overall impact and benefits of investments, cover a larger number of utility customers, and strengthen the financial sustainability of capital investments. An additional 30 suburban villages will be supplied with gravity water providing an additional 120,000 people with piped water supply. The AF will also fund larger sanitation networks accompanied by larger capacity wastewater treatment plants. This would enable water utilities to collect and treat larger volumes of effluents, thus reducing the negative environmental impact from the use of septic tanks by households. The AF will also contribute to regional development by providing sustained and improved services, and a greater positive impact on the health and quality of life of low-income households in selected rural centers.

16. The proposed AF is fully aligned with the Government's Water Sector Strategy for 2006–2015, which establishes the provision of reliable water and sanitations services as one of the top priorities for the country. This strategy was developed jointly by the Bank and the Government and is based on the Water Sector Issues and Options Report prepared and presented to the Government by the World Bank in 2006. The ongoing SNWSSP and the proposed AF are also consistent with, and form an integral part of, the Government's ambitious country-wide $4 billion Azerbaijan Water Program, which is being supported by several development partners including the World Bank, ADB, KfW, IDB, and JICA.

Alternatives to Additional Financing

17. The Government has allocated budget resources to boost the economy with a large public investment program. A considerable portion of the public investment program is assigned to projects in the water sector with the aim to rehabilitate the water supply and sanitation services in more than 40 rayon centers and hundreds of suburban villages. The financing is spread between the state budget and donor resources. Despite an increase in public spending from 33.7 percent of GDP in 2011 to 35.2 percent in 2012, available funding sources for the water sector remain limited relative to the significant multibillion investments over the medium term period. Considerable investments are being provided by JICA, ADB, IDB and KfW for co-financing of existing projects in more than 20 rayons to reduce the burden on the state budget. There are coordination arrangements established between all donors and Government via quarterly meetings hold by the World Bank and ADB. The Government is putting a top priority on continuing its ongoing collaboration with the Bank in the sector and has submitted a request for this AF. Although the Government considers seeking funding from other International Financial Institutions (IFIs) for co-financing of on-going activities in other rayons, no donor co-financing is foreseen for completion of the works in project rayons supported by the Bank.

III. Proposed Changes

Summary of Proposed Changes

Implementation arrangements, with a well-performing PIU in AAWM, will not be changed. No changes are required in either the Environmental Safeguards Category or in the arrangement for procurement and financial management. The current PDO will be refined to be aligned with the baseline situation. The RF will be revised to reflect additional activities, refine original performance indicators and introduce sector core indicators. The original Closing Date of the project is December 31, 2014. An extension of the project Closing date by three years to December 31, 2017 will be required to complete the on-going and additional activities, and for contractors to meet their defect liability commitments and commission facilities to the implementing agency, which will hand over the new assets to AZERSU. Considering that on-going and original activities are to be implemented within the same existing contracts, the closing date of the original IBRD loan and IDA credit would also need to be extended until December 31, 2017.

Change in Implementing Agency	Yes [X] No [ ]
Change in Project's Development Objectives	Yes [X] No [ ]
Change in Results Framework	Yes [X] No [ ]
Change in Safeguard Policies Triggered	Yes [ ] No [X]
Change of EA category	Yes [ ] No [X]
Other Changes to Safeguards	Yes [ ] No [X]
Change in Legal Covenants	Yes [ ] No [X]
Change in Loan Closing Date(s)	Yes [X] No [ ]
Cancellations Proposed	Yes [ ] No [X]
Change in Disbursement Arrangements	Yes [ ] No [X]
Reallocation between Disbursement Categories	Yes [ ] No [X]
Change in Disbursement Estimates	Yes [ ] No [X]
Change to Components and Cost	Yes [ ] No [X]
Change in Institutional Arrangements	Yes [ ] No [X]
Change in Financial Management	Yes [ ] No [X]
Change in Procurement	Yes [ ] No [X]
Change in Implementation Schedule	Yes [ ] No [X]
Other Change(s)	Yes [ ] No [X]

Development Objective/Results

Project's Development Objectives

Original PDO

To improve the availability, quality, reliability and sustainability of water supply and sanitation (WSS)

services in selected regional (rayon) centers in Azerbaijan.

Change in Project's Development Objectives

Explanation:

The current PDO will be refined to align with baseline situation.

Proposed New PDO - Additional Financing (AF)

To improve the quality and reliability of water supply and expand water supply and sanitation services in selected regional (rayon) centers in Azerbaijan.

Change in Results Framework

Explanation:

The RF will be revised to reflect additional activities, refine original performance indicators and introduce sector core indicators.

Compliance

Covenants - Additional Financing (Second National Water Supply & Sanitation Project - AF - P147378)

Source of Funds	Finance Agreement Reference	Description of Covenants	Date Due	Recurrent	Frequency	Action
IBRD	LA, Schedule 2, Section I.A.1 PA, Schedule, Section I.A.1	The Borrower shall cause the PIE to, and PIE shall carry out the Project in accordance with the Project Operational Manual and shall not amend, suspend, abrogate, repeal or waive any provision of said Manual without the prior written approval of the Bank.		☒	CONTINUOUS	
IBRD	LA, Schedule 2, Section I.A.2 PA, Schedule, Section I.A.2	The Borrower shall cause the PIE to, and PIE shall maintain the PIU until the completion of the Project, and shall ensure that the PIU is adequately staffed by personnel with qualifications and under terms of reference and functions at all times in accordance with procedures necessary and appropriate for the carrying out of the Project, and satisfactory to		☒	CONTINUOUS	

		the Bank.				
IBRD	LA, Schedule 2, Section I.A.3 PA, Schedule, Section I.A.3	During the implementation of the Project, the Borrower shall cause the PIE to, and PIE shall retain the services of a construction management company satisfactory to the Bank until the Bank's assessment has determined that the PIE has the capacity to take over such a responsibility independently.		☒	CONTINUOUS	
IBRD	LA, Schedule 2, Section I.B.1	To facilitate the carrying out of the Project, the Borrower shall make the proceeds of the Loan available to the PIE under a subsidiary agreement between the Borrower and the PIE, under terms and conditions acceptable to the Bank ("Subsidiary Agreement").		☒	CONTINUOUS	
IBRD	LA, Schedule 2, Section I.B.2	The Borrower shall exercise its rights under the Subsidiary Agreement in such manner as to protect the interests of the Borrower and the Bank and to accomplish the purposes of the Loan. Except as the Bank shall otherwise agree, the Borrower shall not assign, amend, abrogate or waive the Subsidiary Agreement or any of its provisions.		☒	CONTINUOUS	
IBRD	LA, Schedule 2, Section I.D.1 PA, Schedule, Section I.C.1	The Borrower shall cause the PIE to, and PIE shall carry out the Project in accordance with the provisions of the EIAF, site-specific EIAs and EMPs, RPF and RAP, and shall not		☒	CONTINUOUS	

		assign, amend, abrogate or waive the EIA, EMP, RPF and/or RAP or any provision thereof, without prior approval of the Bank.				

Conditions

Source Of Fund	Name	Type
IBRD	Loan Agreement	Effectiveness

Description of Condition

The Subsidiary Agreement has been executed on behalf of the Borrower and the Project Implementing Entity.

Source Of Fund	Name	Type
IBRD	Loan Agreement	Effectiveness

Description of Condition

The Borrower has submitted to the Bank the Project Operational Manual in form and substance satisfactory to the Bank.

Finance

Loan Closing Date - Additional Financing (Second National Water Supply & Sanitation Project - AF - P147378)

Source of Funds	Proposed Additional Financing Loan Closing Date
International Bank for Reconstruction and Development	31-Dec-2017

Loan Closing Date(s) - Parent (Second National Water Supply and Sanitation Project - P109961)

Explanation:

The original Closing Date of the project is December 31, 2014. An extension of the project Closing date by three years to December 31, 2017 will be required to complete the on-going and additional activities, and for contractors to meet their defect liability commitments and commission facilities to the implementing agency, which will hand over the new assets to AZERSU. Considering that on-going and original activities are to be implemented within the same existing contracts, the closing date of the original IBRD loan and IDA credit would also need to be extended until December 31, 2017.

Ln/Cr/TF	Status	Original Closing Date	Current Closing Date	Proposed Closing Date	Previous Closing Date(s)
IBRD-75180	Effective	28-Feb-2013	31-Dec-2014	31-Dec-2017	31-Dec-2014
IDA-43970	Effective	28-Feb-2013	31-Dec-2014	31-Dec-2017	31-Dec-2014

Allocations - Additional Financing (Second National Water Supply & Sanitation

Project - AF - P147378)				
Source of Fund	**Currency**	**Category of Expenditure**	**Allocation**	**Disbursement %(Type Total)**
			Proposed	**Proposed**
IBRD		Goods, works, non-consulting and consultant services	149,625,000.00	75.00
IBRD		Front end fee	375,000.00	100.00
		Total:	150,000,000.00	

Other Change(s)

Change in Implementing Agency

Explanation:
The correct legal name of existing implementing agency (Azerbaijan Amelioration and Water Management Open Joint Stock Company) will be reflected in the amendments to the original legal agreements.

Implementing Agency Name	Type	Action
Amelioration and Water Management Open Joint Stock Company	Implementing Agency	

Appraisal Summary

Economic and Financial Analysis

Explanation:

See paragraphs №25 and №36

Technical Analysis

Explanation:

See paragraphs №23-24

Social Analysis

Explanation:

See paragraph №30

Environmental Analysis

Explanation:

See paragraphs №32 and №45

Risk

Explanation:

See paragraphs №52

18. The overall project design has proven to be adequate. No additional components will be introduced and the scaling-up will not trigger new safeguard policies. The AF will finance costs associated with additional activities under Component A "Rayon Investment", Component B "Institutional Modernization Component", and Component C "Project Implementation and Management", but does not require significant changes to the project design. Additional activities under Component A include (i) additional household connections; (ii) additional metering; and (iii) increased water and wastewater treatment plant capacity. Component B will include additional activities for institutional modernization and construction supervision. Additional funds will also be allocated to Component C to cover additional expenses for project management by the Project Implementation Unit (PIU). The correct legal name of implementing agency (Azerbaijan Amelioration and Water Management Open Joint Stock Company) has been reflected in the amendments to the original legal agreements.

