

Project Administration Manual

Project Number: 43405
Loan Number: 2749 (Tranche 1)
July 2013

Multitranche Financing Facility
Georgia: Urban Services Improvement Investment
Program – Project 1

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Project Administration Manual Purpose and Process

The project administration manual (PAM) describes the essential administrative and management requirements to implement the Urban Services Improvement Investment Program (Investment Program) on time, within budget, and in accordance with Government and Asian Development Bank (ADB) policies and procedures. The PAM should include references to all available templates and instructions either through linkages to relevant URLs or directly incorporated in the PAM.

The Ministry of Regional Development and Infrastructure (MRDI) and the United Water Supply Company of Georgia LLC (UWSCG) are wholly responsible for the implementation of ADB financed Investment Program, as agreed jointly between the beneficiary and ADB, and in accordance with Government and ADB's policies and procedures. ADB staff is responsible to support implementation including compliance by MRDI and UWSCG of their obligations and responsibilities for Investment Program implementation in accordance with ADB's policies and procedures.

In the event of any discrepancy or contradiction between the PAM and the Loan and/or Project Agreement, the provisions of the Loan and/or Project Agreement shall prevail.

After ADB Board approval of the Investment Program's report and recommendations of the President (RRP) changes in implementation arrangements are subject to agreement and approval pursuant to relevant Government and ADB administrative procedures (including the Project Administration Instructions) and upon such approval they will be subsequently incorporated in the PAM.

Abbreviations

ADB	=	Asian Development Bank
ADF	=	Asian Development Fund
AFS	=	audited financial statements
CQS	=	consultant qualification selection
DMF	=	design and monitoring framework
EARF	=	environmental assessment and review framework
EIA	=	environmental impact assessment
EMP	=	environmental management plan
GDP	=	gross domestic product
ICB	=	international competitive bidding
IEE	=	initial environmental examination
IPP	=	indigenous people plan
IPPF	=	indigenous people planning framework
LAR	=	land acquisition and resettlement
LIBOR	=	London interbank offered rate
MRDI	=	Ministry of Regional Development and Infrastructure
NCB	=	national competitive bidding
NGOs	=	nongovernment organizations
PAI	=	project administration instructions
PAM	=	project administration manual
PIU	=	project implementation unit
QBS	=	quality based selection
QCBS	=	quality- and cost-based selection
RF	=	resettlement framework
RRP	=	report and recommendation of the President to the Board
SBD	=	standard bidding documents
SOE	=	statement of expenditure
SPS	=	Safeguard Policy Statement
SPRSS	=	summary poverty reduction and social strategy
TOR	=	terms of reference
UWSCG	=	United Water Supply Company of Georgia LLC

I. PROJECT DESCRIPTION

A. Overview

1. The Investment Program will improve the health of residents in the secondary towns of Marneuli, Kutaisi, Poti, Zugdidi, Anaklia and Mestia. The outcome of the Investment Program is improved WSS services in these secondary towns.

1. Component 1: Infrastructure Improvement

2. The first component will include infrastructure investments to rehabilitate, improve and expand water supply and sanitation facilities in 6 secondary towns, and provision of vehicles and equipment for system operation and maintenance for these towns

2. Component 2: Institutional Effectiveness

3. The second component will provide capacity development for the Ministry of Environmental Protection and Natural Resources (MEPNR), Ministry of Agriculture (MA), Georgia National Energy and Water Supply Regulatory Commission (GNEWSRC), and the United Water Supply Company of Georgia LLC (UWSCG). This includes providing management contractor support to improve management and technical capabilities of UWSCG.

3. Component 3: Project Implementation Support

4. The third component will provide project implementation support comprising detailed engineering, construction supervision, safeguards compliance, preparing subsequent projects of the Investment Program and a public awareness program on health, hygiene, sanitation and water conservation.

B. Project 1

5. The multitranche financing facility (MFF) for financing the Investment Program implementation will be structured as four tranches. Completion of engineering designs, safeguard compliance, and completion of procurement documents will trigger preparation of subsequent tranches. Project 1 to be financed by the first tranche of the MFF will include: (i) construction of water supply facilities, water treatment facilities and water transmission systems in Anaklia, Marneuli, Mestia and Zugdidi; (ii) procurement of vehicles and equipment for water supply and sewerage (WSS) operation and maintenance in Anaklia, Kutaisi, Marneuli, Mestia, Poti and Zugdidi; and (iii) all activities under components 2 and 3.

6. The Ministry of Regional Development and Infrastructure (MRDI) will be the Investment Program's executing agency and the implementing agency for Component 2 of the Investment Program. The UWSCG will be the implementing agency for Component 1 and 3 of the Investment Program.

II. IMPLEMENTATION PLANS

A. Project Readiness Activities

1. Project 1

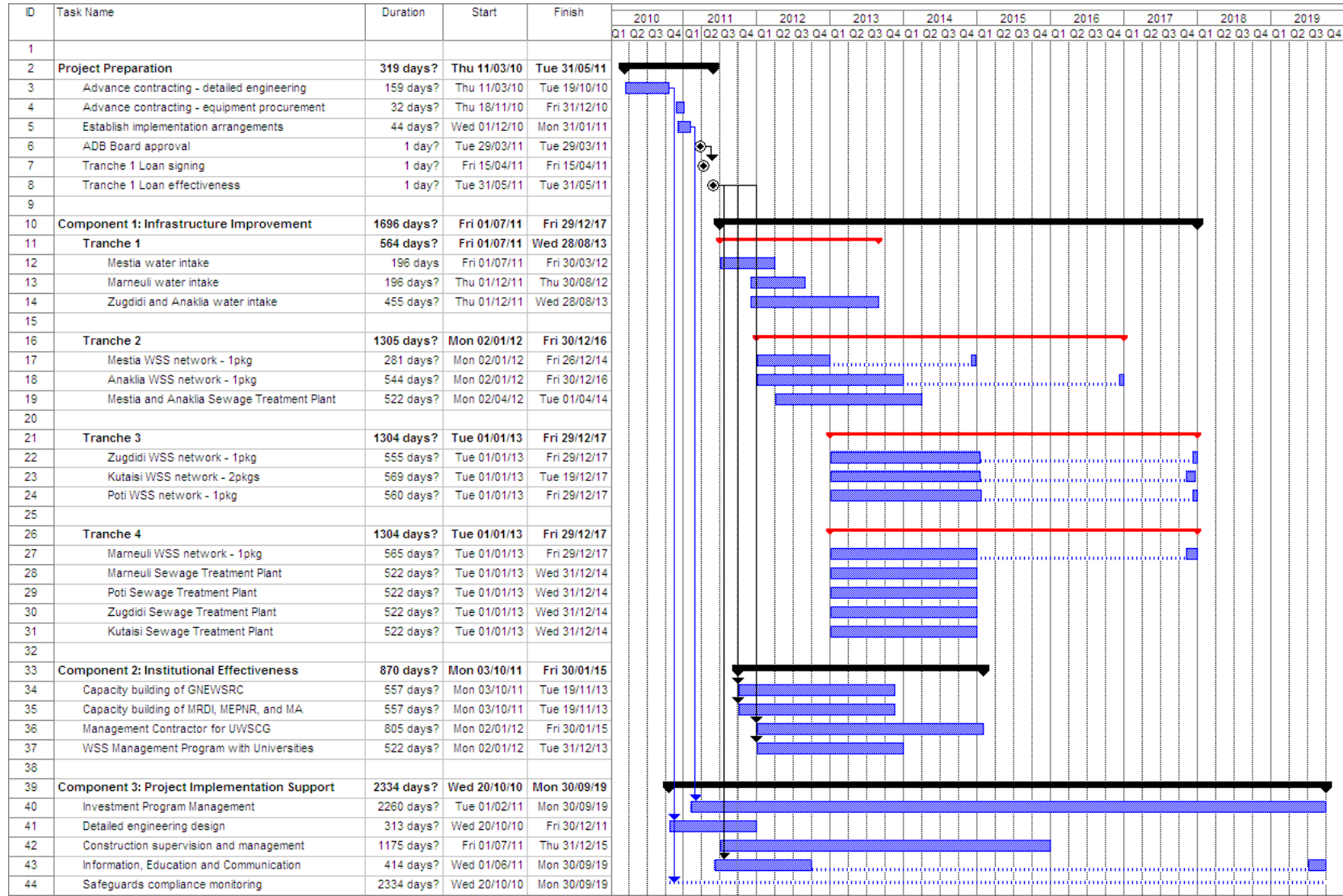
Indicative Activities	2010		2011						Responsible Party	
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May		Jun
1 Advance contracting actions ¹										UWSCG, MRDI
2 Establish MFF implementation arrangements										MRDI, ADB
3 ADB Board approval										ADB
4 Tranche 1 Loan signing										MRDI and ADB
5 Government legal opinion provided										UWSCG, MRDI
6 Government budget inclusion										MRDI
7 Tranche 1 Loan effectiveness										MRDI

ADB = Asian Development Bank, MFF = multitranches financing facility, MRDI = Ministry of Regional Development and Infrastructure, UWSCG = United Water Supply Company of Georgia LLC.

¹ ADB approved advance contracting and retroactive financing for (i) detailed engineering design consultants on 11 March 2010; and (ii) vehicle and maintenance equipment on 9 August 2010.

B. Overall Project Implementation Plan

1. Investment Program



2. Project 1

Georgia: Urban Services Improvement Investment Program - Loan 2749 Implementation Progress

	Activity	2010				2011				2012				2013				2014				2015				2016				Prg.	Wt.	Total
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
1	Project Preparation																															
2	Advance Contracting - DED																												100	1	1	
3	Advance Contracting - Equipment Procurement																												100	1	1	
4	Establishing Implementation Arrangements																												100	1	1	
5	ADB Board Approval																												100	1	1	
6	Trance 1 Loan Effectiveness																												100	1	1	
7	Component 1: Infrastructure Improvement																													50	10	
8	Civil Works																												45	5	5	
9	Mestia Water Intake																												50	10	5	
10	Mestia WTP and Reservoir																												-	10	-	
11	Marneuli Water Intake																												-	10	-	
12	Zugdidi and Analia Water Intake																												-	15	-	
13	Equipment																												100	5	5	
14	Component 2: Institutional Effectiveness																													25	8	
15	Capacity Building of GNEWSRC																												10	5	1	
16	Capacity Building of MEPNR and MA																												-	2	-	
17	Management Contractor for UWSCG																												50	15	8	
18	WSS Management Program with Universities																												-	3	-	
19	Component 3: Project Implementation Support																													20	11	
20	Investment Program Management																												3	3	0	
21	Detailed Engineering Design																												70	4	3	
22	Mestia - Resettlement Plan Implementation																												100	2	2	
23	Construction Supervision Management																												100	5	5	
24	Information, Education and Communication																												-	3	-	
25	Safeguards Compliance Monitoring																												30	3	1	
																														100	34	