19. Implementation arrangements, with a well-performing PIU in AAWM, will not be changed. No changes are required in either the Environmental Safeguards Category or in the arrangement for procurement and financial management. The current PDO will be refined to be aligned with the baseline situation. The RF will be revised to reflect additional activities, refine original performance indicators and introduce sector core indicators. It is proposed that the closing date be extended by three years to December 31, 2017, to complete the ongoing and additional activities, including the ability of contractors to fully meet their defect liability commitments and commission facilities to implementing agency, which will hand over the new assets to AZERSU. In addition, the disbursement categories are proposed to be unified in the legal agreement for the additional loan.

Results indicators. Key performance indicators have been reviewed and amendments to the RF are proposed mainly to reflect additional activities, introduce sector core indicators and a gender customized indicator. The revised RF will also rectify baseline and target values based on the updated information that has become available as a result of feasibility and construction activities implemented under original project. A summary of the revisions of the targets for the original result indicators is provided in Table 1 below. The complete revised RF is presented in Annex 1. The RF was finalized and agreed during appraisal.

Table 1: Proposes revisions to the Results Framework

Indicator	Original target FY15	Changes with AF	Revised target FY18
People in project area receiving improved water supply[2]	212,000 people	The target value is revised to reflect additional household connections and villages connected to improved water supply	323,000[3]

[2] Improved water supply is defined as 24-hour continuous service that complies with quality standards to, on average, 90 percent of the population for continuity of service and 98 percent of the samples for quality.

[3] This figure is based on number of household connections and includes population of suburb villages which will also benefit from improved water supply as a result of rehabilitated networks.

Population load measured in persons equivalent (PE) eliminated through adequate wastewater treatment[4]	230,000	The target value is revised to reflect additional household connections	285,000
New piped household water connections that are resulting from the project intervention		New core indicator	41,577
New household sewer connections constructed under the project		New core indicator	42,795
Number of females receiving improved water supply and sanitation services resulting from the project		New, (custom indicator to access gender impact of project interventions)	160,000
Number of rayons in which the water supply and wastewater systems in the project area are rehabilitated and operational.	8	No changes	8
Percentage of population in project areas that on average receives 24 hours of water supply per day		New custom indicator	90 Percent
Percentage of drinking water samples in project areas meeting Azeri water quality standards		New custom indicator	98 Percent
Intermediate Indicators			
Water network rehabilitated	900 Km	The target value is revised to reflect additional household connections and villages connected to improved water supply	1048 Km
Sewerage network rehabilitated	750 Km	The target value is revised to reflect additional household connections	923 Km
New reservoir capacity provided	31,000 m3	The target value is revised to reflect additional household connections and villages connected to improved water supply	52,000 m3
Rayons with monitoring system in place	8	Dropped and replaced with sector core indicator	
Number of trained O&M personnel in project rayons		New custom indicator	140
Rayons equipped and with trained personnel for O&M	8	No changes	8

[4] Adequate treatment is defined as conformity with the EU Wastewater Treatment Directive for secondary treatment.

20. **Funds allocation.** The overall amount of AF is US$150 million. The majority of funds would be allocated to Component A to finance additional activities under on-going civil works in selected rayons. Additional funds would also be made available to Component B to cover additional activities for institutional modernization and construction supervision and to Component C to cover additional expenses required by the PİU. The specific costs and financing allocation by component for the original project and the proposed AF are presented in Table 2 below:

Table 2: Revised Cost Estimates and Funds Allocation by Component (US$ million)

Component	Current allocation[5]		Additional financing needs		Total cost (incl. VAT)
	Total estimate (incl. VAT)	IBRD + IDA [6]	Total estimate (incl. VAT)	IBRD loan	
A: Rayon Investment	389.2	246.6	222.9	142.8	612.1
B: Institutional Modernization	15.0	9.5	7.5	4.8	22.5
C: Project Implementation and Management	5.2	3.3	3.2	2.0	8.4
Total baseline costs	**409.4**	**259.4**	**233.6**	**149.6**	**643.0**
Front-end Fee	0.6	0.6	0.4	0.4	1.0
TOTAL	**410.0**	**260.0**	**234.0**	**150.0**	**644.0**

21. **Extension of Closing Date.** The original Closing Date of the project is December 31, 2014. An extension of the project's Closing date by three years to December 31, 2017 will be required to complete the on-going and additional activities, and for contractors to meet their defect liability commitments and commission facilities to the implementing agency, which will hand over the new assets to AZERSU. Considering that on-going and original activities are to be implemented within the same existing contracts, the closing date of the original IBRD loan and IDA credit would also need to be extended until December 31, 2017.

IV. Appraisal Summary

22. **Implementation arrangements.** The AF and project restructuring do not require any changes to the implementation arrangements in place. The AAWM has the overall responsibility for project implementation. A PIU has been established within the AAWM to manage day-to-day project management responsibilities. The PIU has been staffed adequately and functions well. The existing structures have proven to be very effective and the PIU at AAWM will remain the implementation unit in charge. The activities financed by this AF do not require additional capacity at the PIU.

[5] Current allocation and actual amounts committed to date may differ from original allocation as a result of reallocation between components.
[6] IBRD and IDA financing excludes VAT which is financed under the Government contribution.

Technical appraisal

23. **Water Supply.** The water supply production, treatment, transmission and distribution infrastructure existing in project rayons has exceeded its economic life span and is severely deteriorated, affecting the quality and reliability of services. The AF will complement the work under the original project to address the widespread inefficiencies in the production and delivery of water to consumers, employing two strategic approaches: (i) rehabilitation of water production, treatment, storage and distribution infrastructure; and (ii) capacity building and institutional development to enhance staff capacities in O&M and provide necessary utility outfitting to ensure that the investments are sustained. The description of major investments and results per city is summarized in the technical Annex 3. As under the original project and NWSSP, investments will generally focus on the following aspects:

- *System Planning*. This will involve the introduction of master-planning capacities to: update and confirm system concepts; address bottlenecks in water treatment, storage and delivery, and improve overall asset management practices through wide application of SCADA systems.
- *Efficiency of the Water Supply System*. The investments will improve the efficiency of the system by converting from pressure systems to gravity systems where feasible.
- *Distribution Network Efficiency*: The investments will improve distribution network efficiency, in order to be able to progress eventually to 24 hour supply through measures such as network rehabilitation, installation of bulk water meters to measure losses and water delivery; replacement of key network mains based on secure (ring) structures; and establishment of storage facilities.
- *Mechanical and Electrical Works:* The investments will replace mechanical and electrical equipment vital to system efficiency and effectiveness, including pumps, panels, transformers, voltage protection, as well as provision of back-up generators, and construction of necessary structures to house these facilities, where necessary.
- *System Expansion*: The investments will expand the water supply network to reach unserved parts of the *rayon* centers and villages in close proximity or located along the transmission lines.
- *Capacity Building*: This will involve the provision of hands-on training in Operations and Maintenance of new facilities, including application of single standard water supply and wastewater treatment manuals for O&M in the rayons.

24. **Wastewater Management.** Like water supply, existing wastewater and storm water service in most *rayons* is inadequate. However, the key issues in wastewater service are typically different from those applicable to water supply, in that they relate more to the absence or seriously limited extent of wastewater collection and treatment facilities rather than to poor maintenance. The majority of households depend on on-site facilities, mainly septic pits (‘*shambols*’). The lack of treatment and safe disposal of septic sludge also needs to be addressed. Maintenance of wastewater systems is constrained by lack of appropriate tools, equipment and vehicles to service the public sewers and private sanitation facilities. AF wastewater investments will complement the ongoing investments in water supply with adequate wastewater disposal systems that comply with environmental requirements. The wastewater component of the project will expand existing sewerage network coverage in urbanized parts

with due regard to cost effectiveness, as well as sewage and septic sludge treatment and disposal, particularly where these would have clear positive environmental impacts. As under the original project and NWSSP, investments will focus primarily on the following issues:

- *Improvement of wastewater collection and treatment systems:* Rehabilitation and extension of existing wastewater collection and treatment systems, with expansion of sewerage networks to cover urbanized areas where mainly gravity flow is allowed, as well as increase in the capacity of originally planned wastewater and sludge treatment facilities; and
- *Capacity building and institutional development* to enhance staff capacities and ensure improved operational efficiency, so that the investments can be sustained and service improvements maintained.

25. **Economic analysis.** The project will increase the capacity of water and waste water treatment plants and extend the current water supply and sanitation network to selected rayons and surrounding villages. Although the project investments will complement investments made under SNWSSP, the Economic Analysis considers only costs and benefits associated to the investments financed under the AF. For the economic analysis the evaluation period was defined at 20 years, with corresponding benefits to be realized starting 2018, which best accounts for the economic life of the activities financed under the project. The adopted social discount rate is 5.5 percent and the standard conversation factor for the cost (mainly equipment, skilled and unskilled labor) is conservatively assessed at 0.85, in correspondence to recent guidelines issued by the EU[7]. All assumptions and key results are outlined below. A summary table of the economic analysis can also be found in the Annex 4.

26. The economic analysis includes (a) the cost of all project components, including Government contributions and estimated O&M costs, and (b) all measurable benefits, including improved energy efficiency; welfare gains at household level associated with reduced cost of service delivery (i.e. shift from tinkered water consumption to piped services); reduced coping cost due to better water quality and sufficient and reliable supply; and reduced discharge of pollutants due to increased wastewater treatment. As with all economic analyses, the costs are perfectly observed while the benefits are not. Although improved health and convenience are significant benefits of the proposed investments, attribution of health outcomes is particular difficult and associated benefits are therefore omitted from the analyses.

27. ***Benefits.*** The AF is expected to benefit around 120,000 people, by supplying them with better quality and reliability of water services. Of these 78 percent or 94,000 persons will experience sizeable improvements, as they will shift from tankered water provision to piped water connections. The project will also extend existing sewerage networks and increase the capacity of water and wastewater treated.

[7] EC Directorate General Regional Policy (2008), Guide to Cost-Benefit Analysis of Investment Projects. The EU suggests using lower Social Discount Rates (SDR) – than the commonly applied 12 percent . The EU SDR benchmark values are the following: 5.5 percent for Cohesion and IPA countries, and for convergence regions elsewhere with high growth outlook and 3.5 percent for competitiveness regions.

28. ***Reduced coping costs***. At the time of appraisal, even households with piped water connection suffer from unreliable supply and inadequate water quality, which has resulted in them boiling water to meet their drinking needs and investing in water tanks for security of supply. Proposed investments will render both practices obsolete, but this economic analysis conservatively assumes that only half of the households that currently have water tanks (between 10 and 95 percent, depending on the rayon) will give up their water tanks in the future, and savings associated with the quality of water pertain to only 10 liters per capita per day and only to households that currently boil their water, which is about 5 to 40 percent, depending on the rayon. The observed cost for a household water tank is about AZN 425 (or US$540) and, assuming an asset life of 20 years, households currently incur an annual cost of AZN 21 associated with the depreciation of their asset. Boiling one liter of water consumes 0.09 kWh, priced at its economic cost of US$0.27 per kWh[8]. Under these assumptions the project is expected to generate annual benefits of US$0.2 mln due to reduced investments in water tanks and US$2.3 mln of energy savings from no longer being required to boil water for safety precautions.

29. The project will also connect around additional 11,000 households to the sewerage network. This should produce benefits in the form of avoided investments in septic tanks and their maintenance. The observed cost for a septic tank is about AZN 2,000 (or US$2,540) and, assuming an asset life of 20 years, households currently incur an annual cost of AZN 100 associated with the depreciation of their asset. Adding to this the annual cost of emptying a septic tank (AZN 10), the project is expected to generate annual benefits of US$1.5 mln due to avoided investment and maintenance expenditures in septic tanks.

30. ***Welfare gains to households associated with lower cost of provision and increased consumption***. Households without piped water currently consume tankered water at the cost of around US$3.2 per cubic meter, compared to the piped water tariff of US$0.35 per cubic meter. Due to the high cost of tankered water, households consume only 13 liters per capita per day, on average, from these supplies and complement their consumption with well water. Since household savings per cubic meter are roughly a tenth, it is likely that these savings are converted to increased consumption. This analysis assumes that future per capita consumption by these households will expand to 100 liters per capita per day, which is a consumption estimate at the lower bound of comparable countries in Eastern Europe. Applying these net savings to current and incremental water consumption generates annual benefits of US$9.8 mln.

31. ***Energy Efficiency improvement.*** The project is also expected to reduce the energy intensity of water provision by switching from pumping to gravity-based systems where feasible. To estimate savings in energy efficiency the team used baseline data on energy intensity (kWh/m^3) collected in 5 of the 8 selected rayons and projected energy intensity estimated from feasibility studies and detailed designs. This, along with the total amount of water produced, was

[8] World Bank (2012) Europe and Central Asia Balancing Act; Cutting subsidies, protecting affordability, and investing in the Energy Sector in Eastern Europe and Central Asia Region.

used to estimate savings in energy efficiency. Annual benefits from savings in energy efficiency were estimated at US$0.6 mln.

32. ***Reduce discharge of pollution loads***. The AF will increase – by 50,000 Population Equivalent (PE) - the cumulative capacity of eight wastewater treatment plants, financed under the SNWSSP. The wastewater treatment includes nutrient reduction and has been designed to comply with the EU directive on wastewater treatment. In order to measure the benefits of reduced discharge of pollutants the shadow price for Nutrient, Phosphate, BOD and COD removal[9], assessed in a recent evaluation on pollution load removal[10], was applied in this economic analysis. Annual benefits from avoided pollution removal costs were estimated at US$7.4 mln.

33. ***Costs.*** All project costs, including Components A, B and C were applied in the economic analysis. It was assumed that annual O&M costs were equal to 3 percent of the investment cost and total investment costs, net of VAT, were adjusted by a standard conversion factor of 0.85, as mentioned above.

34. ***Results.*** Based on these assumptions the total estimated annual benefits of the project are US$21.9 mln, yielding an ERR of 7 percent and a NPV of US$22.4 mln.

35. ***Efficiency.*** Based on results of economic and financial analysis the SNWSSP and the AF have US$2,020 and US$1,950 per capita investment costs, which are higher than average international rates for the urbanized areas. However, the preliminary analysis of similar rates from other donor and Government funded operations in the country, indicates that rates used in Bank's funded water operations are among the lowest. While the major reason of the high per capita cost in Azerbaijan water sector is the low population density in the semi-urban areas served, the project team would review the realism of the detailed engineering designs and monitor closely the cost of implementation, as to avoid any further increases and ensure cost efficiency to the best extent.

36. **Financial analysis.** The majority of funds under the AF will be used to extend the water supply and sanitation systems to cover an increased number of households. In particular, the capacity of water intakes and water and wastewater treatment plants and the coverage of water supply and sanitation networks will be significantly extended. These extensions are expected to provide economy of scale and reduce the cost of household connections in the range of: (i) 5-10 percent for small contracts such as those for Lerik and Yardimli rayons where the number of connections would increase from 1,200 to 1,700; (ii) 10-15 percent for medium-size contracts such as those for Siyazan and Shabran rayons, where the number of connections would double

[9] The following values were used as shadow prices: 0.033 EUR/kg (DBO), 0.098 EUR/kg (DCO), 16.353 EUR/kg (N) and 30.944 EUR/kg (P).

[10] Hernandez-Sancho H, Molinos-Senante M, Sala-Garrido M, (2010) Economic valuation of environmental benefits from wastewater treatment. Science of the Total Environment.

from about 3000 to 6000; and (iii) 20-30 percent for large-size contracts such as in Aghsu, Ismayilli, Masalli and Jalilabad, where the number of connections would more than double, from about 4,000 to 10,000. Savings are expected, as in the case of the Shabran construction contract, where the cost of household connections should be reduced from $8,411 (original contract value/original number of household connections) to $7,540 (amended contract final value/increased number of household connections). The new cost of household connection under the Shabran contract is calculated on the basis of the increased number of household connections to be covered under the AF, and does not consider additional villages/people supplied with access to piped water supply but with no household connection.

37. It is expected that the AF will enable the implementing agency to almost double the number of beneficiary customers in project rayons. This in turn will have a strong positive impact on sustainability of investments and strengthen the operating and working ratio of local water utilities. The provision of prepaid smart meters would ensure a 100 percent tariff collection, while providing 85 percent savings from payroll and 90 percent savings on transportation costs, as manual reading would no longer be required. The smart meters have a leak detection function which would significantly contribute to the leakage preventive activities and reduce the bill for individual customers. The embedded GSM module would enable the remote flow control and reading and eliminate costs associated with old billing system.

38. **Procurement.** Procurement functions under the project are assigned to the PIU under the AAWM. The PIU has a qualified and experienced procurement specialist. The last procurement review was carried out during the March, 2014 mission, and the rating was satisfactory. The last procurement post review was carried out during the June 2012 supervision mission. Procurement under the AF shall follow the Bank's "Guidelines: Procurement under IBRD Loans and IDA Credits" dated January 2011, and "Guidelines: Selection and Employment of Consultants by World Bank Borrowers" dated January 2011 and Guidelines On Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants dated October 15, 2006, and revised in January 2011. The PIU has prepared a draft Procurement Plan (PP) for the AF attached in the Annex 4.

39. An agreed PP details all expenses to be financed under the proposed AF, which are: i) amendments to existing civil work contracts for rehabilitation of water supply and sanitation systems in project rayons. (Component A); ii) consultancy services for construction supervision and institutional modernization (Component B); and iii) project implementation and audit (Component C). Most of the funds are allocated to finance the additional works under component A. The existing Bill of Quantities (BoQ) under all 11 existing civil work contracts which have been originally procured competitively following ICB terms are planned to be amended by the implementing agency. The amendments are to be awarded following Direct Contracting Procedures and would be based on the initial unit rates submitted at the bidding stage and the existing provisions in accordance with General Condition of the Contract (GCC) № 39 for such change orders. However, some additional items including the contract for the supply and installation of smart meters for all the rayons are planned to be procured competitively. Each works contract will have two amendments: a) first amendment with regard to WS and WWS

networks for which additional scope (quantities) are currently known to the Borrower; and b) second amendment with regard to WWTPs for which the revised scope will be known later once detailed designs are approved by AZERSU and safeguards requirements are complied with. The changes to the scope of original contract have three main risks: (i) corruption; (ii) excessive prices by current contractors; and (iii) political interference. The Bank considers that the proposed procurement approach is the most appropriate to address these three risks: (i) using competitively bid unit rates, under the control of the independent engineering supervision firm for all amendments, minimizes potential corruption risks which may occur if rebidding or bidding is selected to contract additional works; (ii) the technical team has compared the original unit prices (procured competitively in 2011-2012 for all existing civil work contracts) with international comparators and found them within a reasonable range; and (iii) keeping current contractors would minimize the risk of external interference, particularly since there is an heterogeneous mix of contractors/nationalities involved and to ensure uniform technical standard/compliance for each city. The alternative of seeking new bids for increased BoQ would result in delayed completion by 9-12 months (i.e. time allocated to procurement, mobilization and detailed design). New unit rates would also likely be higher than the ones procured in 2011-2012 considering inflation and additional costs to be faced by new contractor due to mobilization, design preparation and approval.