III. PROJECT MANAGEMENT ARRANGEMENTS

A. Project Implementation Organizations– Roles and Responsibilities

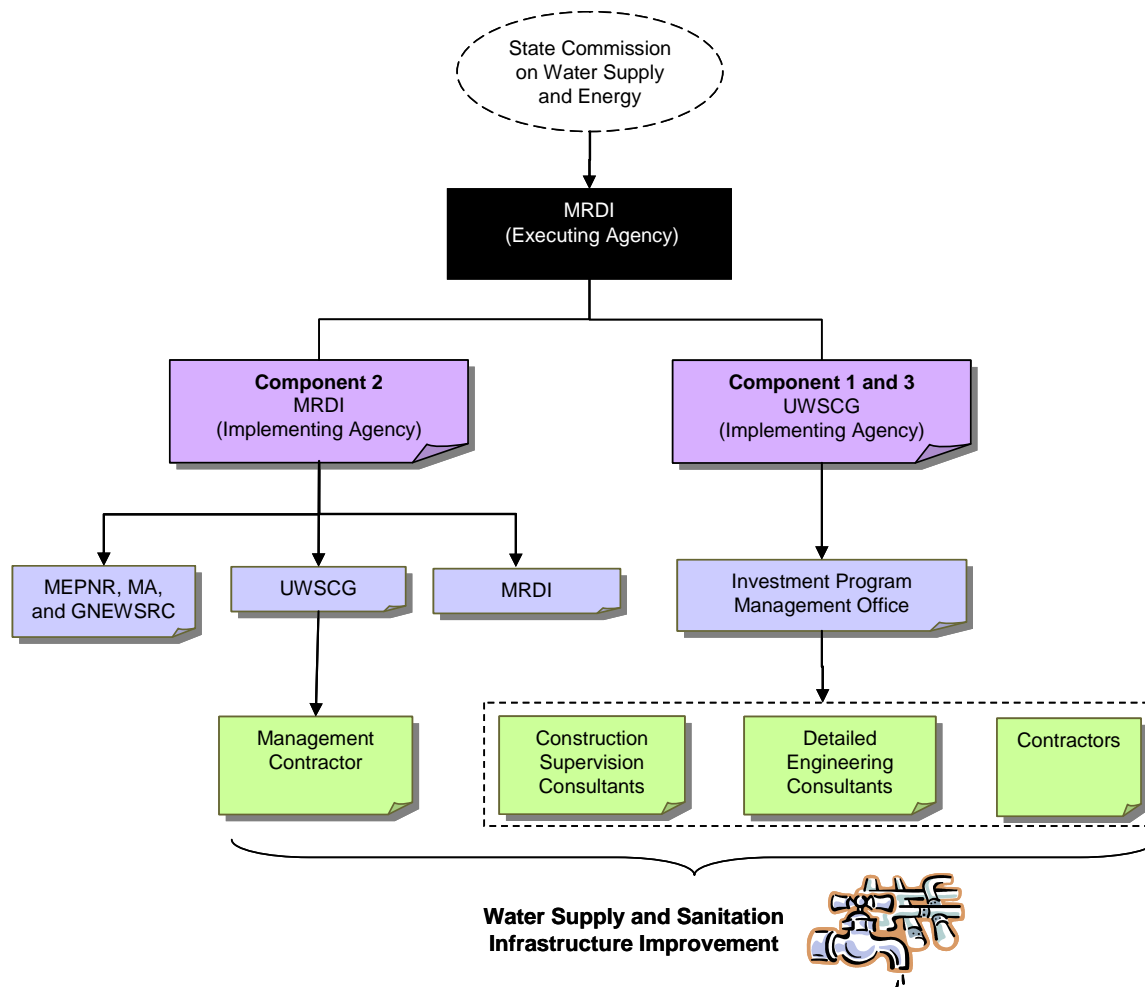
Implementation Organizations	Management Roles and Responsibilities
<ul style="list-style-type: none"> Steering Committee (State Commission on Water Supply and Energy) 	<ul style="list-style-type: none"> oversee progress and provide guidance on the Investment Program implementation meet at least once every 3 months until Investment Program completion
<ul style="list-style-type: none"> Executing Agency (Ministry of Regional Development and Infrastructure) 	<ul style="list-style-type: none"> responsible for Investment Program oversight and administration hold monthly meetings with UWSCG to review progress submit progress reports to the SC for decision making ensure compliance with Investment Program covenants submit Investment Program documents, including audit reports, to ADB on time convene regular meetings in consultation with the SC Chairperson and UWSCG
<ul style="list-style-type: none"> Implementing Agency 1: MRDI 	<p>For Component 2 on Institutional Effectiveness:</p> <ul style="list-style-type: none"> Through UWSCG, provide capacity building support to the GNEWSRC on economic and service standard regulation, to the MEPNR on environmental safeguards compliance, and to the MA on monitoring drinking water quality standards Engage a Management Contractor to assist the UWSCG improve its service delivery and business planning Delegate processing of withdrawal applications to UWSCG under Component 2 but will review and sign them before submission
<ul style="list-style-type: none"> Implementing Agency 2: UWSCG 	<p>For Component 1 on Infrastructure Investment and Component 3 on Project Implementation Support:</p> <ul style="list-style-type: none"> prepare the periodic financing request oversee Investment Program implementation and management oversee Investment Program accounting and auditing manage all consultants coordinate with all line ministries to ensure smooth and efficient implementation secure technical and environmental approvals for all civil works prior to bidding implement the environmental management plan for each subproject ensure compliance with Investment Program covenants comply with social safeguards requirement detailed in the PAM invite bids, evaluate and prepare bid evaluation reports for

Implementation Organizations	Management Roles and Responsibilities
	ADB's approval <ul style="list-style-type: none"> • award contracts • prepare quarterly progress reports
<ul style="list-style-type: none"> • Management Contractor 	Will assist UWSCG in: <ul style="list-style-type: none"> • managing the company operations and improving the delivery of WSS services • undertaking long-term capital planning and asset strengthening, procurement, supervision of capital improvement works, operation and maintenance, and financial management • placing a team of professionals at the UWSCG head office in Tbilisi, regional branches, and service centers, work with UWSCG staff to establish appropriate management systems • undertaking the operation and maintenance of WSS systems in all the service centers with the existing staff of the UWSCG, and provide on the job training to enhance UWSCG staff capacity, and improve their management, administrative and technical performance
<ul style="list-style-type: none"> • Detailed Engineering Consultant 	<ul style="list-style-type: none"> • responsible for designing water supply and sewerage systems in 6 Investment Program towns (Marneuli, Kutaisi, Poti, Anaklia, Zugdidi and Mestia) • responsible for completion safeguards compliance documents for all subprojects • responsible for assisting UWSCG in preparing the periodic financing request
<ul style="list-style-type: none"> • Construction Supervision Consultant 	<ul style="list-style-type: none"> • responsible for supervising construction of water supply and sewerage systems in 6 Investment Program towns (Marneuli, Kutaisi, Poti, Anaklia, Zugdidi and Mestia) • responsible for ensuring that all safeguards compliance plans are implemented
<ul style="list-style-type: none"> • ADB 	<ul style="list-style-type: none"> • Ensure technical and financial support and oversight according to the framework financing, loan and project agreement

B. Key Persons Involved in Implementation

Executing Agency	Contact Information
Ministry of Regional Development and Infrastructure	Officer's Name: Shota Murgulia Position: Deputy Minister Telephone: : + 995-322510774 Email address: shota.murgulia@mrdi.gov.ge
United Water Supply Company of Georgia LLC	Officer's Name: Archil Tsabutashvili Position: Director Telephone: +995-919060 Email address: a.tsabutashvili@water.gov.ge
Asian Development Bank	
Urban Development and Water Division Central and West Asia Department	Staff Name: Anand Chiplunkar Position: Director Telephone: +63-2-632 6346 Email address: achiplunkar@adb.org
Mission Leader	Staff Name: Sanjay Joshi Position: Senior Urban Development Specialist Telephone: +63-2-632 4136 Email address: sjoshi@adb.org

C. Investment Program Organization Structure



Component 1 = Infrastructure Improvement, Component 2 = Institutional Effectiveness, Component 3 = Project Implementation Support, GNEWSRC = Georgia National Energy and Water Supply Regulatory Commission, MA = Ministry of Agriculture, MEPNR = Ministry of Environmental Protection and Natural Resources, MRDI = Ministry of Regional Development and Infrastructure, UWSCG = United Water Supply Company of Georgia Limited Liability Company

IV. COSTS AND FINANCING

A. Detailed Cost Estimates by Expenditure Category

1. Investment Program

Items	Total Cost	% of Total Base Cost
A. Investment Costs		
1 Civil Works	444.13	90.40
2 Equipment and Machinery	5.00	1.00
3 Environment and Social Mitigation	1.50	0.30
4 Consultants and Management Contractor	24.50	5.00
Subtotal (A)	475.13	96.70
B. Recurrent Costs		
1 IPMO Consultants	1.27	0.30
2 System Operation and Maintenance	14.70	3.00
Subtotal (B)	15.97	3.30
Total Base Cost	491.10	100.0%
C. Contingencies		
1 Physical	49.46	-
2 Price	68.49	-
Subtotal (C)	117.95	-
D. Financing Charges During Implementation		
1 Interest During Construction	15.76	-
2 Commitment Charges	0.19	-
Subtotal (D)	15.95	-
Total Project Cost (A+B+C+D)	625.00	

Source: United Water Supply Company of Georgia and Asian Development Bank estimates.

2. Project 1

Items	Total Cost	% of Total Base Cost
A. Investment Costs		
1 Civil Works	63.25	71.04
2 Equipment and Machinery	5.00	5.62
Water	3.00	3.37
Sewerage	2.00	2.25
3 Environment and Social Mitigation	0.50	0.56
4 Consultants and Management Contractor	19.50	21.90
Subtotal (A)	88.25	99.12
B. Recurrent Costs		
1 IPMO Consultants	0.78	0.88
2 System Operation and Maintenance	-	-
Subtotal (B)	0.78	0.88
Total Base Cost	89.03	100.00
C. Contingencies		
1 Physical	8.90	
2 Price	4.90	
Subtotal (C)	13.80	
D. Financing Charges During Implementation		
1 Interest During Construction	2.17	
2 Commitment Charges	-	
Subtotal (D)	2.17	
Total Project Cost (A+B+C+D)	105.00	

Source: United Water Supply Company of Georgia and Asian Development Bank estimates.

B. Allocation and Withdrawal of Tranche 1 Loan Proceeds

Number	Category	Total Amount Allocated for ADB Financing (SDR)	ADB Financing Percentage and Basis for Withdrawal from the Loan Account
1	Works	31,274,000	84.75%
2	Goods	2,719,000	84.75%
3	Consulting Services	14,030,000	84.75%
4	Interest	1,393,000	100.00%
5	Unallocated	1,927,000	
	Total	51,343,000	

Source: United Water Supply Company of Georgia and Asian Development Bank estimates.

C. Detailed Cost Estimates by Financier

1. Investment Program

\$ million

Items	Total	ADB		Government	
		Amount	% of Cost Category	Amount	% of Cost Category
A. Investment Costs					
1 Civil Works	444.13	376.20	84.70	67.93	15.30
2 Equipment and Machinery	5.00	4.24	84.80	0.76	15.20
3 Environment and Social Mitigation	1.50	1.27	84.70	0.23	15.30
4 Consultants and Management Contractor	24.50	20.76	84.70	3.74	15.30
Subtotal (A)	475.13	402.47	84.70	72.66	15.30
B. Recurrent Costs					
1 IPMO Consultants	1.27	1.08	85.00	0.19	15.00
2 System O&M	14.70	7.12	48.40	7.58	51.60
Subtotal (B)	15.97	8.20	51.35	7.77	48.65
Total Base Cost	491.10	410.67	83.62	80.43	16.38
C. Contingencies					
1 Physical	49.46	25.59	51.74	23.87	48.26
2 Price	68.49	47.99	70.07	20.50	29.93
Subtotal (C)	117.95	73.57	62.40	44.37	37.60
D. Financing Charges During Implementation					
1 Interest During Construction	15.76	15.76	100.00	-	-
2 Commitment Charges	0.19	-	-	0.19	100.00
Subtotal (D)	15.95	15.76	98.80	0.19	1.20
Total Project Cost (A+B+C+D)	625.00	500.00	80.00	125.00	20.00

Source: United Water Supply Company of Georgia and Asian Development Bank estimates.

2. Project 1

		\$ million				
Item	Total Cost	ADB		Government		
		Amount	% of Cost Category	Amount	% of Cost Category	
A. Investment Costs						
1	Civil Works	63.25	53.60	84.74	9.65	15.25
2	Equipment and Machinery	5.00	4.24	84.80	0.76	15.20
	Water	3.00	2.54	84.67	0.46	15.33
	Sewerage	2.00	1.69	84.50	0.30	15.00
3	Environment and Social Mitigation	0.50	0.42	84.00	0.08	16.00
4	Consultants and Management Contractor	19.50	16.53	84.77	2.97	15.23
	Subtotal (A)	88.25	74.79	84.75	13.46	15.25
B. Recurrent Costs						
1	IPMO Consultants	0.78	0.67	85.90	0.11	14.10
2	System Operation and Maintenance	-	-	-	-	-
	Subtotal (B)	0.78	0.67	85.90	0.11	14.10
	Total Base Cost	89.03	75.46	84.76	13.57	15.24
C. Contingencies						
1	Physical	8.90	-	-	8.90	100.00
2	Price	4.90	2.37	48.37	2.53	51.63
	Subtotal (C)	13.80	2.37	17.17	11.43	82.83
D. Financing Charges During Implementation						
1	Interest During Implementation	2.17	2.17	100.00	-	-
2	Commitment Charges	-	-	-	-	-
	Subtotal (D)	2.17	2.17	100.00	-	-
Total Project Cost (A+B+C+D)		105.00	80.00	76.18	25.00	23.82

Source: United Water Supply Company of Georgia and Asian Development Bank estimates.

D. Detailed Cost Estimates by Outputs/Components

1. Investment Program

Item	Total Cost	Water		Sanitation	
		Amount	% of Cost Category	Amount	% of Cost Category
A. Investment Costs					
1 Civil Works	444.13	187.48	42.20	256.65	57.80
2 Equipment and Machinery	5.00	3.00	60.00	2.00	40.00
3 Environment and Social Mitigation	1.50	0.75	50.00	0.75	50.00
4 Consultants and Management Contractor	24.50	12.25	50.00	12.25	50.00
Subtotal (A)	475.13	203.48	42.83	271.65	57.17
B. Recurrent Costs					
1 IPMO Consultants	1.27	0.64	50.00	0.64	50.00
2 System Operation and Maintenance	14.70	7.35	50.00	7.35	50.00
Subtotal (B)	15.97	7.99	50.00	7.99	50.00
Total Base Cost	491.10	211.46	43.06	279.64	56.94
C. Contingencies					
1 Physical	49.46	21.30	43.07	28.16	56.93
2 Price	68.49	29.49	43.06	39.00	56.94
Subtotal (C)	117.95	50.79	43.06	67.16	56.94
D. Financing Charges During Implementation					
1 Interest During Implementation	15.76	6.79	43.08	8.97	56.92
2 Commitment Charges	0.19	0.08	42.10	0.11	57.90
Subtotal (D)	15.95	6.87	43.07	9.08	56.93
Total Project Cost (A+B+C+D)	625.00	269.12	43.00	355.88	57.00

Source: United Water Supply Company of Georgia and Asian Development Bank estimates.

2. Project 1

Item	Total Cost	Water		Sanitation	
		Amount	% of Cost Category	Amount	% of Cost Category
A. Investment Costs					
1 Civil Works	57.50	57.50	65.88	-	-
2 Equipment and Machinery	5.00	3.00	3.40	2.00	11.29
Water	3.00	3.00	3.40	2.00	11.29
Sewerage	2.00	-	-	2.00	11.29
3 Environment and Social Mitigation	0.50	0.25	0.20	0.25	1.41
4 Consultants and Management Contractor	24.50	12.25	14.03	12.25	69.13
Subtotal (A)	87.50	73.00	83.64	14.50	81.83
B. Recurrent Costs					
1 Independent Engineer	0.80	0.40	0.45	0.40	2.26
2 System Operation and Maintenance	-	-	-	-	-
Subtotal (B)	0.80	0.40	0.45	0.40	2.26
Total Base Cost	88.30	73.40	84.10	14.90	84.10
C. Contingencies					
1 Physical	9.28	7.71	8.83	1.57	8.90
2 Price	5.26	4.37	5.00	0.89	5.02
Subtotal (C)	14.54	12.08	13.84	2.46	13.89
D. Financing Charges During Implementation					
1 Interest During Implementation	2.17	1.80	2.01	0.37	2.10
2 Commitment Charges	-	-	-	-	-
Subtotal (D)	2.17	1.80	2.01	0.37	2.10
Total Project Cost (A+B+C+D)	105.00	87.28	100.00	17.72	100.00

Source: United Water Supply Company of Georgia and Asian Development Bank estimates.