40. Though the Bank is in agreement with the implementing agency that procurement of additional works based on Single Source Selection (SSS) procedures maintaining the original unit rates is the most cost efficient and technically sound solution, the project team will carry out a technical audit for some of the completed works to confirm the quantities performed as per original BoQ and those proposed under amended contracts. The results of these audits will be used to further enhance the project fiduciary and technical oversight. The first audits for two large contracts in Siyazan and Shabran rayons have been already conducted in March 2014. The results of those audits confirmed that the works and payments defined in the contracts and its amendments have been correctly executed.

41. The current construction supervision contract for ongoing civil works will be amended to cover additional works. The final PP was agreed with the Borrower during Appraisal and finalized during Negotiations. Draft amendments to the few contracts have been prepared and were submitted to the Bank for review prior to Negotiations.

42. **Financial management.** The proposed AF does not require changes in the financial management arrangements. Financial Management (FM) functions under the proposed AF, including flow of funds, staffing, accounting, reporting and auditing, will remain under the responsibility of the PIU at the AAWM, as under the original Project. FM arrangements of the original Project have been reviewed periodically as part of project supervision and have been found satisfactory. The last implementation support mission, including FM review was held in December, 2013. Sound internal control procedures are in place. The client is in compliance with the financial management covenants: Interim Un-audited Financial Reports (IFRs) have been submitted on a regular and timely basis and the Project audit reports have been received by due date and the auditor has given an unqualified opinion on the project financial statements. The overall FM risk for the Project remains Moderate.

43. Audit arrangements similar to the audit arrangements under the original Project would be adopted for the proposed AF. The audit will be conducted by an independent private auditor in accordance with terms of reference acceptable to the World Bank, and procured by the PIU. The current format and components of the project financial statements will remain the same. The annual audited project financial statements will be submitted to the World Bank within six months after the end of each reporting period. The audited financial statements will be posted on AAWM's official website within one month of the receipt of audited reports from the auditor. In addition, following the World Bank's formal receipt of the financial statements from the recipient, the World Bank will make them available to the public in accordance with its Policy on Access to Information for Bank-financed operations. The cost of the audit would be financed from the proceeds of the Loan. The quarterly IFRs will be used for the proposed AF monitoring and supervision. Existing IFR formats will be used and the PIU will produce a full set of IFRs every quarter throughout the life of the Project and will submit them to the World Bank no later than 45 days after the calendar quarter end.

44. **Disbursement.** The proposed AF would follow the flow of funds and disbursement arrangements established under the original Project, i.e., reimbursement, direct payment, advances, and special commitments including the use of Statement of Expenditure procedures. A separate Designated Account (DA) for IBRD funds under the AF Loan would be opened in a commercial bank on terms and conditions acceptable to IBRD. It was agreed to set the Ceiling of Advances to the DA at US$10.0 million, so as to ensure quick and efficient disbursements for the proposed Additional Financing.

45. **Environmental safeguards.** The original project and AF trigger OP/BP 4.01 'Environmental Assessment' falling under Category A for Environmental Assessment (EA) since it provides financing for one or more wastewater treatment plants of considerable size and potential impact. Most sub-project investments in water supply, rehabilitation of infrastructure, and smaller wastewater treatment plants pose less risk. Prior to appraisal of the original project the client prepared an EA document which set out an environmental framework for screening, due diligence, mitigation and monitoring. The specific utility and sites locales have been determined during the implementation of the original project, and site-specific EIAs were prepared and approved for each selected site, which provide for the assessment of the associated environmental risks and put in place mitigation and monitoring mechanisms. For the purposes of the Additional Financing, EIA Reports for all 8 rayons have been updated by the implementing agency to accommodate the additional scope of work specified above. Those updated EIA Reports have been cleared by the Bank and duly disclosed on the AAWM's official web-site and disclosed in the World Bank's Infoshop prior to appraisal. The project ISDS has been updated as part of appraisal and publically disclosed. The Executive Summaries have been cleared by SECPO.

46. The original project and AF trigger OP/BP 7.50 "International Waterways" but were deemed to fall within the exception to the notification requirement under Paragraph (7a) of the Operational Policy. Several of the rayons under the Project are dependent on canals linked to the Kura River or its tributaries for their drinking water supply, and raw wastewaters from some of

them are discharged untreated into receiving water bodies, including canals ultimately linked to the above mentioned rivers and the Caspian Sea. The works to be carried out under the project are not expected to have adverse impacts on the quality and quantity of water to the riparians, and will not be affected by the other riparians water use. It is expected that the water intake from the rivers will actually be reduced because of the reduction in leakages and improved demand management under the project. Proposed investments are also expected to improve the quality of wastewater discharged into the relevant waterways, resulting in overall improvements in their water quality. The Bank determined in its memo, cleared by the Regional Vice President, dated April 13, 2014 that the exception to the external notification requirement set forth in paragraph 7a) of OP 7.50 is applicable under the Additional Financing.

47. The original project and AF trigger Safeguards Policy OP 4.47 (Safety of Dams) even though the project does not finance the construction or rehabilitation of any dams or other large control structures, because the assumption under the original project was that in some of the rayons water supply schemes might be supplied from existing dams. The original project envisaged consultations with Dam Safety Specialists on the appropriate means for ensuring that this OP is met, and, if deemed necessary, investigations on the dam safety to be carried out by an independent dam safety expert in accordance with OP 4.47. Given that all detailed designs for 8 cities are prepared, it has recently been identified that Jalilabad and Masalli rayons would be supplied with water from the existing Vilashchay Dam located in Masalli rayon. It was agreed with the implementing agency that a dam safety expert would be hired and appropriate dam safety reports would be cleared by the Bank, and the report's recommendations implemented prior to starting the construction works under Part A of the Project in the Jalilabad and Masalli rayons. The water supply solutions proposed in the detailed designs for the remaining rayons do not involve the use of existing dams other than Vilashchay Dam to be used for Masalli and Jalilabad rayons.

48. **Social safeguards.** The original project and AF trigger OP/BP 4.12 'Involuntary Resettlement' since its implementation might involve land acquisition of either fallow land, used agricultural land, and/or pasture areas used for sheep and cattle, for specific infrastructure investments such as wastewater treatment plants and water and sewage investments mainly outside the urban centers. As the specific locations, land type and size were not fully determined at appraisal, a Resettlement Policy Framework (RPF) was developed under the original project.

49. The RPF sets out the policies, principles, institutional arrangements, schedules and funding mechanisms for any land acquisitions that may occur in the project rayons as a result of the project. No resettlement of persons is anticipated, and the project does not foresee any demolitions of commercial or private buildings.

50. Specific utility and sites locales outside the urban centers have been determined for the purpose of wastewater and water treatment facilities as part of implementation of the original project. Specific social assessment reports, including information on the land acquisition needs are under preparation by the implementing agency for each selected site. These reports will

provide the assessment of the associated social risks and put in place mitigation and monitoring mechanisms before construction of relevant wastewater and water treatment facilities have started.

51. **Restructuring of Original Project.** The original Project will be restructured accordingly to refine the Project Development Objective; extend the closing date by three years; make revisions in the Results Framework, and reflect the correct name of the implementing agency. These changes will be reflected in an amendment letter to the original loan and credit agreements.

52. **Risks.** The overall risk rating in the original project was Substantial. Since effectiveness, the implementation performance of the project was satisfactory or moderately satisfactory, and the main risks identified during initial project preparation have not materialized or are no longer relevant. In addition, the mitigating measures carried out under the original project have proven to be effective. Nevertheless, some risks remain and it is proposed that the overall risk associated with the AF be rated as *Substantial*. The Operational Risk Assessment Framework (ORAF) in Annex 2 provides further details on the risks and corresponding mitigation measures.

Annex 1: Results Framework and Monitoring
AZERBAIJAN: Second National Water Supply and Sanitation Project – Additional Financing and Restructuring

Results Framework

Revisions to the Results Framework		Rationale for Change
PDO		
Current	*Proposed*	*Comments*
The PDO is to provide quality and reliable water supply and sanitation services in selected regional (rayon) centers in Azerbaijan.	The PDO is to improve the quality and reliability of water supply and expand water supply and sanitation services in selected regional (rayon) centers in Azerbaijan.	Revisions are proposed to align the PDO with baseline situation and monitoring indicators.
PDO indicators		
Current	*Proposed change**	*Comments*
People in project area receiving improved water supply and sanitation services resulting from the project[11].		The target value is revised to reflect additional household connections and villages connected to improved water supply. A more precise definition of improved services is added
	Number of females receiving improved water supply and sanitation services resulting from the project	New, (custom indicator to access gender impact of project interventions)
	Percentage of drinking water samples in project area meeting Azeri water quality standards	New, (custom indicator to access the quality of water)
Pollution load measured in persons equivalent (PE) eliminated through adequate wastewater treatment[12].		Continued, target value is revised to include additional manhole connections (core indicator)
	Percentage of population that on average receives 24 hours of water supply	New, (custom indicator to assess the reliability of service)
Intermediate Results indicators		
Current	*Proposed change**	*Comments*
Component A: Water supply and sanitation systems in the project area are rehabilitated and operational.		
Number of rayons in which the water supply and wastewater systems in the project areas are	--	Continued

[11] Improved water supply is defined as 24-hour continuous service that complies with quality standards.
[12] Adequate treatment is defined as conformity with the EU Wastewater Treatment Directive for secondary treatment.

Revisions to the Results Framework		Rationale for Change
rehabilitated and operational.		
	New piped household water connections that are resulting from the project intervention.	New, (core indicator)
	New household sewer connections constructed under the project.	New, (core indicator)
Water network rehabilitated.	--	Continued, revised to reflect additional household connections and villages connected to improved water supply
Sewerage network rehabilitated.	--	Continued, revised to reflect additional manhole connections
New reservoir capacity provided.	--	Continued, revised to reflect additional household connections and villages connected to improved water supply
Component B: Selected water utilities have been strengthened, with adequate operational and maintenance capacity, setting the basis for future financial sustainability.		
Rayons equipped and with trained personnel for O&M	--	Continued
Number of trained O&M personnel in project rayons	--	New (custom indicator to access institutional impact of project interventions)
Rayons with monitoring system in place	--	Dropped; redundant

*** Indicate if the indicator is Dropped, Continued, New, Revised, or if there is a change in the end of project target value**

REVISED PROJECT RESULTS FRAMEWORK

Project Name:	Second National Water Supply & Sanitation Project - AF (P147378)			Project Stage:	Additional Financing	Status:	DRAFT
Team Leader:	Hadji Huseynov	Requesting Unit:	ECCU3	Created by:	Hadji Huseynov on 03-Apr-2014		
Product Line:	IBRD/IDA	Responsible Unit:	ECSUW	Modified by:	Hadji Huseynov on 11-Jun-2014		
Country:	Azerbaijan	Approval FY:	2014				
Region:	EUROPE AND CENTRAL ASIA	Lending Instrument:	Investment Project Financing				
Parent Project ID:	P109961	Parent Project Name:	Second National Water Supply and Sanitation Project (P109961)				

Project Development Objectives

Original Project Development Objective - Parent:

To improve the availability, quality, reliability and sustainability of water supply and sanitation (WSS) services in selected regional (rayon) centers in Azerbaijan.

Proposed Project Development Objective - Additional Financing (AF):

To improve the quality and reliability of water supply and expand water supply and sanitation services in selected regional (rayon)centers in Azerbaijan.

Results

Core sector indicators are considered: Yes

Results reporting level: Program Level

Project Development Objective Indicators

Status	Indicator Name	Core	Unit of Measure		Baseline	Actual(Current)	End Target
Revised	People in project areas receiving improved water	☐	Number	Value	0.00	119230.00	323000.00
				Date	05-Feb-2012	04-Dec-2013	31-Dec-2017

	supply			Comment	The facilities are under construction.	Number of completed households connections multiplied by average family size in project rayons.	The end target has been refined to include additional activities financed under AF
New	Number of females receiving improved water supply and sanitation services resulting from the project	☐	Number	Value	0.00	60000.00	160000.00
				Date	05-Feb-2012	04-Dec-2013	31-Dec-2017
				Comment	The facilities are under construction.		
New	Percentage of drinking water samples in project areas meeting Azeri water quality standards	☐	Percentage	Value	0.00	50.00	98.00
				Date	05-Feb-2012	04-Dec-2013	31-Dec-2017
				Comment			
New	Percentage of population in project areas that on average receives 24 hours of water supply	☐	Percentage	Value	40.00	50.00	98.00
				Date	05-Feb-2012	04-Dec-2013	31-Dec-2017
				Comment			
Revised	Pollution load measured in persons equivalent (PE) eliminated through adequate wastewater treatment	☐	Number	Value	0.00	0.00	285000.00
				Date	05-Feb-2012	04-Dec-2013	31-Dec-2017
				Comment	The facilities are under construction.	This target will be met once construction of WWTPs is completed.	The end target has been refined to include additional activities financed under AF

Intermediate Results Indicators

Status	Indicator Name	Core	Unit of Measure		Baseline	Actual(Current)	End Target

Revised	Number of rayons in which the water supply and wastewater systems in the project areas are rehabilitated and operational	☐	Number	Value	0.00	5.00	8.00
				Date	05-Feb-2012	04-Dec-2013	31-Dec-2017
				Comment	The facilities are under construction.	The water intakes and water supply and sanitation networks are completed in 5 rayons	
Revised	Water network rehabilitated	☐	Kilometers	Value	0.00	789.00	1048.00
				Date	05-Feb-2012	04-Dec-2013	31-Dec-2017
				Comment	The facilities are under construction.	The construction of networks in Siyazan, Shabran, Aghsu, Ismayilli and Lerik is completed and partially completed for Lerik, Yardimli andMasalli.	The end target has been refined to include additional activities financed under AF
Revised	Sewerage network rehabilitated	☐	Kilometers	Value	0.00	600.00	923.00
				Date	05-Feb-2012	04-Dec-2013	31-Dec-2017
				Comment	The facilities are under construction.	The construction of networks in Siyazan, Shabran, Aghsu, and Ismayilli is completed and partially completed for Yardimli, Masalli and Jalilabad.	The end target has been refined to include additional activities financed under AF

Revised	New reservoir capacity provided	☐	Cubic Meter(m3)	Value	0.00	13600.00	52000.00
				Date	05-Feb-2012	04-Dec-2013	31-Dec-2017
				Comment	The facilities are under construction.	All reservoirs for Siyazan, Shabran, Lerik, Aghsu and Ismayilli have been constructed. The reservoirs for Yardimli, Masalli and Jalilabad are under construction.	The end target has been refined to include additional activities financed under AF
Revised	New piped household water connections that are resulting from the project intervention	☒	Number	Value	0.00	23846.00	41577.00
				Date	05-Feb-2012	04-Dec-2013	31-Dec-2017
				Comment	The facilities are under construction.	All household connections have been fully completed for Siyazan, Shabran, Aghsu, Ismayilli and Lerik and partially for Yardimli, Masalli and Jalilabad.	The end target has been refined to include additional activities financed under AF
Revised	New household sewer connections constructed under the project	☒	Number	Value	0.00	22221.00	42795.00
				Date	05-Feb-2012	04-Dec-2013	31-Dec-2017
				Comment	The facilities are under construction.	All household connections have been fully completed for Siyazan, Shabran, Aghsu, Ismayilli and Lerik and	The end target has been refined to include additional activities financed under AF

						partially for Yardimli, Masalli and Jalilabad.	
Revised	Rayons equipped and with trained personnel for O&M	☐	Number	Value	0.00	5.00	8.00
				Date	05-Feb-2012	04-Dec-2013	31-Dec-2017
				Comment	The facilities are under construction.	The water intakes and water supply and sanitation networks are completed in 5 rayons and utility personnel has been equipped and trained by contractor.	
New	Number of trained O&M personnel in project rayons	☐	Number	Value	0.00	0.00	140.00
				Date	05-Feb-2012	04-Dec-2013	31-Dec-2017
				Comment			
Marked for Deletion	Daily number of hours of water supply service (average per connection)	☐	Number	Value	4.00	14.00	24.00
				Date	05-Feb-2012	04-Dec-2013	31-Dec-2014
				Comment	The facilities are under construction.	This target will be met at 100% once the rehabilitation works are completed in all project rayons.	
Marked for Deletion	Percentage of drinking water samples in project area meeting Azeri water quality standards	☐	Percentage	Value	0.00	60.00	100.00
				Date	05-Feb-2012	04-Dec-2013	31-Dec-2014
				Comment	The facilities are under construction.	This target will be met at 100% once the rehabilitation	

						works are completed in all project rayons.	
Marked for Deletion	Effluent water samples passing water quality tests	☐	Percentage	Value	0.00	0.00	100.00
				Date	05-Feb-2012	04-Dec-2013	31-Dec-2014
				Comment	The facilities are under construction.	This target will be met once construction of WWTPs is completed.	

Annex 2: Operational Risk Assessment Framework (ORAF)
AZERBAIJAN: Second National Water Supply and Sanitation Project – Additional Financing and Restructuring

Project Stakeholder Risks						
Stakeholder Risk	**Rating**	**Substantial**				
Risk Description: 1. The project is implemented by Azerbaijan Amelioration and Water Management JSC (AAWM), which does not have primary responsibility for potable water supply and sanitation services across the country.	**Risk Management:** 1. The Government has established an efficient coordination mechanism between the implementing agency (AAWM) and Azersu that will inherit all facilities built under the project. The Cabinet of Ministers and project team control that agreed coordination arrangements are properly followed by all stakeholders.					
	Resp:	**Status:**	**Stage:**	**Recurrent:**	**Due Date:**	**Frequency:**
	Both	Completed	Implementation	☐		
2. There is a risk that AZERSU JSC, the national potable water and sanitation utility, may not agree to take over facilities constructed by AAWM once commissioning is over.	**Risk Management:** The Government has established an efficient coordination mechanism between the implementing agency (AAWM) and AZERSU to allow for a smooth transition once all facilities are built. The Cabinet of Ministers and the project team are supervising this effort closely. 2. AZERSU has developed technical guidelines specifying design and maintenance requirements for all water and sanitation facilities under construction. All detailed designs are scrutinized by AZERSU and AAWM so they fully meet the technical requirements set by AZERSU before construction commences.					
	Resp:	**Status:**	**Stage:**	**Recurrent:**	**Due Date:**	**Frequency:**
	Client	Completed	Implementation	☐		
Implementing Agency (IA) Risks (including Fiduciary Risks)						
Capacity	**Rating**	**Low**				
Risk Description: The additional activities may bear the risk to over-stretch existing PİU implementation capacity.	**Risk Management:** The PIU is fully staffed and capable of handling additional tasks. AAWM has demonstrated strong management and technical capacity and is in a position to handle a larger workload. The PIU and AAWM are also supported by a reputable and capable international construction supervision company and this arrangement has already proven effective.					
	Resp:	**Status:**	**Stage:**	**Recurrent:**	**Due Date:**	**Frequency:**

	Client	Completed	Implementation	☐		
Governance	**Rating**	**Substantial**				
Risk Description: Weak institutional capacity (central, regional and local); and (ii) need for greater accountability and transparency in processes, including financial management and procurement functions.	**Risk Management:** Computerized billing and accounting system are currently introduced in AZERSU that would increase revenue collection, reduce rent seeking opportunities; and improve financial management. The PIU and AAWM are also supported by reputable international Construction Supervision Company. To further enhance fiduciary and technical oversight, an independent technical and financial audit of a few large ongoing contracts will be conducted.					
	Resp: Bank	**Status:** In Progress	**Stage:** Implementation	**Recurrent:** ☐	**Due Date:**	**Frequency:**
	Risk Management:					
	Resp:	**Status:**	**Stage:**	**Recurrent:** ☐	**Due Date:**	**Frequency:**
Project Risks						
Design	**Rating**	**Moderate**				
Risk Description: The recent practices with the implementation of large infrastructure investment projects in Azerbaijan repeatedly demonstrates delays with the review and approval of detailed designs for civil work contracts.	**Risk Management:** The AAWM has demonstrated the strong project ownership facilitating the review of project related design documentation ensuring an efficient and timely review/endorsement by Government. Most of detailed designs covering additional financing are ready and endorsedor about to be endorsed by Government and the Bank. The team will watch this progress very closely.					
	Resp: Client	**Status:** In Progress	**Stage:** Implementation	**Recurrent:** ☐	**Due Date:**	**Frequency:**
Social and Environmental	**Rating**	**Moderate**				
Risk Description: 1. The Additional Financing involves the	**Risk Management:** 1. Most of the updated detailed designs have been reviewed by AZERSU and relevant modifications to the Environmental Management Plans (EMPs) are under preparation by					

<table>
<tr><td rowspan="3">modification to the technology and scale up of few wastewater treatment plants which may have the negative environmental impact.