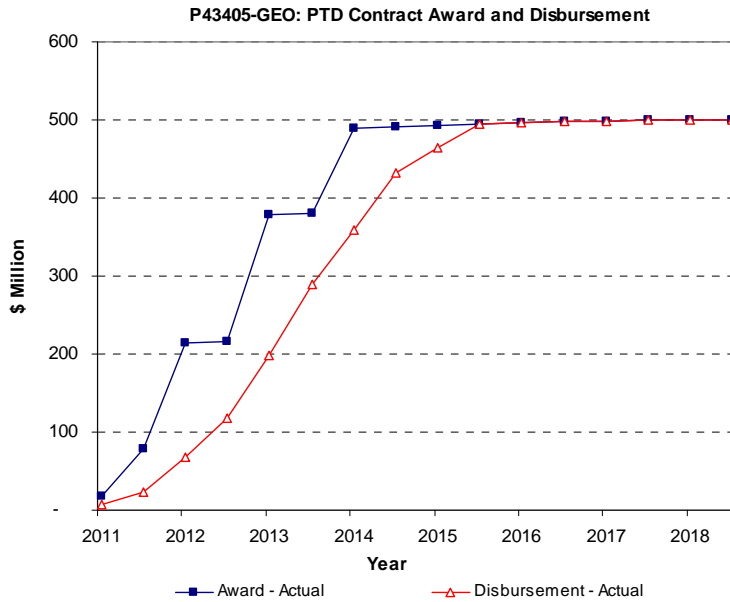
E. Detailed Cost Estimates by Year

		\$ million								
	Item	Total	2011	2012	2013	2014	2015	2016	2017	2018
A.	Investment Costs									
1	Civil Works	444.13	57.50	130.50	158.06	98.06		-	-	-
	Tranche 1	57.50	57.50	-	-	-	-	-	-	-
	Tranche 2	130.50	-	130.50	-	-	-	-	-	-
	Tranche 3	158.06	-	-	158.06	-	-	-	-	-
	Tranche 4	98.06	-	-	-	98.06	-	-	-	-
2	Equipment and Machinery	5.00	5.00	-	-	-	-	-	-	-
	Tranche 1 (Water)	3.00	3.00	-	-	-	-	-	-	-
	Tranche 1 (Sewerage)	2.00	2.00	-	-	-	-	-	-	-
3	Environment and Social Mitigation	1.50	0.50	1.00	-	-	-	-	-	-
	Tranche 1	0.50	0.50	-	-	-	-	-	-	-
	Tranche 2	1.00	-	1.00	-	-	-	-	-	-
4	Consultants	24.50	24.50	-	-	-	-	-	-	-
	Tranche 1	24.50	24.50	-	-	-	-	-	-	-
	Subtotal (A)	475.13	87.50	131.50	158.06	98.06		-	-	-
B.	Recurrent Costs									
1	IPMO Consultant	1.27	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
	Tranche 1	0.80	0.16	0.16	0.16	0.16	0.16	-	-	-
	Tranche 3	0.48	-	-	-	-	-	0.16	0.16	0.16
2	System Operation and Maintenance	14.70	-	-	-	2.20	4.30	4.90	2.70	0.60
	Tranche 1	-	-	-	-	-	-	-	-	-
	Tranche 2	6.60	-	-	-	2.20	2.20	2.20	-	-
	Tranche 3	6.30	-	-	-	-	2.10	2.10	2.10	-
	Tranche 4	1.80	-	-	-	-	-	0.60	0.60	0.60
	Subtotal (B)	15.97	0.16	0.16	0.16	2.36	4.46	5.06	2.86	0.76
	Total Base Cost	491.10	87.66	131.66	158.22	100.42	4.46	5.06	2.86	0.76
C.	Contingencies									
1	Physical	49.46	9.12	13.17	15.82	10.04	0.45	0.51	0.29	0.08
	Tranche 1	9.28	9.12	0.12	0.02	0.02	0.02	-	-	-
	Tranche 2	13.71	-	13.05	-	0.22	0.22	0.22	-	-
	Tranche 3	16.48	-	-	15.81	-	0.21	0.23	0.23	0.02
	Tranche 4	9.99	-	-	-	9.81	-	0.06	0.06	0.06
2	Price	68.49	5.01	7.31	27.43	23.81	1.35	1.89	1.28	0.40
	Tranche 1	5.26	5.01	0.13	0.03	0.04	0.05	-	-	-
	Tranche 2	9.39	-	7.18	-	0.52	0.67	0.88	0.07	0.08
	Tranche 3	29.79	-	-	27.41	-	0.64	0.79	0.95	0.01
	Tranche 4	24.05	-	-	-	23.25	-	0.22	0.27	0.31
	Subtotal (C)	117.95	14.13	20.47	43.26	33.85	1.80	2.40	1.57	0.47
D.	Financing Charges During Implementation									
1	Interest During Implementation	15.76	0.64	1.56	2.08	4.05	3.37	2.90	1.16	-
	Tranche 1	2.17	0.64	0.63	0.08	0.82	-	-	-	-
	Tranche 2	4.81	-	0.93	1.06	1.39	1.42	-	-	-
	Tranche 3	5.78	-	-	0.93	1.36	1.74	1.74	-	-
	Tranche 4	3.01	-	-	-	0.48	0.21	1.16	1.16	-
2	Commitment Charges	0.19	-	-	0.10	0.08	0.01	0.01	-	-
	Tranche 1	-	-	-	-	-	-	-	-	-
	Tranche 2	-	-	-	-	-	-	-	-	-
	Tranche 3	0.10	-	-	0.10	0.01	-	-	-	-
	Tranche 4	0.09	-	-	-	0.08	0.01	0.00	-	-
	Subtotal (D)	15.95	0.64	1.55	2.17	4.14	3.38	-	-	-
	Total Project Cost (A+B+C+D)	625.00	102.42	153.69	203.65	138.41	9.64	7.46	4.43	1.23

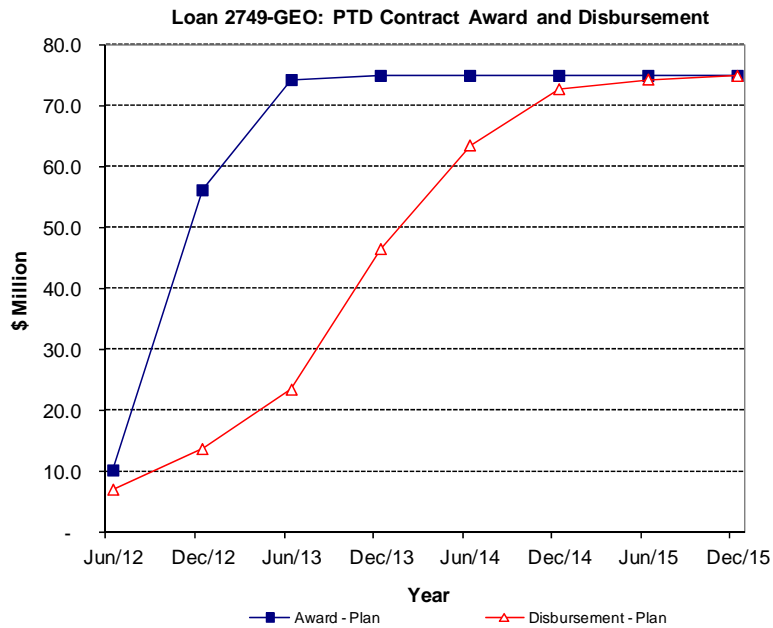
Source: United Water Supply Company of Georgia and Asian Development Bank estimates.

F. Contract and Disbursement S-curve

1. Investment Program



2. Project 1

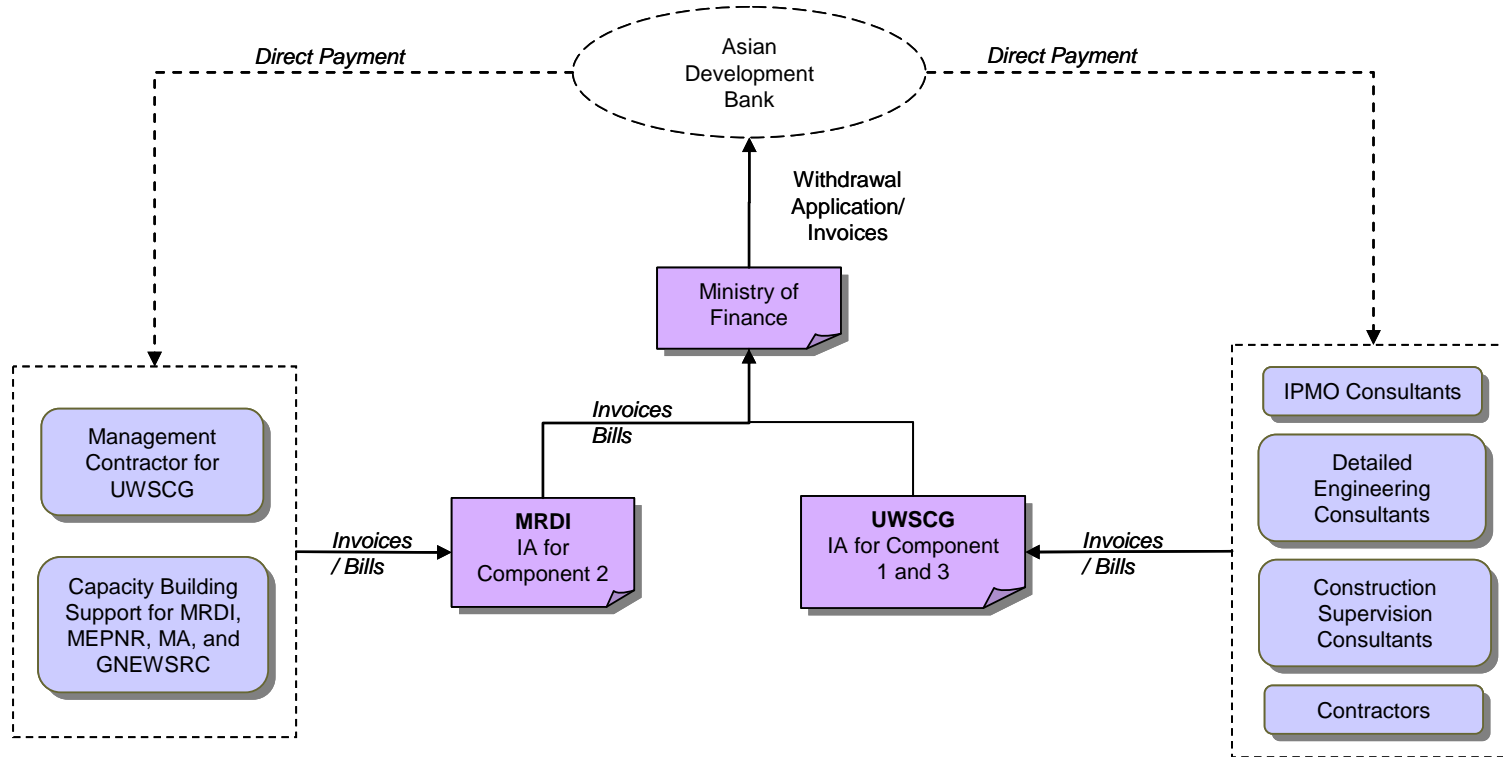


G. Summary Detailed Cost Estimates and Investment Plan

Towns	Intake	WSS-1	WSS-2	WSS-3	STP	Equip.	Total	T1	T2	T3	T4	Total
Civil Works and Equipment												
Marneuli	6.00	25.00	25.00	-	20.00	0.80	76.80	6.80	25.00	45.00	-	76.80
Zugdidi	50.00	30.00	30.00	-	25.00	0.80	135.80	50.80	30.00	30.00	25.00	135.80
Mestia	1.50	8.00	-	-	10.00	0.40	19.90	1.90	18.00	-	-	19.90
Kutaisi	-	32.50	32.50	33.07	40.00	1.00	139.07	1.00	32.50	33.07	73.07	139.63
Poti	-	25.00	25.00	-	25.00	1.00	76.00	1.00	25.00	50.00	-	76.00
Water Laboratory Equipment						1.00	1.00	1.00	-	-	-	1.00
Environment & Social Mitigation	-	-	-	-	-	-	-	0.50	1.00	-	-	1.50
Consultants and Management Contractor	-	-	-	-	-	-	-	24.50	-	-	-	24.50
Recurrent Costs												
IPMO Consultants	-	-	-	-	-	-	-	0.80	-	0.48	-	1.27
Post Construction O&M	-	-	-	-	-	-	-	-	6.60	6.30	1.80	14.70
Contingencies												
Physical	-	-	-	-	-	-	-	9.28	13.71	16.48	9.99	49.46
Price	-	-	-	-	-	-	-	5.26	9.39	29.79	24.06	68.49
Financing Charges												
Interest During Construction	-	-	-	-	-	-	-	2.17	4.81	5.78	3.01	15.76
Commitment Charges	-	-	-	-	-	-	-	-	-	0.10	0.09	0.19
Total	57.50	120.50	112.50	33.07	120.00	5.00	448.57	105.00	166.00	217.00	137.00	625.00

Financing Plan	T1	T2	T3	T4	Total
ADB	80.00	141.00	168.00	111.00	500.00
-OCR	-	-	139.00	111.00	250.00
-ADF	80.00	141.00	29.00	-	250.00
Georgia	25.00	25.00	49.00	26.00	125.00
Total	105.00	166.00	217.00	137.00	625.00

H. Fund Flow Diagram



Component 1 = Infrastructure Improvement, Component 2 = Institutional Effectiveness, Component 3 = Project Implementation Support, GNEWSRC = Georgia National Energy and Water Supply Regulatory Commission, IPMO = Investment Program Management Office, MA = Ministry of Agriculture, MEPNR = Ministry of Environmental Protection and Natural Resources, MRDI = Ministry of Regional Development and Infrastructure, UWSCG = United Water Supply Company of Georgia Limited Liability Company

V. FINANCIAL MANAGEMENT

A. Financial Management Assessment

1. Public Financial Management

7. The reform of the public financial management (PFM) system of Georgia has been a priority for the government in the last six years. The Budget System Law approved in 2004 set in place the principles of comprehensiveness, transparency, and accountability for the budget system as well as rules and procedures for the processes at all stages, which include budget preparation, discussion, approval and execution, consolidation, reporting and auditing of the actual expenditures.² All extra budgetary funds were closed and all state financial transactions were unified within a Treasury Single Account. This change increased the transparency of the budget process and information on revenue collection and spending was available to any interested group.

8. The Government of Georgia, in 2009, adopted a new Budget Code, which was designed to improve the budget process. With the adoption of the new Budget Code, the budget process became simplified and unified under a common system. This change also positively affected the transparency of the budget process. The basic data and directions (BDD) document became binding with the legislation.³ In 2010 the budget, the expenditure ceilings of the budget agencies for the fiscal year was determined following the BDD document.

9. Another significant change to the budget process is an introduction of program and capital budgeting that is planned for implementation in 2012. Conversion into the program budgeting will clearly identify how much money is necessary for each program and activity, what the expected results of the program are and which performance indicators will be used to measure the output and outcome of the program. In addition to this budget preparation improvement, tax policy reform and other measures to improve the business climate, as well as re-structuring and re-staffing of key government units were also implemented.

2. Financial Management Assessment

10. The financial management assessment (FMA) was carried out for UWSCG, the Investment Program Implementing Agency. The FMA determined the following for UWSCG:

- (i) **Accounting.** Accounting is based on international accounting standards and follows an accrual based system. The Financial Accounting Division is currently preparing a financial management manual to guide staff in applying international accounting practices. Staff will need training on international accounting standards and on international financial reporting standards to improve operational efficiencies.
- (ii) **Budgeting.** Capital planning, tariff review and calculation, and budget preparation and coordination is carried out by the Financial and Economic Division and based on national budgeting guidelines. The staff will need adequate training on preparing business plans that meet commercial operational efficiencies for submissions to the

² The World Bank and European Commission. 2008. *Public Expenditure and Financial Accountability (PEFA)*. Tbilisi.

³ In 2006, the medium term expenditure framework and basic data and directions (BDD) document was introduced. The document outlined the main macroeconomic indicators and basic directions and priorities of the Government for the next four fiscal years.

GNEWSRC. Determining tariffs in the short-term to meet revenue requirements and in the long-term to meet long-run marginal costs taking cognizance of socially equitable principles will be a key function the staff will require training on.

- (iii) **Procurement.** Procurement is centrally managed and the staff is currently conversant with national procurement procedures only. Activities are largely related to procurement of regular maintenance goods and procurement of civil works and goods under donor financed WSS projects is conducted with Municipal Development Fund (MDF) support. Over the immediate term, UWSCG staff capacity should be developed to handle international competitive bidding for civil works, equipment and machinery, and turnkey projects.

UWSCG Income and Expenditure Statement
(\$ million)

Item	2010	%	2011-H1	%
Income				
Sales Revenue	11.61	48.54	28.41	64.86
Subsidies received	11.27	47.11	12.52	28.58
Other incomes	1.04	4.36	2.87	6.55
Total income	23.92	100.00	43.80	100.00
Expenditure				
Payroll	5.49	33.11	11.96	31.51
Electricity	5.20	31.33	9.66	25.45
Depreciation	2.48	14.93	7.28	19.18
Consumables, materials and supplies	1.59	9.57	4.56	12.01
Consulting expenses	0.39	2.34	0.67	1.77
Operating tax expenses	0.23	1.37	0.73	1.92
Interest expenses	0.01	0.07	-	-
Other expenses	1.21	7.28	3.10	8.17
Total expenditure	16.58	100.00	37.96	100.00
Profit before tax	7.34	-	5.84	-
Profit tax expense	1.09	-	0.45	-
Net profit	6.25	-	5.39	-

Source: UWSCG estimates.

11. UWSCG has an internal audit department to conduct audits through the GNEWRC, at present, does not require utility companies it regulates to submit audited financial statements. The UWSCG is currently not subject to an external audit but proposes to conduct an audit of its 2010 financial statements by an external auditor.

12. The financial management system of the UWSCG requires improvement through additional support from the Investment Program. The financial management manual will include a management plan to:

- (i) record project financial transactions in accordance with agreed project components, disbursement categories, and sources of funds;
- (ii) provide regular and reliable financial statements and monitoring reports during project implementation;

- (iii) safeguard financial assets; and
- (iv) subject financial statements to audit acceptable to ADB.

13. UWSCG's finance and procurement staff will undergo training on ADB disbursement and procurement procedures to ensure that the management plan indicated above is effective.

B. Disbursement

14. The loan proceeds for financing Goods, Works, and consulting services shall be disbursed in accordance with ADB's *Loan Disbursement Handbook* (2007, as amended to date).⁴ Pursuant to ADB's Safeguard Policy Statement (2009) (SPS),⁵ ADB funds may not be applied to the activities described on the ADB Prohibited Investment Activities List set forth at Appendix 5 of the SPS.

15. The minimum value per withdrawal application is US\$100,000, unless otherwise approved by ADB. Withdrawal applications and supporting documents will demonstrate, among other things that the goods, and/or services were produced in or from ADB members, and are eligible for ADB financing. Withdrawal applications and other loan disbursement information are available at ADB Controller's Department's website, <http://ifis.adb.org>. For Component 2, MRDI will delegate processing of withdrawal applications to UWSCG but will review and sign them before submission.

16. **First Withdrawal Application (WA).** MOF should submit to ADB sufficient evidence of the authority of the (two) persons who will sign the withdrawal applications on behalf of the Government, together with the authenticated specimen signatures of each authorized person. Estimate of Expenditures Sheet/s⁶ for the next 6 months will accompany the first WA.

17. **Retroactive Financing.** If approved by ADB, withdrawals from the relevant Loan Account may be made for reimbursement of eligible expenditures incurred under the relevant Project before the Effective Date of the Loan Agreement (but not earlier than 12 months before the date of the Loan Agreement) in connection with items to be retroactively financed, subject to a maximum amount equivalent to 20% of the amount of the Loan. ADB will reimburse eligible expenditures incurred for retroactive financing to the Borrower, MoF, MRDI or UWSCG depending on the entity incurring eligible expenditures. The entity should provide sufficient evidence satisfactory to ADB of having incurred the eligible expenditure to be eligible to claim amounts to be retroactively financed.

18. **Condition for Withdrawals from Loan Account.** Notwithstanding any other provision of this Loan Agreement, no withdrawals shall be made from the Loan Account until the Subsidiary Loan Agreement described between the Borrower and UWSCG in form and substance satisfactory to ADB, has been duly authorized or ratified, and executed and delivered on behalf of, the Borrower and UWSCG, and is legally binding upon the parties thereto in accordance with its terms.

⁴ Available at: http://www.adb.org/Documents/Handbooks/Loan_Disbursement/loan-disbursement-final.pdf

⁵ Available at: <http://www.adb.org/Documents/Policies/Safeguards/Safeguard-Policy-Statement-June2009.pdf>

⁶ Follow the format provided in Appendix 29 of the *Loan Disbursement Handbook*.

C. Accounting

19. The Government shall ensure that the MRDI and UWSCG maintain separate accounts and records for the Loan Components and in accordance with sound accounting principles. These accounts shall be audited annually in accordance with standards acceptable to ADB, and the Government shall provide ADB with certified copies of the audited accounts promptly after their preparation (and no later than six months after the close of the Financial Year for the relevant accounts).

D. Auditing

20. MoF and MRDI will cause the detailed consolidated Project accounts to be audited in accordance with International Standards on Auditing and/or in accordance with the Government's audit regulations by an auditor acceptable to ADB. The audited accounts will be submitted in the English language to ADB within 6 months of the end of the fiscal year by the MRDI. The Government and MoF have been made aware of ADB's policy on delayed submission, and the requirements for satisfactory and acceptable quality of the audited accounts. ADB reserves the right to verify the Project's financial accounts to confirm that the share of ADB's financing is used in accordance with ADB's policies and procedures.

VI. PROCUREMENT AND CONSULTING SERVICES

A. Advance Contracting and Retroactive Financing

21. All advance contracting and retroactive financing will be undertaken in conformity with ADB's Procurement Guidelines (April 2010, as amended from time to time) (ADB's *Procurement Guidelines*) and ADB's Guidelines on the Use of Consultants (April 2010, as amended from time to time) (ADB's *Guidelines on the Use of Consultants*). The issuance of invitations to bid under advance contracting and retroactive financing will be subject to ADB approval. The government, executing and implementing agencies have been advised that approval of advance contracting and retroactive financing does not commit ADB to finance the Investment Program.

22. **Advance contracting.** The government has requested ADB's approval of advance contracting for (i) the recruitment of consultants (detailed engineering consultants); (ii) procurement of civil works; and (iii) procurement of water supply and sewerage system maintenance equipment.

23. **Retroactive financing.** For tranche 1, ADB will finance a maximum amount of eligible expenditures up to the equivalent of 20% of the loan for tranche 1 (approximately \$16,000,000) incurred before tranche 1 loan effectiveness but not earlier than 12 months before the signing of the Loan Agreement for tranche 1. Retroactive financing shall apply to consulting services, civil works, and goods (to include water supply and sewerage system maintenance equipment) under tranche 1 loan.

B. Procurement of Goods, Works and Consulting Services

24. The Investment Program will follow ADB's *Procurement Guidelines* (2010, as amended time to time) and tranche 1 loan includes: (i) three international competitive bids (ICBs) for water supply intake works in Marneuli, Zugdidi, and Mestia; (ii) three ICBs for equipment and machinery for water supply and sewerage system maintenance in all six Investment Program towns; and (iii) recruitment of consulting services for the Investment Program Management Office Consultants, Management Contractor, Detailed Engineering Consultants, Construction Supervision Consultants, and individual consultants for capacity building initiatives. An 18-month procurement plan indicating threshold and review procedures, goods, works, and consulting service contract packages and national competitive bidding guidelines is in Section C.

25. All consultants will be recruited according to ADB's *Guidelines on the Use of Consultants* (2010, as amended from time to time). The terms of reference for consulting services are detailed in Section D. Consulting firms will be engaged using the quality- and cost-based selection (QCBS) method with a standard quality: cost ratio of 80:20. Tranche 1 loan will finance Detailed Engineering Design Consultants with 149 person-months, Construction Supervision Consultants with 780 person-months, and a Management Contractor with 1,404 person-months.

26. Bidders eligibility will be determined in accordance with ADB's *Procurement Guidelines* (2010, as amended from time to time). Accordingly, no bidder or potential bidder shall be declared ineligible for ADB financed contracts for any reason other than those set out in ADB's Procurement Guidelines. For goods or services funded by loans from ADB's Special Fund resources, payments are limited to goods produced in, and services supplied by, developed

member countries that have contributed to such resources and all developing member countries.

C. Revised Procurement Plan for Project 1

Basic Data

Project Name: Urban Services Improvement Investment Program – Project 1	
Country: Georgia	Executing Agency: Ministry of Regional Development and Infrastructure
Loan Amount: \$80 million	Loan Number: 2479(SF)
Date of First Procurement Plan: 10 May 2011	Date of this Procurement Plan: 10 August 2012

1. Process Thresholds, Review and 18-Month Procurement Plan

a. Project Procurement Thresholds

27. Except as the Asian Development Bank (ADB) may otherwise agree, the following process thresholds shall apply to procurement of goods and works.

Procurement of Goods and Works

Method	Threshold
International Competitive Bidding (ICB) for Works	Above \$1,000,000
International Competitive Bidding for Goods	Above \$500,000
National Competitive Bidding (NCB) for Works	Beneath that stated for ICB, Works
National Competitive Bidding for Goods	Beneath that stated for ICB, Goods
Shopping for Works	Below \$100,000
Shopping for Goods	Below \$100,000

b. ADB Prior or Post Review

28. Except as ADB may otherwise agree, the following prior or post review requirements apply to the various procurement and consultant recruitment methods used for the project.