2. Changes in the detailed design of civil works contracts may cause approval delays, have negative environmental impacts, or require land acquisition/resettlement.</td><td colspan="6">the implementing agency. The process will be closely monitored and supervised by the implementing agency and the Bank, with support from the Bank's Environmental Specialist based in Baku.</td></tr>
<tr><td>Resp:
Both</td><td>Status:
In Progress</td><td>Stage:
Implementation</td><td>Recurrent:
☐</td><td>Due Date:</td><td>Frequency:</td></tr>
<tr><td colspan="6">Risk Management:
2. Consultants are currently surveying land ownership information and will prepare a site specific Resettlement Action Plans if needed. The team includes the environmental and social development specialists which would ensure that all safeguards due-diligence is fully met. The updated appraisal stage ISDS has been reviewed and cleared by Regional Safeguards Coordinator.</td></tr>
<tr><td></td><td>Resp:
Both</td><td>Status:
In Progress</td><td>Stage:
Implementation</td><td>Recurrent:
☐</td><td>Due Date:</td><td>Frequency:</td></tr>
<tr><td>Program and Donor</td><td>Rating</td><td colspan="5">Moderate</td></tr>
<tr><td rowspan="3">Risk Description:

1. There a risk that Government programmatic investments allocated to the sector and implemented primarily by AZERSU will not be well coordinated with current AF activities implemented by AAWM.

2. Risk of overlapping on technical assistance activities by the other donors operating in the sector.</td><td colspan="6">Risk Management:
1. The Government has established a mechanism where all detailed design/construction permits are first reviewed and endorsed by AZERSU before construction has been launched by contractor irrelevant of financing source or implementing entity.</td></tr>
<tr><td>Resp:
Client</td><td>Status:
Completed</td><td>Stage:
Implementation</td><td>Recurrent:
☐</td><td>Due Date:</td><td>Frequency:</td></tr>
<tr><td colspan="6">Risk Management:
2. The donors represented in the sector are holding quarterly meetings to update/coordinate implementation progress and share best experiences with each other and government.</td></tr>
<tr><td></td><td>Resp:
Both</td><td>Status:
In Progress</td><td>Stage:
Implementation</td><td>Recurrent:
☐</td><td>Due Date:</td><td>Frequency:</td></tr>
<tr><td>Delivery Monitoring and Sustainability</td><td>Rating</td><td colspan="5">Moderate</td></tr>
<tr><td>Risk Description:

The local operational staff of AZERSU does not have</td><td colspan="6">Risk Management:
More than 200 of AZERSU's regional operational staff have been trained via Bank</td></tr>
</table>

broad experience in operation and maintenance of new treatment facilities built under the project.	financed Public Investment Capacity Building Project and these trainings are now part of official staff accreditation program launched by AZERSU under newly inaugurated training centers. In addition, bank funded on-going civil work contracts includes performance guarantee period to ensure that O&M arrangements are properly handed over by contractor to AZERSU.					
	Resp: Client	**Status:** In Progress	**Stage:** Implementation	**Recurrent:** ☐	**Due Date:**	**Frequency:**
Other (Optional)	**Rating**	**Low**				
Risk Description: There is a risk of limited specific experience at the local construction market, especially with regard to construction of wastewater treatment plants.	**Risk Management:** All works including design and construction of wastewater treatment plants are committed under on-going contracts and contractors are represented by experienced international companies. Most of those contractors have subcontracting arrangements with local contractors which is the best way to build local capacity in the sector.					
	Resp: Client	**Status:** Completed	**Stage:** Implementation	**Recurrent:** ☐	**Due Date:**	**Frequency:**
Other (Optional)	**Rating**					
Risk Description:	**Risk Management:**					
	Resp:	**Status:**	**Stage:**	**Recurrent:** ☐	**Due Date:**	**Frequency:**
Overall Risk						
Overall Implementation Risk:	**Rating**	**Substantial**				
Risk Description:						

Annex 3: Technical Annex

Description of AF investments per city

Siyezan city

The lump sum design and built contract for Siyezen rayon was the first Contract signed within the Project, which was tendered in a very squeeezed period after 6 months from Project effectiveness. During this period the Feasibility Study and bidding documents were prepared and the Contract was competitively awarded to Sade (France) in December 2010. AF investments are intended to finance 23 km of additional water supply and sewerage networks; construction of 13 new road crossings, increase in capacity and reallocation of WWTP; installation of about 3000 smart meters and their housing, new household connections; new power supply lines and access roads for pumping stations and WWTP. As a result of AF the number of household connections will be increased from 2371 to 3780 pieces reducing the unit price of one household connection.

Shabran city

The lump sum design and built contract for Shabran city has been bid together with above contract for Siyezan and is implemented by the same contractor. AF investments are intended to finance about 48 km of additional water supply and sewerage networks; construction of 55 new road crossings, increase in capacity of WWTP; installation of about 4000 smart meters and their housing, new household connections; new power supply lines and access roads for pumping stations and WWTP. As a result of AF the number of household connections will be almost doubled from 3915 to 7200 pieces reducing the unit price of one household connection.

Aghsu city

The lump sum design and built contract contract for the construction of water supply and sanitation systems for Aghsu rayon was signed with PWT Wasser (Germany) on September 9, 2011. As part of AF the contract will be amended to finance about 65km of additional water supply and sewerage networks; design and introduction of SCADA system; construction of 8 river crossings, increase in capacity of WWTP and costs associated with modification of treatment process from extended aeration to tertiary treatment; installation of about 6000 smart meters and their housing; new household connections. As a result of AF the number of household connections will be increased from 3285 to 6000 pieces reducing the unit price of one household connection.

Ismayilli city

The lump sum design and built contract contract for the construction of water supply and sanitation systems for Ismayilli rayon was signed with Kolin Insaat (Turkey) on September 5, 2011. As part of AF the contract will be amended to finance about 30km of additional water supply and sewerage networks; design and introduction of SCADA system; construction of protection dam for water intake facilities, increase in capacity of WWTP and costs associated with modification of treatment process from extended aeration to tertiary treatment; installation of about 7000 smart meters and their housing; new household connections. As a result of AF the number of household connections will be increased from 3607 to 7000 pieces reducing the unit price of one household connection.

Masalli city

The lump sum design and built contract contract for the construction of water supply and sanitation systems for Masalli rayon was signed with Eser Construction (Turkey) on November 25, 2011. As part of AF the contract will be amended to finance about 43km of additional water supply and sewerage networks; design and introduction of SCADA system; increase in capacity of WTP; increase in capacity of WWTP and costs associated with modification of treatment process from extended aeration to tertiary treatment; new water reservoir of 15000 m3 capacity; installation of 6322 smart meters and their housing; new household connections. As a result of AF the number of household connections will be increased from 3954 to 6322 pieces reducing the unit price of one household connection.

Yardimli city

The lump sum design and built contract contract for the construction of water supply and sanitation systems for Yardimli rayon was signed with Ludwig Pfeiffer (Germany) on November 4, 2011. As part of AF the contract will be amended to finance about 10km of additional water supply and sewerage networks; increase in capacity of WWTP and its reallocation; costs associated with modification of treatment process from extended aeration to tertiary treatment; installation of 1600 smart meters and their housing; new household connections. As a result of AF the number of household connections will be increased from 1270 to 1600 pieces reducing the unit price of one household connection.

Lerik city

The lump sum design and built contract contract for the construction of water supply and sanitation systems for Lerik rayon was signed with Gelishim Insaat (Turkey) on September 8, 2011. As part of AF the contract will be amended to finance about 18km of additional water supply and sewerage networks; increase in capacity of WWTP and its reallocation; increase in capacity of WTP; costs associated with modification of treatment process from extended aeration to tertiary treatment; hard rock excavation costs; design and introduction of SCADA system; additional volume of asphalt pavement; installation of 1700 smart meters and their housing; new household connections. As a result of AF the number of household connections will be increased from 1320 to 1700 pieces reducing the unit price of one household connection.

Jalilabad city

There are four lump sum design and built contracts implemented by international contractors in Jalilabad: 2 network contracts, one transmission line contract and one WWTP contract. The contracts are not very advanced and additional scope is not quantified by implementing agency yet. It is expected that AF would finance additional water supply and sewerage networks; increase in capacity of WWTP; installation of smart meters and their housing; and substantial increase in number of household connections.