Procurement Method	Prior or Post	Comments
Procurement of Goods and Works		
ICB Works	Prior	ADB SBD
ICB Goods	Prior	ADB SBD
NCB Works	Prior and Post	ADB SBD (prior followed by post)
NCB Goods	Prior and Post	ADB SBD (prior followed by post)
Shopping for Works	Post	ADB SBD
Shopping for Goods	Post	ADB SBD
Recruitment of Consulting Firms		
Quality- and Cost-Based Selection (QCBS)	Prior	RFP
Quality-Based Selection (QBS)	Prior	RFP
Other selection methods: CQS, LCS, FBS and SSS	Prior	RFP
Recruitment of Individual Consultants		
Individual Consultants	Prior	ToR

ADB = Asian Development Bank, Consultants Qualifications = CQS, Fixed Budget = FBS, Least-Cost Selection = LCS, RFP = Request for Proposal, SBD = Standard Bidding Document, Single Source Selection = SSS, ToR = Terms of Reference.

c. Goods and Works Contracts Estimated to Cost More Than \$1 Million

29. The following table lists goods and works contracts for which procurement activity is either ongoing or expected to commence within the next 18 months.

General Description	Contract Value	Procurement Method	Prequalification of Bidders (y/n)	Advertisement Date (quarter/year)	Comments
Procurement of vehicles and equipment for system maintenance	[This information was deemed confidential according to exception (v) of paragraph 97 of ADB's Public Communication Policy (2011)]	ICB - Goods	N	Q3/2010	Advance actions and retroactive financing (4 packages) and 1 package during loan
Procurement of civil works for surface water intake, transmission and treatment		ICB - Works	N	Q3/2011	2 packages for Mestia. Treatment plant package to be bid with sewage treatment plant package in Anaklia (under project 2) as one contract
Procurement of civil works for surface water intake, treatment, transmission and distribution		ICB - Works	N	Q3/2012	1 package for Anaklia, Kutaisi, and Poti
Procurement of civil works for construction of UWSCG Office Building		ICB - Works	N	Q1/2013	1 package
Procurement of civil works for drilling of water boreholes in Anaklia		NCB - Works	N	Q4/2012	1 package

d. Consulting Services Contracts Estimated to Cost More Than \$100,000

30. The following table lists consulting services contracts for which procurement activity is either ongoing or expected to commence within the next 18 months.

General Description	Contract Value	Recruitment Method	Advertisement Date (quarter/year)	International or National Assignment	Comments
Design Engineering Consultant	[This information was deemed confidential according to exception (v) of paragraph 97 of ADB's Public Communication Policy (2011)]	QCBS (80:20)	Q2/2010	International	Advance actions and retroactive financing.
Construction Supervision Consultant		QCBS (80:20)	Q3/2011	International	-
Management Contractor		QCBS (80:20)	Q2/2012	International	ADB staff / staff consultant will be an observer in the CSC
Consultants for the public awareness program		QCBS (80:20)	Q1/2012	National	-
Consultants for the baseline surveys		QCBS (80:20)	Q1/2012	National	-
Consultants for auditing		QCBS (80:20)	Annually	National	To conduct UWSCG and Project Accounts auditing

QCBS = Quality and Cost Based Selection.

e. Goods and Works Contracts Estimated to Cost Less than \$1 Million and Consulting Services Contracts Less than \$100,000

31. The following table groups smaller-value goods, works and consulting services contracts for which procurement activity is either ongoing or expected to commence within the next 18 months.

General Description	Value of Contracts (cumulative)	Number of Contracts	Procurement / Recruitment Method	Comments
Consultants to support the IPMO	[This information was deemed confidential according to exception (v) of paragraph 97 of ADB's Public Communication Policy (2011)]	Minimum 4	-	Individual consultants
Consultants to support on capacity building and PPP transaction advisory		Minimum 6	-	Individual consultants
Consultants for conducting the WSS Management Program		Minimum 3	-	Individual consultants

IPMO = Investment Program Management Office.

2. Indicative List of Packages Required Under the Project

32. The following table provides an indicative list of all procurement (goods, works and consulting services) over the life of the project. Contracts financed by the Borrower and others should also be indicated, with an appropriate notation in the comments section.

General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Procurement Method	Domestic Preference Applicable	Comments
Goods	[This information was deemed confidential according to exception (v) of paragraph 97 of ADB's Public Communication Policy (2011)]				
Procurement of vehicles and equipment for system maintenance		4	ICB	N	-
Works					
Procurement of civil works for surface water intake, transmission and treatment		2	ICB	N	2 packages for Mestia. Treatment plant package to be bid with sewage treatment plant package in Anaklia (under project 2) as one contract
Procurement of civil works for surface water intake, treatment, transmission and distribution		1	ICB	N	1 package for Anaklia, Kutaisi, and Poti
Procurement of civil works for construction of UWSCG Office Building		1	ICB	N	1 package
Procurement of civil works for drilling of water boreholes in Anaklia		1	NCB	N	1 package
General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Recruitment Method	Type of Proposal	Comments
Design Engineering Consultant	[This information was deemed confidential according to exception (v) of paragraph 97 of ADB's Public Communication Policy (2011)]	1	QCBS (80:20)	FTP	International = 36 pm and National = 113 pm
Construction Supervision Consultant		1	QCBS (80:20)	FTP	International = 374 pm and National = 791 pm
Management Contractor		1	QCBS (80:20)	FTP	International = 68 pm
Consultants for the public awareness program		1	QCBS (80:20)	STP	National = 200 pm
Consultants to support the IPMO		Minimum 4	-	-	-
Consultants to support on capacity building and PPP transaction advisory		Minimum 6	-	-	-
Consultants for		Minimum 3	-	-	-

General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Procurement Method	Domestic Preference Applicable	Comments
conducting the WSS Management Program					
Consultants for the baseline survey		1	QCBS (80:20)	National	-

3. National Competitive Bidding

a. General

33. The procedures to be followed for national competitive bidding shall be those set forth in the Law of Georgia on State Procurement January 1, 2006 with the clarifications and modifications described in the following paragraphs required for compliance with the provisions of the ADB's *Procurement Guidelines* (April 2010, as amended from time to time).

b. Eligibility

34. The eligibility of bidders shall be as defined under section I of ADB's *Procurement Guidelines*, published by ADB (April 2010, as amended from time to time); accordingly, no bidder or potential bidder should be declared ineligible to ADB-financed contracts for other reasons than the ones provided by section I of ADB's *Procurement Guidelines*. Bidders must be nationals of member countries of ADB, and offered goods and services must be produced in and supplied from member countries of ADB. For loan from Special Funds resources, refer to eligibility defined in clauses 1.2 (a) and 2.11 (a) of ADB's *Procurement Guidelines*.

c. Prequalification

35. Normally, post-qualification shall be used unless explicitly provided for in the loan agreement/procurement plan. Irrespective of whether post qualification or prequalification is used, eligible bidders (both national and foreign) shall be allowed to participate.

d. Registration and Licensing

- (i) Bidding shall not be restricted to pre-registered/licensed firms.
- (ii) Where registration or licensing is required, bidders (i) shall be allowed a reasonable time to complete the registration or licensing process; and (ii) shall not be denied registration/licensing for reasons unrelated to their capability and resources to successfully perform the contract, which shall be verified through post-qualification.
- (iii) Foreign bidders shall not be precluded from bidding. If a registration or licensing process is required, a foreign bidder declared the lowest evaluated bidder shall be given a reasonable opportunity to register or to obtain a license without unreasonable cost and additional requirements.

e. Bidding Period

36. The minimum bidding period is twenty-eight (28) days prior to the deadline for the submission of bids.

f. Bidding Documents

37. Procuring entities should use standard bidding documents for the procurement of goods, works and services acceptable to ADB.

38. The term "services" above are applicable to the following: (a) related services (for supply of goods and works) such as transportation, insurance, installation, commissioning, training and initial maintenance, and (b) other services such as drilling, mapping, and similar operations.

g. Preferences

39. No domestic preference shall be given for domestic bidders and for domestically manufactured goods.

h. Advertising

40. Invitations to bid shall be advertised in at least one widely circulated national daily newspaper or freely accessible, nationally-known website allowing a minimum of twenty-eight (28) days for the preparation and submission of bids.

41. Bidding of NCB contracts estimated at US\$500,000 equivalent or more for goods and related services or US\$1,000,000 equivalent or more for civil works shall be advertised on ADB's website via the posting of the Procurement Plan.

i. Bid Security

42. Where required, bid security shall be in the form of a bank guarantee from a reputable bank.

j. Bid Opening and Bid Evaluation

- (i) Bids shall be opened in public.
- (ii) Evaluation of bids shall be made in strict adherence to the criteria declared in the bidding documents and contracts shall be awarded to the lowest evaluated bidder who meets the qualifying criteria stated in the bid documents.
- (iii) Bidders shall not be eliminated from detailed evaluation on the basis of minor, non-substantial deviations.
- (iv) No bidder shall be rejected on the basis of a comparison with the employer's estimate and budget ceiling without ADB's prior concurrence.
- (v) A contract shall be awarded to the technically responsive bid that offers the lowest evaluated price and no negotiations shall be permitted.

(vi) Price verification shall not be applied.

k. Rejection of All Bids and Rebidding

43. Bids shall not be rejected and new bids solicited without ADB's prior concurrence.

l. Participation by Government-owned enterprises

44. Government-owned enterprises in Georgia shall be eligible to participate as bidders only if they can establish that they are legally and financially autonomous, operate under commercial law and are not a dependent agency of the contracting authority. Furthermore, they will be subject to the same bid and performance security requirements as other bidders.

m. Right to Inspect/Audit

45. A provision shall be included in all NCB works and goods contracts financed by ADB requiring suppliers and contractors to permit ADB to inspect their accounts and records and other documents relating to the bid submission and the performance of the contract, and to have them audited by auditors appointed by ADB.

n. Fraud and corruption

- (i) The Borrower shall reject a proposal for award if it determines that the bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the contract in question.
- (ii) ADB will declare a firm or individual ineligible, either indefinitely or for a stated period, to be awarded a contract financed by ADB, if it at any time determines that the firm or individual has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive or obstructive practices in competing for, or in executing, an ADB-financed contract.

46. For purposes of the provisions in (a) and (b) above, the definitions of the terms "fraudulent practice", "corrupt practice", "collusive practice", and "coercive practice" are the definitions given in ADB's Procurement Guidelines.

o. Conflict of Interest

47. ADB's rule in respect of "Conflict of Interest" as stipulated in ADB's Standard Bidding Documents for Procurement of Goods, Civil Works, and Plant-Design, Supply and Install shall be applicable.

p. Disclosure of Decision on Contract Awards

48. At the same time that notification on award of contract is given to the successful bidder, the results of bid evaluation shall be published in a local newspaper, or a well-known freely accessible website identifying the bid and lot numbers and providing information on (i) name of each Bidder who submitted a Bid, (ii) bid prices as read out at bid opening; (iii) name of bidders whose bids were rejected and the reasons for their rejection, and (iv) name of the winning Bidder, and the price it offered, as well as duration and summary scope of the contract awarded. The executing agency/implementing agency/contracting authority shall respond in writing to

unsuccessful bidders who seek explanations on the grounds on which their bids are not selected.

4. Review of Contract Modifications

1. ADB will review contract modifications in accordance with the procedures set forth in the loan agreement between the Borrower and ADB.

D. Consultant's Terms of Reference

1. Outline Terms of Reference for the Public Private Transaction Adviser

a. Objective/Purpose of the Assignment

i. Scope of Work

24. The United Water Supply Company of Georgia is looking for International Public-Private Partnership Transaction Adviser. The United Water Supply Company of Georgia is the state owned and is administered by the Ministry of Regional Development and Infrastructure of Georgia. The Government of Georgia has received a loan from the Asian Development Bank (ADB) toward the cost of the Urban Services Improvement Investment Program and intends to apply a portion of this loan to eligible payment under the consultancy services. The Consultant shall provide its assistance and advice to UWSCG.

ii. Detailed Tasks

25. The PPP Transaction Advisor will develop the detailed scope of services for the Management Contractor (MC), determine performance indicators to be monitored during the contract period, and assist the Ministry of Regional Development and Infrastructure (MRDI) appoint the MC. The PPP Transaction Advisor's service is required for approximately three person months.

- a. Review outputs of the policy and advisory technical assistance and determine the outline scope of services of the MC.
- b. Review outputs of the capacity development technical assistance and include lessons learned in the design of the MC scope of services.
- c. Review the organizational structure, technical / engineering capacity of staff, and operational practices of the United Water Supply Company of Georgia (UWSCG) and elaborate the scope of services (water supply and sanitation) of the MC with respect to technical management services.
- d. Review the organizational structure, financial management practices, and business planning practices and elaborate the scope of services of the MC with respect to financial management services.
- e. Review the asset information in service centers and along with the International Water Supply and Sanitation Specialist (appointed separately by UWSCG) identify the performance monitoring parameters of the MC.
- f. Based on above review and in consultation with the MRDI, UWSCG, and ADB, design the scope of services of the MC and develop a request for proposal based on ADB Guidelines on the Use of Consultants.
- g. Assist MRDI in bid process management by developing the bidding documents, evaluating the bids, negotiating the contract with the prospective MC, and awarding the contract.

iii. Output / Reporting Requirements

26. The assignment requires three person months of intermittent inputs in Georgia. Outputs will include (i) expression of interest by 1 September 2011, (ii) scope of services by 1 October 2011, (iii) Request for Proposal (RFP) and short list of firms by 15 October 2011, and (iv) appointment of Management Contractor by 31 January 2012.

2. Outline Terms of Reference for the Management Contractor

E. Background

United Water Supply Company of Georgia (UWSCG) is one of three water and wastewater utilities servicing about 58.5% population in Georgia. The other two companies service Tbilisi and the Adjara region.

Figure 1: UWSCG Service Area



UWSCG was established in January 2010 under the Law of Georgia on Entrepreneurs. As of 31 December 2010, it had a capitalization of US\$43 million. UWSCG has three organizational tiers: a central office located in Tbilisi, six regional branches, and 53 service centres covering cities and towns.