Annex 4: Procurement Plan
AZERBAIJAN: Second National Water Supply and Sanitation Project – Additional Financing and Restructuring

Works and Goods Section

Plan vs. / Actual	Name of Assignment/Contract	Procurement Ref. #	Type-Category	Est. Cost / Actual (USD)	Est. Cost / Actual (USD) incl. VAT	Proc. Method	Prior / Post Review	Start	Days Execution	Completion	Total no of expected Change Orders	Amount of expected Change Orders	Amendments/ Change Orders already agreed	Amount of already agreed/approved Change Orders	Expected Final value of the Contract after all COs are agreed*	Payment to vendor %	Installation progress % (excl. goods` supply and variations)	Name of Contractor	Comments/ Notes
1	4/15/2014 15:12	3	4	6	7	8	9	26	27	28	29	30	31	32		33	34	35	36
	Rehabilitation - Main Investments																		
P	Water supply & sewarage networks and treatment facilities for Shabran	SNWSSP-SHD&B-01/2010	G	31,311,678.0	36,947,780.0	ICB	Prior	30-Dec-10	515	23-May-12	13 no	22,646,252.20	5 no Amendments / 3 COs	3,655,526.06	55,576,692.52	75%	84.29%	SADE – Compagnie Generale De Travaux D'Hydraulique (France)	Amendments compose changes in payment conditions, time extension and Change Orders. Change Orders include changes in scope of networks and WWTPs. While the Change Orders are approved, their amounts are included over the original Contract Price in Column no 7
A				31,005,056.3	36,585,966.4			28-Feb-11	1402	31-Dec-14									
P	Water supply & sewarage networks and treatment facilities for Siyazan	SNWSSP-SIYD&B-02/2010	G	24,140,823.7	28,486,172.0	ICB	Prior	30-Dec-10	515	23-May-12	15 no	19,198,509.74	5 no Amendments / 3 COs	2,643,035.39	51,038,593.31	76%	96.25%	SADE – Compagnie Generale De Travaux D'Hydraulique (France)	Amendments compose changes in payment conditions, time extension and Change Orders. Change Orders include changes in scope of networks and WWTPs. While the Change Orders are approved, their amounts are included over the original Contract Price in Column no 7
A				29,222,982.2	34,483,119.0			28-Feb-11	1402	31-Dec-14									
P	Water supply & sewarage networks and treatment facilities for Ismayilli	SNWSSP-ISD&B-03/2011	G	37,786,679.7	44,588,282.0	ICB	Prior	09-Jun-11	515	05-Nov-12	4 no	16,145,000.00	2 no Amendments		78,955,711.85	71%	75.00%	Kolin Insaat Turizm Sanayi ve Ticaret A. S. (Turkey)	Amendments compose time extension, Change Orders. Change Orders include changes in scope of networks and WWTPs. While the Change Orders are approved, their amounts are included over the original Contract Price in Column no 7
A				53,229,416.8	62,810,711.9			10-Nov-11	1147	31-Dec-14									
P	Water supply & sewarage networks and treatment facilities for Aghsu	SNWSSP-AGD&B-04/2011	G	28,764,722.9	33,942,373.0	ICB	Prior	09-Jun-11	515	05-Nov-12	5 no	17,950,015.00	2 no Amendments		67,750,487.00	72%	73.80%	PWT Wasser-und Abwessertechnik GmbH (Germany)	Amendments compose time extension, Change Orders. Change Orders include changes in scope of networks and WWTPs. While the Change Orders are approved, their amounts are included over the original Contract Price in Column no 7
A				42,203,789.8	49,800,472.0			03-Nov-11	1154	31-Dec-14									
	Land acquisition costs of Shabran, Siyazan, Ismayili and Aghsu rayons				3,562,500.00														
P	Water supply & sewarage networks and treatment facilities for Yardimli	SNWSSP-YARD&B-07/2011	G	25,836,120.3	30,486,622.0	ICB	Prior	20-Jul-11	515	16-Dec-12	3 no	8,920,000.00	2 no Amendments		38,382,722.54	45%	47.00%	Ludwig Pfeiffer Hoch und Tiefbau GmbH & Co. KG (Germany)	Amendments compose time extension, Change Orders. Change Orders include changes in scope of networks and WWTPs. While the Change Orders are approved, their amounts are included over the original Contract Price in Column no 7
A				24,968,408.9	29,462,722.5			19-Dec-11	880	17-May-14									
P	Water supply & sewarage networks and treatment facilities for Lerik	SNWSSP-LERD&B-06/2011	G	24,451,900.0	28,853,242.0	ICB	Prior	10-Aug-11	515	06-Jan-13	7 no	9,014,000.00	2 no Amendments		36,743,606.00	63%	78.00%	Gelişim Inşaat Turizm Sanayi ve Ticaret Ltd. Sti. (Turkey)	Amendments compose time extension, Change Orders. Change Orders include changes in scope of networks, WTP and WWTPs. While the Change Orders are approved, their amounts are included over the original Contract Price in Column no 7
A				23,499,666.1	27,729,606.0			04-Oct-11	880	02-Mar-14									
P	Prequalification for procurement of WWS7 water supply & sewarage networks and treatment facilities in Masalli rayon		G			ICB	Prior												
A																			6 Applicants out of 9 were prequalified
P	Water supply & sewarage networks and treatment facilities for Masalli	SNWSSP-MASD&B-05/2011	G	57,360,594.9	67,685,502.0	ICB	Prior	11-Oct-11	515	09-Mar-13	4 no	29,500,604.45	2 no Amendments		85,977,217.40	56%	58.00%	Eser Contracting & Industry Co. Inc. (Turkey)	Amendments compose time extension, Change Orders. Change Orders include changes in scope of networks, WTP and WWTPs. While the Change Orders are approved, their amounts are included over the original Contract Price in Column no 7
A				47,861,536.4	56,476,613.0			16-Dec-11	880	14-May-14									
P	Construction of Waste Water Treatment Plant in Jalilabad rayon	SNWSSP-JAL-1-D&B-08/2011	G	12,889,830.5	15,210,000.0	ICB	Prior	19-Dec-11	490	17-May-13	2 no	11,000,000.00	1 no Amendment		27,802,708.87	12%	5.60%	Beton & Rohrbau C.-F. Thymian GmbH & Co. KG (Germany)	Amendments compose time extension, Change Orders. Change Orders include changes in scope of sewerage transmission line and WWTP. While the Change Orders are approved, their amounts are included over the original Contract Price in Column no 7
A				14,239,583.8	16,802,708.9			20-Apr-12	863	31-Aug-14									
P	Construction of Water Supply and Wastewater network of Jalilabad rayon - Zone 1	SNWSSP-JAL-NETW1-D&B-09/2011	G	13,940,678.0	16,450,000.0	ICB	Prior	03-Jan-12	515	01-Jun-13	2 no	10,619,579.00	1 no Amendment		26,563,355.15	34%	28.00%	ART-AKKORD JV (Turkey/ Azerbaijan)	Amendments compose time extension, Change Orders. Change Orders include changes in scope of networks. While the Change Orders are approved, their amounts are included over the original Contract Price in Column no 7
A				13,511,674.7	15,943,776.2			20-Jun-12	696	17-May-14									
P	Construction of Water Transmission Line from Masalli to Jalilabad rayon	SNWSSP-JAL-WS-D&B-10/2011	G	20,279,661.0	23,930,000.0	ICB	Prior	01-Feb-12	515	30-Jun-13	2 no	19,465,135.00	1 no Amendment		42,675,689.94	64%	47.00%	ART-AKKORD JV (Turkey/ Azerbaijan)	Amendments compose time extension, Change Orders. Change Orders include changes in scope of the transmission line and pipe diameters. While the Change Orders are approved, their amounts are included over the original Contract Price in Column no 7
A				19,669,961.8	23,210,554.9			20-Jun-12	696	17-May-14									
P	Construction of Water Supply and Wastewater network of Jalilabad rayon - Zone 2	SNWSSP-JAL-NETW2-D&B-11/2011	G	37,271,186.4	43,980,000.0	ICB	Prior	23-Jan-12	515	16-Jun-13	2 no	17,540,904.61	1 no Amendment		60,482,620.94	48%	38.30%	Cakir Yapi & Gul Ish JV (Turkey/Turkey)	Amendments compose time extension, Change Orders. Change Orders include changes in scope of networks. While the Change Orders are approved, their amounts are included over the original Contract Price in Column no 7
A				36,391,285.0	42,941,716.3			17-Aug-12	866	31-Dec-14									
P	Supply & Installation of Smart card type water meters	SNWSSP-SCWM-S&I-01/2014	G	33,898,305.1	40,000,000.0	ICB	Prior	30-Jul-14	480	22-Nov-15		40,000,000.00							Supply and Installation of smart card type water meters is subject to justification by the operating company - Azersu JSC
A				0.0					480										
P	Land acquisition costs of Yardimli, Lerik, Masalli and Jalilabad rayons				6,206,250.00														

Sub-total for Rehabilitation Works- Plan	356,210,782.2	420,328,723.0
Sub-total for Rehabilitation Works- Actual	335,803,361.8	396,247,967.0
SUB-TOTAL for Rehabilitation Works- Actual + Additional Financing	523,938,955.1	618,247,967.0

	222,000,000.00	6,298,561.45	571,949,405.52

***Agreed/approved Change Order amounts are added up to the actual Contract prices in Column 7**

Consultant Services Section

SECOND NATIONAL WATER SUPPLY AND SANITATION PROJECT

Revision Date: January 2014

P109961, Credit (LOAN): 7518-AZ & 4397-AZ USD 410 mln

PIU Director: Mr. Mahammad Abdullayev
Proc. Specialists: Mr. Samir Suleymanov
PAS: Mr. Deepal Fernando