UWSCG is a limited liability company wholly owned by the state of Georgia, represented by the Ministry of Economy and Sustainable Development (MESD). Under an agreement between MESD and Ministry of Regional Development and Infrastructure (MRDI), MESD has transferred to MRDI a range of higher-level management rights that MESD has as owner of UWSCG.

Although it is a separate legal entity, UWSCG is, as a result of this agreement, effectively controlled by MRDI, to which it reports. The bulk of UWSCG's Water and Sewerage Services (WSS)- land, buildings, reservoirs, intake structures, water and sewerage networks, pumping stations, and other assets were previously owned by small municipal water companies. An agreement between MESD and MRDI, dated 5 November 2010, on transfer of management rights from MESD to MRDI is pursuant to Article 43 of the Law on State Property; Presidential Decree 978, dated 11 October 2010; and Regulation 1367 of the Government of Georgia, dated 22 October 2010. These "partnership rights" are a wide range of powers outlined in the agreement and UWSCG charter and include the right to approve annual budgets and make contributions to the capital of UWSCG. The day-to-day management is undertaken by a senior management team headed by the Director reporting to MRDI.

UWSCG continues to receive transfers of various WSS sector assets from the Georgian Municipal Development Fund, some of which were financed by other international financial institutions

At present UWSCG manages the 53 service centres with 2,343 staff and has recently begun reforms and many functions have been centralized, notably planning, design, finance, logistics and procurement. Central offices in Tbilisi are manned with 150 technical and administrative staff to manage many of these diverse functions. Currently, there are 6 regional offices that link Tbilisi with the service centres with about 1,706 staff. The regional offices provide troubleshooting technical assistance to the service centres. The service centres are responsible for the day to day operation and maintenance (O&M) for water supply and sewerage services. The service details are summarised below.

- Servicing about 700,000 people spread in 53 service centres; 240,000 domestic and 8,500 commercial customers
- Annual operating cost in the year 2011 was GEL 37.96m;
- Operating income during 2011 was 31.28m own income and 12.52m operating subsidy from GoG;
- GEL 2.40/person/month fixed ceiling tariff; Volumetric tariff at GEL 0.50/m³ for metered customers and GEL 4.30/m³ Commercial Customers;
- All commercial customers billed on metered consumption
- Non-Revenue Water ~ 30 – 60%;
- Revenue Collection ~75% domestic and ~98% commercial

System operation and services are challenged by aging infrastructure, irregular maintenance and low capacity. In many service centres systems exceed 30-50 years of use with historically low investments in asset management and maintenance and require significant investment to improve efficiency and quality of services.

With the corporatisation and reorganisation UWSCG, had been implementing structured programs of both improving the infrastructure capacity and organisation efficiency. The company has invested in management improvements like setting up a new centralised billing system, a customer service centre at Kutaisi (one of the service area with large customer base), transport facilities, operational tools and equipment, spares, inventory etc. In addition to these, the company had been undertaking focussed improvements in customer metering, collection of revenue and achieved significant increase both in collection as well as billed volume which is reflected in the following financial summary.

UWSCG Income and Expenditure Statement
(\$ million)

Item	2010	%	2011	%
Incomes				
Sales Revenue	11.61	48	17.22	65.23
Subsidies received	12.52	51.76	7.59	28.75
Other incomes	0.06	0.24	1.59	6.02
Total incomes	24.19	100.00	26.40	100.00
Expenses				
Payroll	5.49	32.82	7.25	31.52
Electricity	5.19	31.02	5.85	25.44
Depreciation	2.48	14.82	4.41	19.18
Consumables, materials and supplies	1.59	9.50	2.76	12.00
Consulting expenses	0	0	0.41	1.78
Operating tax expenses	0.18	1.08	0.44	1.91
Interest expenses	0.01	0.06		-
Other expenses	1.79	10.70	1.88	8.17
Total expenses	16.73	100.00	23.00	100.00
Profit before tax	7.46		3.40	
Profit tax expense	1.09		0.27	
Net profit	6.37		3.13	
Other comprehensive income				
Revaluation gain	-		-	
Change in value of available-for-sale financial assets	-		-	
Income tax relating to components of other comprehensive income	-		-	
Total comprehensive income for the year	6.37		3.13	
Operating Ratio	0.69		0.87	

Source: UWSCG estimates.

Even though the Company achieved significant improvement in financial performance, it lacks expertise in the following areas due to the legacy of historical under-investment and erstwhile model of governance:

- Modern operational techniques in water utility management
- Standard Operating Procedures and Emergency Response Systems
- Planned Asset Management for optimising and sustaining the performance of existing assets
- Financial management and control conforming to IFRS standards

- Internal accountability between HQ, Regions and Service Stations
- Benchmarking and performance monitoring
- Energy Management
- Human Resource Development

1. On-going Investments

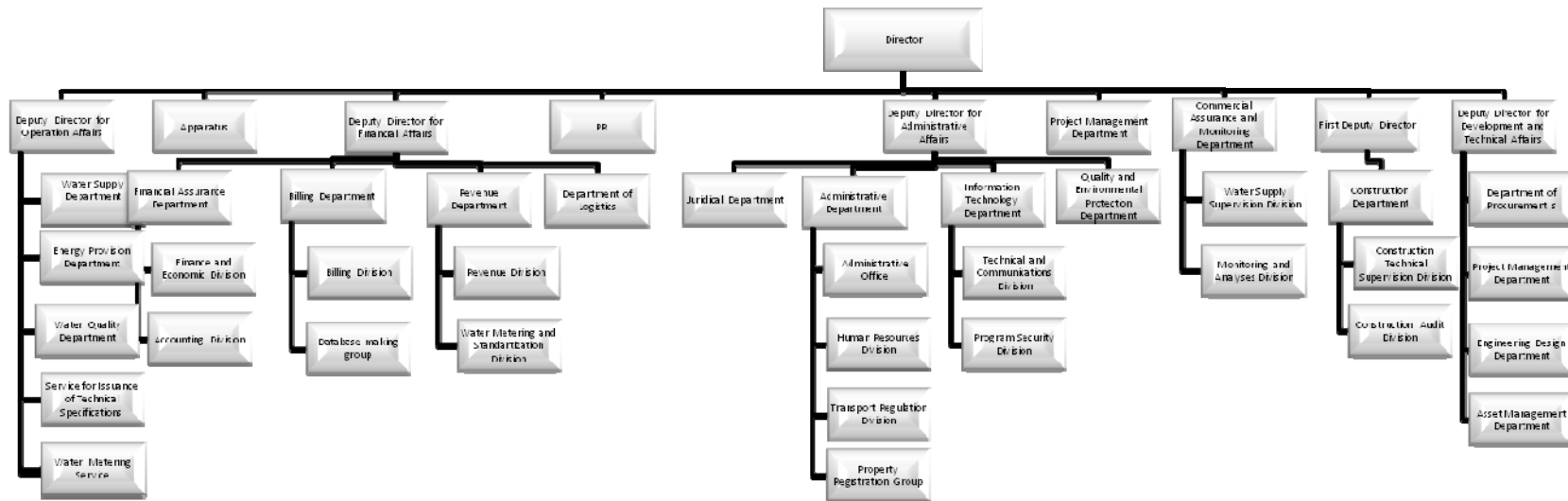
The Asian Development Bank (ADB) is currently providing a Multi-tranche Financing Facility (MFF) loan to Georgia for financing up to \$500 million over a period of 2011-19. The proceeds of this MFF are intended to be used for financing the critical capital works with a priority for investment in six towns viz. Anaklia, Kutaisi, Mestia, Poti, Marneuli and Zugdidi.

The European Investment Bank is providing about €40m for partial rehabilitation of water supply systems in 28 municipal centres of Georgia. In addition partial rehabilitation of water supply systems is being implemented as given below.

Funding Agency	Scope of Works	Number of Towns	Funding
EBRD	Partial Rehabilitation of WSS	3	Euro 7 million
EBRD	Corporate Development Program	UWSCG	-
European Union	Partial Rehabilitation of WSS	18	GEL 7.31 million
USAID	Partial Rehabilitation of WSS	2	GEL 3.28 million
The World Bank	Partial Rehabilitation of WSS	3	GEL 7.58 million

The current organisation structure of UWSCG is shown in the following figure.

Figure 2: UWSCG Organization Structure



F. Name of Employer

The Employer is the Director, United Water Supply Company of Georgia (UWSCG).

G. Objectives of Contract

UWSCG wishes to appoint an eligible experienced water utility agency as a Management Contractor (MC) on a performance based management support contract. Through this Contract, the UWSCG intends to strengthen its management and operating efficiency by streamlining and improving the service delivery in key operational and management functions including increased employee productivity.

UWSCG intends to use a part of the proceeds of the ADB MFF for implementing the Management Contract.

The Contract is to employ a qualified and experienced Management Contractor (MC) for providing management support services to the Employer for improving the water services in the service area in the jurisdiction of UWSCG and the key objectives are listed below but not limited to:

- a) Improving water and sewerage services to customers
- b) Capacitate UWSCG to become an efficient and effective water utility services company
- c) Improved technical and commercial efficiency in operations
- d) Increased productivity of UWSCG employees
- e) Moving towards full cost recovery and financial turn-around
- f) Achieving sustainability in the long term

H. Parties to the Contract

The United Water Supply Company of Georgia represented by the Director; and the appointed Management Contractor (MC) are the Parties to the Contract.

I. Service Area

The Service Area comprise of all that area currently within the legal jurisdiction of UWSCG comprising of 53 services centres comprise of approximately 240,000 residential and 8,500 commercial connections including area that expand during the term of the Contract.

J. Project Sponsor

Asian Development Bank (ADB) shall be the sponsor of the project to finance the required funds covering the remuneration to the Management Contractor estimated at \$3 million.

K. Method of Selection

The selection process is governed under ADB procurement guidelines and is through a two stage bidding process. In the first stage, UWSCG shall invite Expression of Interest (Eoi) from eligible Water Utility Operators. On prequalification of the eligible Operators, the UWSCG in the second stage shall issue Request for Proposals to the qualified Operators and would evaluate the technical and financial proposals for selecting the most beneficial bid from among the responsive proposals on quality and cost based selection (QCBS) method.

L. Contract Structure

The Contract would be based on ADB's Lumpsum Contract.

M. Contract Time Frame

The contract is spread over 36 months commencing from the Contract Effective Date during which the appointed Management Contractor (MC) shall provide its team of professionals including internal turn around experts and short term functional experts for improving the operating efficiency of UWSCG. The critical areas where UWSCG intends to induct qualified and experienced water utility management experts shall include but not be limited to:

- a) Water utility operations, rehabilitation and asset management
- b) Institutional Development
- c) Improving operating efficiency – ratio of expenditure to income
- d) Increasing productivity of UWSCG human resources

1. Contract Key Dates

- a) Contract Date – Date on which the Contract is signed by the Parties
- b) Effective Date – Date on which the Contract becomes effective which is one month from the Contract Date or as mutually agreed by the Parties
- c) Contract End Date – Date on which the MC completes the Contract which is 36 months from Effective Date or to be mutually agreed if UWSCG decides to terminate the Contract by pre-closure or extends the Contract Term.

N. Scope of Services

The Management Contractor (MC) shall be responsible for providing qualified and experienced functional specialists who shall assist UWSCG in improving the performance in the following key areas:

- a) Water production, transport and distribution operational services
- b) Commercial services including billing, income collection
- c) Customer services including recording and resolving customer complaints
- d) Institutional re-engineering, change management, internal accountability mechanisms and organisational effectiveness
- e) Financial management, accounts, revenue and expenditure management
- f) Information management, analysis and control; setting up an Enterprise Resource Planning system
- g) Human resources management, instituting rewards, incentives and performance appraisal systems

O. Key Activities

The list of key activities described hereunder is indicative only of the services expected from the Management Contractor. The list is not intended to be exhaustive and inclusion of additional tasks not listed may be needed. The Management Contractor may also propose additional programs it thinks necessary according to its experience of good practice in similar water utility operations and management contracts.

1. General Management, Administration and Training

- a) The MC shall study the existing operations and management and develop a baseline performance report on the Company duly establishing service level benchmarks in

different service areas and assess the Key Performance Indicators of Operating Ratio and Employee Productivity Ratio. The MC shall then develop periodical updates (at least once in six months) of the performance reports including the service level benchmarks and the Key Performance Indicators.

- b) Study, evaluate and submit to the approval of the UWSCG and MRDI a re-organization of territorial branches and of their relationships with the Company Headquarters, including through mergers, creation of sub-branches, amendments and develop robust rewarding and incentivising framework and assist UWSCG in implementing these measures after approval;
- c) Introduce, modern utility personnel practices and more effective, results-oriented personnel management. The MC will carry out evaluations of the all existing company staff and prepare a human resources development plan and assist in implementation;
- d) Design and implement a management information system, including financial management, asset management and operation information particularly reliable monitoring of water volumes abstracted from the environment, supplied to distribution reservoirs and distributed to end-users, and of electricity consumption including setting up a benchmarking system for monitoring the performance of the service and regional centres, using appropriate computer-based systems;
- e) Organise focussed on-job training to the concerned staff in all the service improvement areas as detailed further.