Plan / Actual	Name of Assignment / Contract	Procurement Ref. #	Type-Category	Estimated Cost / Actual (USD)	Estimated Cost / Actual (USD) incl VAT	Selection Method	Contr. Type LS/TB	Prior / Post Review	Start	Days Execution	Completion	Agreed/expected Amendments (Amount, Date and reason should be indicated in the Comments)	Expected cost impact of the Amendments	Comments Notes (Company Name)
1	4/15/2014 15:24	3	4	5	6	7	8	9	32	33	34	35	36	37
P	Feasibility Study & Construction Supervision for 16 rayons	SNWSSP-CS-A-SSS-01/2012	CS-1	12,711,864.4	15,000,000.0	QCBS	LS & TB	Prior	15-Mar-10	1086	5-Mar-13	3 no / 1 no	$ 7,000,000	Gauff & Temelsu JV (Germany/Turkey) Amendment has been made to reflect the decrease of number of contracts for construction supervision and changes in man-months and price, incl. Time extension due to extension of Project period). As a result of Additional Financing, if the Project closing period is extended, then the Contract with CMF shall be increased as well.
A				16,440,678.0	19,400,000.0	SSS		Prior	1-Apr-10	1735	31-Dec-14			
P	Specific Environmental Impact Assessment (EIA) for 4 rayons (Aghsu, Ismayilli, Shabran and Siyezen)	SNWSSP-CS–CQ-01/2010	CS-2	34,545.3	40,763.5	CQ	LS	Prior	10-May-10	112	30-Aug-10	2 no /		Eptisa (Spain) (Amendments have been made to extend the contract period)
A				155,555.9	183,556.0	CQ		Prior	1-Jun-10	101	10-Sep-10			
P	Specific Environmental Impact Asessment (EIA) for 12 rayons	SNWSSP-CS-QCBS-01/2010	CS-3	466,667.8	550,668.0	QCBS	LS	Prior	1-Oct-10	138	16-Feb-11	4 no /		Aim Texas Trading LLC (USA) (Amendments have been made to extend the contract period)
A				422,363.3	498,388.7	QCBS		Prior	3-Sep-10	453	30-Nov-11			
P	Development of FMS for the PIU	SNWSSP-CS-IC-01/2010	CS-4	16,949.2	20,000.0	IC	LS	Prior	5-Apr-10	55	30-May-10			Mr. Etibar Ashurov
A				15,678.0	18,500.0	IC		Prior	20-Apr-10	71	30-Jun-10			
P	Financial Audit for 2009 - 2010 years	SNWSSP-CS-LCS-02/2010	CS-5	25,423.7	30,000.0	LCS	LS	Prior	15-Mar-11	107	30-Jun-11			Moore Stephens
A				15,872.9	18,730.0	LCS		Prior	1-Mar-11	121	30-Jun-11			
P	Financial Audit for 2011	SNWSSP-CS-A-SSS-01/2012	CS-6	29,661.0	35,000.0	SSS	LS	Prior	12-Mar-12	110	30-Jun-12			Moore Stephens
A				23,552.5	27,792.0	SSS		Prior	16-Apr-12	75	30-Jun-12			
P	Financial Audit for 2012	SNWSSP-CS-A-SSS-02/2013	CS-7	42,372.9	50,000.0	SSS	LS	Prior	12-Mar-13	110	30-Jun-13			Moore Stephens
F				26,983.1	31,840.0	SSS		Prior	1-Apr-13	121	31-Jul-13			
P	Financial Audit for 2013	SNWSSP-CS-A-SSS-03/2014	CS-8	50,847.5	60,000.0	SSS	LS	Prior	12-Mar-14	110	30-Jun-14	3 no	$ 200,000	Moore Stephens
F				26,983.1	31,840.0	SSS		Prior	3-Mar-14	119	30-Jun-14			
P	Preparation of RAP for Aghsu, Ismayilli, Shabran & Siyezen rayons	SNWSSP-CS-SSS-01/2013	CS-9	305,178.0	360,110.0	SSS	LS	Prior	14-Jun-13	183	14-Dec-13	1 no		Aim Texas Trading LLC (USA) An amendment for the time extension was made due to late provision of cadastral maps by the Client as per the Contract conditions.
A				349,344.4	412,226.4	SSS		Prior	6-Jun-13	334	6-May-14			
P	Preparation of RAP for Lerik, Yardimli, Masalli & Jalilabad rayons	SNWSSP-CS-FBS-02/2013	CS-10	312,711.9	369,000.0	FBS	LS	Prior	3-Sep-13	181	3-Mar-14	1 no	$ 50,000	Aim Texas Trading LLC (USA)
A				309,855.6	365,629.6			Prior	27-Jan-14	181	27-Jul-14			
P	Preparation of updated cadastral maps for 8 rayons	SNWSSP-S-DC-01/2014	S-11	254,237.3	300,000.0	DC	LS	Prior	28-Jun-13	365	28-Jun-14	1 no	$ 100,000	Center for Registry of Real Estate and Technical Inventory within the State Committee on Property Issues of Azerbaijan Republic
A				0.0				Prior		0				
P	Dam Safety Consultants for Vilashchay Dam in Masalli rayon	SNWSSP-IC-DS-01/2014	CS-12	101,694.9	120,000.0	IC	LS	Prior	27-Mar-14	61	27-May-14		$ 150,000	Center for Registry of Real Estate and Technical Inventory within the State Committee on Property Issues of Azerbaijan Republic
A				0.0				Prior		0				
P	Training on Operation & Maintenance of WWTPs and WTPs, leak detection and etc.		CS-13	0.0		QCBS	LS	Prior		0			$ 1,500,000	The character of the training and methods of procurement to be determined later
A				0.0				Prior		0				
P	**Total Consultant`s Services - Plan**			14,250,458.9	**16,815,541.5**								**$ 9,000,000**	
A	**Total Consultant`s Services - Actual**			17,786,866.7	**20,988,502.7**									
	SUB-TOTAL Consultant`s Services Actual + Additional Financing			**25,413,985.3**	**$ 29,988,502.70**									

Annex 5: Economic Analysis – Summary table
AZERBAIJAN: Second National Water Supply and Sanitation Project – Additional Financing and Restructuring

ECONOMIC ANALYSIS					Before	After	2	3	4	5	6	7
Economic analysis ALL PROJECT	Units	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Estimated annual savings in electricity for water	USD/year					532,746	532,746	532,746	532,746	532,746	532,746	532,746
Net Economic value of incremental water, non-ir	USD/year					9,784,009	9,784,009	9,784,009	9,784,009	9,784,009	9,784,009	9,784,009
Estimated eliminated coping costs	USD/year					2,543,004	2,543,004	2,543,004	2,543,004	2,543,004	2,543,004	2,543,004
Total benefits from avoided depolluting costs	USD/year					7,441,933	7,441,933	7,441,933	7,441,933	7,441,933	7,441,933	7,441,933
Economic cost of project investment (all compor	USD/year	(16,479,630)	(65,918,520)	(65,918,520)	(16,479,630)	(4,660,839)	(4,660,839)	(4,660,839)	(4,660,839)	(4,660,839)	(4,660,839)	(4,660,839)
SUM	USD/year	(16,479,630)	(65,918,520)	(65,918,520)	(16,479,630)	15,640,854	15,640,854	15,640,854	15,640,854	15,640,854	15,640,854	15,640,854
NPV	$14,375,189					20,301,693						
IRR	6%											
					Before	After						
Project Costs	Units	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Component A: Rayon investment component (wc	USD million	22.29	89	89.16	22.29							
Component A adjusted for VAT	USD million	18.28	73.11	73.11	18.28	VAT deducted						
Component B: Institutional Modernization (Cons	USD million	0.75	3	3	0.75							
Component C: Project Implementation and Mana	USD million	0.32	1.28	1.28	0.32							
Front end fee	USD million	0.04	0.16	0.16	0.04							
Operation and Maintenance Costs (10 Percent o	USD million					5.48	5.48	5.48	5.48	5.48	5.48	5.48
Total project costs (E1+E2+E3+E4+E5)	USD	(19,387,800)	(77,551,200)	(77,551,200)	(19,387,800)	(5,483,340)	(5,483,340)	(5,483,340)	(5,483,340)	(5,483,340)	(5,483,340)	(5,483,340)
Standard Conversion Factor Azerbaijan		0.85										

8	9	10	11	12	13	14	15	16	17	18	19	20
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
532,746	532,746	532,746	532,746	532,746	532,746	532,746	532,746	532,746	532,746	532,746	532,746	532,746
9,784,009	9,784,009	9,784,009	9,784,009	9,784,009	9,784,009	9,784,009	9,784,009	9,784,009	9,784,009	9,784,009	9,784,009	9,784,009
2,543,004	2,543,004	2,543,004	2,543,004	2,543,004	2,543,004	2,543,004	2,543,004	2,543,004	2,543,004	2,543,004	2,543,004	2,543,004
7,441,933	7,441,933	7,441,933	7,441,933	7,441,933	7,441,933	7,441,933	7,441,933	7,441,933	7,441,933	7,441,933	7,441,933	7,441,933
(4,660,839)	(4,660,839)	(4,660,839)	(4,660,839)	(4,660,839)	(4,660,839)	(4,660,839)	(4,660,839)	(4,660,839)	(4,660,839)	(4,660,839)	(4,660,839)	(4,660,839)
15,640,854	15,640,854	15,640,854	15,640,854	15,640,854	15,640,854	15,640,854	15,640,854	15,640,854	15,640,854	15,640,854	15,640,854	15,640,854
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
5.48	5.48	5.48	5.48	5.48	5.48	5.48	5.48	5.48	5.48	5.48	5.48	5.48
(5,483,340)	(5,483,340)	(5,483,340)	(5,483,340)	(5,483,340)	(5,483,340)	(5,483,340)	(5,483,340)	(5,483,340)	(5,483,340)	(5,483,340)	(5,483,340)	(5,483,340)

Annex 6: Map

AZERBAIJAN: Second National Water Supply and Sanitation Project – Additional Financing and Restructuring