2. Water Supply Management

The MC shall study and evaluate the existing operating regime and develop and on approval assist UWSCG in:

- a) implementing best practices and measures for improving the management, operations and maintenance of the infrastructure facilities to carry out:
 - i. the production, treatment, transmission and distribution of drinking water; and
 - ii. billing, collections and customer service functions related to the water and wastewater services.
- b) improving the on-going program of customer meters installation and implementation of the transition from non-metered consumption and normative billing to metered consumption and volumetric billing of all customer categories in accordance with the provisions established by the Law and the Government of Georgia.
- c) developing and operating modern systems for asset management, information management, customer service, and financial and cost accounting, whether by improving and developing those recently developed by UWSCG or by designing and installing new ones if deemed necessary;

3. Operation and Maintenance

To improve the quality of the drinking water services to consumers the MC shall:

- a) Study the current operating regime of water and wastewater services and develop a detailed operating plan for each of the branch and on approval from UWSCG, shall assist in successfully implementing and plan. The operating plan shall clearly elucidate the different operating tasks, functions, responsibilities and monitoring mechanism and the related organisation structure and inter relationships.
- b) Develop for the water service, a safety and monitoring program for the raw water sources and treated water in the transmission and distribution systems, with particular regard to ensuring and measuring compliance

- c) Develop and implement a maintenance program and train Operations Staff accordingly.
- d) Assist UWSCG in completing the bulk meter installation program already initiated by the Company and design and establish the bulk meters maintenance, operation and production monitoring system;
- e) Review the current program of leak detection including practices of leak-repair in transmission, feeder and distribution networks service areas, and suggest actions by applying modern equipment and technologies;
- f) Develop and implement a distribution reservoirs washing, sanitary protection and repair program;
- g) Prepare and assist in implementing a water network management plan to control network pressure and reduce hydraulic losses, particularly and, when necessary, through zoning of distribution networks and setting up DMAs;
- h) Develop, calibrate and establish a working hydraulic network model for water networks
- i) Prepare, update and establish internal procedures for a regular updating of digitalized maps of the drinking water networks and the hydraulic network model.

4. Standard Operating Procedures (SOPs)

To improve the operating performance and response times the MC shall:

- a) Develop and establish Standard Operating Procedures (SOPs) for each of the task and function covering all areas of operations, reactive maintenance, customer services etc
- b) Develop an emergency action plan detailing the protocols, responsibilities and actions required to be undertaken by the operating staff in times of emergencies
- c) Develop and assist in implementing water safety plans, particularly for minimizing, monitoring and managing waterborne disease outbreaks;

5. Energy Efficiency Program

To improve the energy efficiency in the water supply and wastewater collection and transmission systems the MC shall:

- a) Develop and implement a program for monitoring and increasing the electricity efficiency of pumping stations and treatment plants (the "Electricity Efficiency program").
- b) Prepare a plan for optimising the performance of sewage pumping stations to reduce surcharging of sewers and effect energy savings wherever possible;

6. Asset Management Program

To improve the Asset Management Program the MC shall:

- a) Develop and assist in implementing and maintaining a data base of major components of the Facilities and Infrastructure (the "Facilities and Infrastructure Data Base") as available at the Effective Date and set up program for updating the same as and any additions or rehabilitation or replacement of assets implemented;
- b) shall develop and implement a robust asset management program (the "Asset Management Program") for the Facilities and Infrastructure which shall include but not be limited to,
- c) a program for maintenance activities comprising of timely maintenance, rehabilitation and replacements required to maintain or improve the performance of various components of the Facilities and Infrastructure;

- i. a vehicle and equipment repair and maintenance record system;
- ii. full planning and scheduling of maintenance activities; and
- iii. schedule of implementation for the Maintenance Program.

7. Financial Management

- a) UWSCG is the process of improving the financial management and control for the Company to move to IFRS standards. The MC shall evaluate the existing management systems and the on-going improvements and design and implement a general ledger and cost accounting system, that addresses the UWSCG's internal needs for better financial information, analysis and decision making and is also compatible with Georgian and IFRS standards including ADB MFF's project financial management reporting requirements;
- b) Separate realistically the cost accounting of drinking water production and bulk supply (up to entrance of distribution reservoirs), distribution services, and wastewater services in all branches;
- c) Prepare annual and quarterly financial reports for the Company and for each of its branches.
- d) Suggest and assist in implementing effective and efficient financial control
- e) prepare and on approval from UWSCG and MRDI, shall assist in implementing a set of procurement protocols and guidelines (the "Company Procurement Guidelines") which shall include comprehensive procurement policies and procedures, including payment procedures.

8. Human Resources Planning

The MC shall prepare and submit a comprehensive plan with respect to the management, organization, remuneration and supervision of the Company Staff (the "Human Resources Plan"). The Plan shall include simple, easy to measure performance appraisal systems, rewarding and incentive schemes etc. In addition, the MC shall evaluate the availability of skilled qualified personnel in Georgia for meeting the growth needs of the company and shall develop a strategy for ensuring the availability of the human resources.

9. Management Information Systems

- a) Base Year Data Report: The MC shall prepare a Base Year Data Report (the "Base Year Data Report") which describes the operations and performance of the Company in the one year period immediately preceding the Starting Date of the Contract including, but not limited to, details of the operations and maintenance activities for the Facilities and Infrastructure, the billings, collections and customer service functions and the service levels and key performance indicators.
- b) Information Systems: UWSCG has been progressing with implementation of a comprehensive Enterprise Resources Program (ERP) covering all areas of management, operations and monitoring and the MC shall review the plans, scope and suggest improvements specifically in continuously monitoring the operating efficiency, financial outcomes and employee productivity in the Company.
- c) Geographic Information Systems: The MC will also review the current GIS being used by UWSCG and identify plans to integrate it with the MIS and roll it out across UWSCG towns.

10. Reporting

To improve operations management and administrative control the MC shall:

- a) Prepare and maintain comprehensive monthly records and reports for management control and regulatory reporting;
- b) Participate in Company Management Meetings at least twice per month, or as necessary, to review operations and financial performance and the forward plan for the upcoming period.
- c) Meet the Company Management Team on a quarterly basis, or as necessary, to review strategic and policy matters of operations and financial performance;
- d) Within sixty (60) days after the last business day of each Contract Year, prepare and submit a comprehensive report in English and Georgian that describes the activities of the MC in the previous Contract Year and its plan for the following Contract Year.
- e) In addition to any other reports required by the Contract, the MC shall, commencing forty five (45) days after the Effective Date, prepare and deliver to the Company within fifteen (15) days after the end of each month, either a monthly report, or at each third month a quarterly report, in English and Georgian which briefly summarises the activities of the MC in each of the activities mentioned above.

P. Resources and Inputs

An estimate of the minimum resources required has been made and is shown in the following table.

No.	Resource	Person Months
1	Team Leader - Water Operations Expert	24
2	Infrastructure Asset Management Expert	6
3	Institutional Change Manager	6
4	Utility Financial Analyst	6
5	Human Resources Manager	5
6	Customer Services Manager	6
7	Utility IT Systems Specialist	9
8	M&E Expert	6

The resource inputs shown above shall be minimum and the selected MC shall assess and propose additional resources if any required for achieving the objectives of the Contract. The support staff like interpretation from/to Georgian language and other professional support staff are not indicated above but shall be arranged by the MC at its own cost. The minimum qualifications of key staff are detailed below.

1. Team Leader – Water Operations Expert

Shall be a graduate engineer with at least 20 years of experience out of which at least 10 years shall be as an operational manager of a water utility providing services to at least 300,000 connections and having demonstrated experience in improving the operating efficiency of water services preferably in developing countries.

2. Infrastructure Asset Management Expert

Shall be a graduate engineer with at least 10 years of experience out of which at least 5 years shall be as Senior Asset Management Expert of a water utility providing services to at least 100,000 connections and having demonstrated experience in improving the operating efficiency of sewerage services preferably in developing countries.

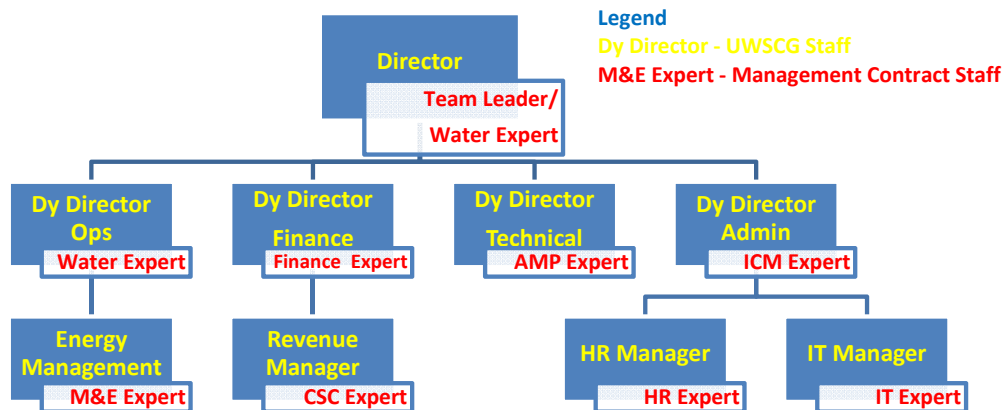
3. Institutional Change Manager

Shall be a management graduate with at least 10 years of experience out of which at least 5 years shall be as an Institutional Development Expert having demonstrated experience in developing and successfully implementing a change management program in at least three public utility organisations out of which one should be a water utility preferably in developing countries.

4. Utility Financial Specialist

Shall be a management graduate or a chartered accountant with at least 10 years of experience out of which at least 5 years shall be as Financial Manager in a water utility providing services to at least 300,000 connections and having demonstrated experience in implementing IFRS standards and also in preparing financial models as part of business planning preferably in European countries.

An indicative working relationship between the proposed specialists from MC and the existing senior management of UWSCG is depicted in the following diagram.



Note: the proposed Team Leader would have a dual role as the water supply expert and would work at two levels i.e. with the Director for overall reporting and with the Deputy Director Operations for inputs on water supply operations.

Q. Obligations of UWSCG

The UWSCG's obligations shall include the following:

- Provide Contract Management Services for ensuring timely approvals which are not unreasonably withheld;
- Identify and empower shadow managers in each of the key management area and assign with the responsibility to work with the MC staff;
- Implement the operational and organisational improvements as proposed by the MC with UWSCG's prior approval

- d. Provide dedicated office space for the MC staff including communication facilities
- e. Provide all data, information, maps, reports etc. on the water and wastewater services including complete access to all service areas, infrastructure, offices to the MC Staff for enabling study and investigation
- f. Process the certified payments by the MC and organise for release of payments
- g. Assist MC in procuring any permits, licenses and approval if necessary from any Georgian Authorities for MC to provide the required services under the Contract

R. Remuneration to Management Contractor

The Remuneration to MC comprises of a fixed fee and a performance fee for achieving the contract deliverables and a terminal bonus for achieving Key Performance Indicators .

1. Fixed and Performance Fees

The fixed fee shall be 85% of the total agreed Remuneration and is released in equal instalments at quarterly intervals during the entire Term of Contract.

The performance fee shall be 15% of the agreed total Remuneration and shall be released in three instalments of 5% each at the end of 12th month, 24th month and 36th month and shall be paid on delivery acceptance of the outputs detailed in Appendix 1 provided at the end of this document.

2. Performance Review

The International Independent Engineer and the Transaction Advisor will advise UWSCG on the MC having achieved its targets.

VII. APPENDIX 1: KEY CONTRACT DELIVERABLES

Service Description	6 months	12 months	24 months	36 months
Prepare Operating Performance Report (OPR)	Submit Base Year Data Report not later than 90 days after Effective Date	Submit OPR for the period ending 12 months from Effective Date	Submit OPR for the period ending 24 months from Effective Date	Report on Working Ratio and Employee Productivity
Prepare Institutional Development Plan	Submit report on strategic options for institutional development not later than 180 days after Effective Date	Complete Submit the Institutional Development Plan	Assist in Implementation	Submit evaluation report on the results of the Plan
Prepare and implement Annual Operating Plan	Submit plan not later than 180 days from the Effective Date	Report on the performance of the implementation of Plan	Submit next annual operating plan not later than 90 days prior to end of previous plan Report on the performance of the implementation of Plan Training	Submit next annual plan not later than 90 days prior to end of previous plan Report on the performance of the implementation of Plan Training
Prepare and implement Asset Management Program	Submit plan not later than 180 days from the Effective Date	Assist in implementation of the Plan Training	Report on the performance of the implementation of Plan Training	Submit next 3 year plan not later than 90 days prior to end of previous plan
Prepare and implement Financial Management Plan	Submit plan not later than 90 days from the Effective Date	Complete Implementation Training	Report on the performance	Report on the performance
Prepare and implement Human Resources and Organisation Development Plan	Submit report not later than 180 days after Effective Date	Complete Implementation	Report on the performance	Report on the performance
Prepare and implement Standard Operating Procedures (SOPs)	Submit report not later than 180 days after Effective Date	Complete Implementation Training	Report on the performance Training	Report on the performance Training

Service Description	6 months	12 months	24 months	36 months
Prepare and implement Management Information Report including ERP	Submit report not later than 90 days after Effective Date	Complete Implementation Training	Report on the performance Training	Report on the performance

1. Outline Terms of Reference for the Detailed Engineering Consultants¹⁰

a. Overview

38. Georgia aims to improve the delivery of water supply and sanitation (WSS) services through effective implementation of legal, economic, and financial frameworks for local self-governance. The Asian Development Bank (ADB) interim operational strategy (2008 to 2009) for Georgia was developed in line with the government's agenda, and identified development of the country's municipal infrastructure as a key contributor to sustainable economic growth, with the crosscutting themes of governance, regional cooperation, and environmental sustainability. Consequently, ADB's support to the water supply and sanitation sectors has grown since 2008 through the municipal services development project.

39. The Government proposes to improve and expand WSS services across urban centers by leveraging donor and private sector funds, and has requested ADB to develop (i) an urban WSS sector strategy to assist it with planning long-term investments; (ii) a regulatory framework and establish urban WSS tariffs to improve service delivery and ensure sustainability of WSS services; and (iii) an investment program to be financed through a multi-tranche financing facility (MFF). To ensure adequate maintenance of WSS systems improved under the proposed investment program, the government requested ADB to develop a WSS utility management system. The system will assist staff of the United Water Supply Company of Georgia (UWSCG) plan improvements and maintain infrastructure created under the proposed investment program.

40. Georgia will initially finance the detailed design preparation for the Investment Program and will apply for retroactive financing as part of the ADB loan.

b. Sector Development Issues

41. **Access to services.** Water supply is largely based on groundwater sources, and abstraction levels are high. Nonrevenue water is estimated at 75% or higher due to ageing infrastructure, with no replacement or rehabilitation investments made since the systems were constructed. The systems were designed for high supply levels to consumers—for example, Tbilisi supplies water at 800 liters per capita per day—with no emphasis on water conservation. Sewer systems cover parts of large towns (>50,000 persons), but there is no sewage treatment. Large parts of the population depend on pit latrines or septic tanks. Sewage is discharged into water channels and rivers, which affects downstream drinking water quality. Investments were prioritized and made based on the urgency of the requirement; consequently, the impact was not necessarily tangible and investment sustainability was questionable. This also has health implications, especially for vulnerable groups such as children and women.

42. **Environmental management.** Four river basins (Alazani, Inguri, Kura and Rioni) are severely affected by direct sewage discharge from the towns. Lack of sewage treatment facilities, nonfunctional sewage treatment plants, and dilapidated sewer systems result in sewage percolation into the ground or direct discharge into surface water. Of particular importance is the sewage discharge into Kura River, which is an international waterway flowing into Azerbaijan from Georgia. Environmental management of the river through improved

¹⁰ This outline terms of reference was included in the request for proposal to appoint design consultants for completing detailed engineering designs for six Investment Program towns.

wastewater management in the riverside towns will specifically benefit downstream water abstraction and irrigation facilities.

43. **Institutional issues.** In 2009, the government undertook a reform path to correct institutional anomalies, and in June 2009, it consolidated 66 water companies in the country into three regional water companies—east, west, and Ajara (for the Autonomous Region). This decision was based on the recommendations of a United States Agency for International Development-assisted TA to improve the sector's efficiency. In June 2009, the government created the Water Supply Regional Development Agency (WSRDA) under the Ministry of Regional Development and Infrastructure (MRDI) to manage sector reforms and oversee the operations of the water companies. Subsequently, in February 2010, the WSRDA was merged with the east and west water companies to form the UWSCG. UWSCG is expected to cooperate closely with each regional governor's office, local government units, and the Municipal Development Fund (MDF) to develop the WSS sector.

44. **Sustainable financing.** Investments in the WSS sector started in 1996, with support from the World Bank. Investments are largely donor financed and approximately \$350 million has been invested to date. Funds were channeled through the MDF with onlending to local governments, except in Batumi where the German development cooperation through KfW is developing infrastructure directly through the local government. Cost recovery on investments is low, and billing to recover operational costs is lower than 50% in most towns. With the consolidation of water companies, the assets created through MDF and accrued liabilities by local governments are being transferred from local governments to the regional water companies.

45. **External assistance.** In addition to ADB, the World Bank, the United States Agency for International Development, the German development cooperation through KfW, the European Bank for Reconstruction and Development (EBRD), the Swedish International Development Cooperation Agency, and the Millennium Challenge Corporation have supported the government's initiative to improve water and sanitation in urban centers. Focused and large-scale investments in the sector were through: (i) the Millennium Challenge Corporation, EBRD, and the Swedish International Development Cooperation Agency in the cities of Kutaisi, Borjomi, Kobuleti, and Poti; and (ii) the German development cooperation through KfW in Batumi. Support was primarily based on requests from the government and focused on improving the local economy in the target cities. ADB and World Bank support through the MDF covers the entire country and is focused on improving priority infrastructure.

46. **Reform agenda.** While continuing to mobilize infrastructure investment in WSS services, the Government also undertook a reform path to set right institutional anomalies and establish a strong premise for improving service delivery. The government has articulated its reform agenda in its Water Supply and Wastewater Sector Development Policy¹¹. There is a clear emphasis on improving infrastructure and service quality; cost recovery, financial sustainability of UWSCG, and operational efficiencies; demand management through reduced water losses; service access to the poor and vulnerable; a legal and regulatory framework; and sector management through modern management systems—management information systems and geographical information systems.

47. **Ongoing efforts.** UWSCG is internally developing the consumer database and management information systems to improve revenue and expenditure management. ADB's

¹¹ Government of Georgia. 2009. *Water Supply and Wastewater Sector Development Policy*. Tbilisi (October draft).

support through the policy and advisory technical assistance (PATA) will help develop an urban WSS sector strategy and ensure that reforms address institutional, financial and environmental sustainability of services, and are oriented to meet the Government's long-term objective of improved WSS services across the country.¹² ADB is also assisting the Government in preparing the investment program to be financed through the MFF.¹³

c. Scope of Work

i. Background

48. The proposed Investment Program will specifically address (i) basic urban infrastructure and services management in the provincial capitals and secondary towns; (ii) institutional issues associated with basic urban services; (iii) capacity development of MRDI and UWSCG staff to deliver services efficiently; and (iv) improved financial management of institutions to facilitate efficient service delivery. Trunk infrastructure traversing the towns/cities will provide poor communities with access to basic services—potable water and safe sanitation. By developing institutionally and financially sustainable services, the proposed investment program will introduce good governance features that will have a trickle-down effect and support pro-poor growth. The Investment Program will be implemented in various tranches; each tranche containing technically feasible and economically viable subprojects developed by UWSCG and agreed with ADB.

49. The scope of work under the consultancy services is to (i) assess the technical, financial, economic, and environmental feasibility of subprojects; (ii) conduct surveys and investigations; (iii) develop hydraulic models; and (iv) prepare detailed designs, drawings, cost estimates, specifications, and bid documents for implementing water supply and sanitation schemes in the Investment Program financed by the MFF.

50. Initial tranches will comprise the following towns:

1. Package A: Towns include Mestia, Zugdidi, Anaklia, and Marneuli. Feasibility studies are currently being developed through an ADB technical assistance grant and will be made available to the consultants during the inception stage. The consultants are expected to undertake works identified in para 12 above, except feasibility studies.
2. Package B: Towns include Kutaisi and Poti. The consultants are expected to undertake all works identified in para 12 above.

ii. Outline Scope of Work

1.51. The Consultant should read the below tasks along with sector specific tasks. Feasibility studies will not be required for Package A towns. All tasks will apply to both Package A and B towns.

(i) Feasibility

- Study the development plans prepared by the UWSCG for each Package B town and assess the potential for development. This will include reviewing the available data,

¹² ADB. 2010. *PATA for Developing an Urban Water Supply and Sanitation Sector Strategy and Regulatory Framework for Georgia*. Manila.

¹³ ADB. 2010. *PPTA for Preparing a Multitranches Financing Facility for the Georgia Urban Services Improvement Investment Program*. Manila

maps, studies and other related documentation to have a better understanding of the water supply and sanitation systems before commencing field work.

- Estimate the current and projected population for the year 2040 taking into account census data, city development plans, and other economic and planning aspects influencing population growth.
- Study the existing water supply and sanitation systems in Package B towns to identify deficiencies or gaps in the availability and adequacy of infrastructure. This shall include technology aspects, supply versus demand, level of services, public aspirations, sustainability, optimization of resources, amount of non-revenue water, institutional constraints, etc.
- Agree on preliminary design criteria for preparing water supply and sanitation schemes with UWSCG in conformity with standards agreed with the UWSCG, and based on national and international standards. The overall objective of water supply and sanitation (WSS) services should be to ensure service regularity, coverage to all population, and ensure potable quality of water supplied and sewage treated to agreed standards.
- Based on the study and the assessment of existing water supply sources, determine the quantity of water required considering the water supply schemes presently being implemented or proposed to be implemented in Package B towns.
- For identified water supply sources, determine system requirement for headworks and raw water transmission. Identify water pipeline route, size and material.
- Based on water supply sources identified, determine appropriate water treatment technologies, and where large water treatment plants are required, identify land and ownership for resettlement planning.
- Review the need and extent of water distribution system rehabilitation and/or replacement, expansion to uncovered areas, and water supply approach to poor settlements. Water distribution planning should be based on tentative hydraulic zoning, which will be confirmed subsequently based on the hydraulic modeling exercise.¹⁴
- 100% metering of bulk water flow and domestic, commercial and industrial properties is envisaged. Consultants should plan for district metering zones using the approach, which would also assist in isolating zones to assess non-revenue water and rectify system.
- Review existing sewerage and sanitation arrangements, and determine the suitability of operating existing systems, specifically the sewage treatment plants. The Consultant should populate the usage of different night-soil disposal methods and assess the suitability of connecting to a sewer network based on population density, location of communities, and access to toilets by the poor.
- Assess existing quantities of sewage generated, estimate future quantities, and analyze options for sewage collection, treatment and disposal. The Consultant should evaluate the possibility of decentralized sewage treatment and disposal based on quality of influent sewage, sewage quantity, and easy availability of suitable sites for locating treatment plants.

¹⁴ Water distribution system will include network of water lines, appurtenances, storage reservoirs, and pumping stations.

- Review the need and extent of sewer system rehabilitation and/or replacement, expansion to uncovered areas, and approach to sewage disposal from poor settlements. Sewer network planning should be based on tentative hydraulic zoning, which will be confirmed subsequently based on the hydraulic modeling exercise.¹⁵
- Prepare initial environmental examinations (IEEs) or environmental impact assessments (EIAs) for each subproject and develop an environmental management plan (EMP). The environmental safeguard compliance planning will be based on the Investment Program's Environmental Assessment and Review Framework.
- Prepare resettlement plans for each subproject based on the Investment Program's Resettlement Framework.
- Prepare subproject cost estimates to include: (i) infrastructure capital and operation and maintenance (O&M) costs for identified capital improvement (including replacement and expansion) and rehabilitation proposals; (ii) EMP costs; and (iii) resettlement costs. The infrastructure capital cost estimates should be based on the current market prices and should include road restoration charges wherever necessary.
- Prepare indicative contract packages and include, where possible, water and sewerage systems. Also indicate in the contract packages, system features and procurement method.
- Develop base maps and network overlays to indicate existing and proposed WSS systems. Also develop bulk facility layouts based on land cadastral maps to define jurisdiction of plants, reservoirs and pumping stations.
- Develop annual cash flows for following 5 years to include revenue and expenditure estimates. Revenue estimates should be based on existing and proposed tariffs, other revenue sources of the UWSCG, customer base, and collection efficiency, etc. Expenditure estimates should include staff and establishment costs, electricity, chemicals and consumables, debt servicing, etc.
- Prepare financial and economic analyses including a financial internal rate of return and an economic rate of return for each subproject.

(i) Surveys and Investigations

- Conduct necessary field tests and collect all data required for preparing detailed designs. All necessary instruments to carry out the study shall be arranged and operated by the Consultant at its own cost.
- Verify all details of each proposed subproject, the physical and site conditions, the execution methodology, etc. All data utilized in preparing the detailed design shall be presented indicating the source of the data and also the basis of assumptions, if any.
- Each service center shall indicate the subproject sites and their available data. The Consultant shall be responsible for verifying these data. The Consultants should verify the quality of available data and confirm whether data is reliable and scientifically derived, and whether it is suitable for detailed engineering designs.

¹⁵ Water distribution system will include network of water lines, appurtenances, storage reservoirs, and pumping stations.

- Develop base maps and detailed WSS network layout based on pipeline corridor and condition surveys. A GIS-based WSS utility management system is currently being developed through ADB TA grants. Base maps pipeline corridor and condition details should be available for Package A towns. Consultants will use the outputs to conduct hydraulic modeling and designing WSS systems.
- Conduct detailed total station surveys, as needed, for subproject areas to facilitate contour development, and preparation of a bulk facility layout plan along with reduced levels based on permanent benchmarks.
- Conduct soil tests according to approved standards in consultation with UWSCG to determine design parameters. At locations proposed for important installations like pump houses, reservoirs, etc., recommendations from a Geotechnical Specialist should be furnished in the soil report and should cover all design aspects.
- Conduct hydrogeological tests to determine ground water table profile and abstraction rates. The tests should be carried out for ground water sources and at location of bulk facilities – treatment plant, reservoirs, etc. – to support structural designs including foundations. The tests should be accompanied by a recommendation from a Hydrogeologist.
- Conduct a survey of other service utilities including but not limited to electricity, telecom, gas, etc. to determine shifting of utilities and associated costs in relation to construction of the water supply and sewerage system.

(i) Detailed Designs, Cost Estimates, Drawings and Specifications

- Prepare preliminary and detailed engineering designs, rate analysis, drawings, cost estimates, and bills of quantities for water supply and sanitation subprojects based on surveys, investigations and feasibility studies.
- Develop appropriate design approaches and confirm standards with the UWSCG, to be adopted for the Investment Program and based on international and national design standards.
- The specifications developed should meet requirements for international competitive bidding.
- Prepare land plan schedules indicating the locations of underground and overhead tanks as well as pumphouses with cadastral details to facilitate land acquisition. The Consultant shall select lands belonging to the service center or other government land to the extent possible.
- The drawings and designs shall include a general arrangement drawing and detailed drawings of all components in sizes A0, A1, or A3. All drawings shall be generated using the latest AutoCAD version.
- All plans, longitudinal sections, and cross sections should be submitted for all alignments in the subproject. Plans shall be plotted at 1:1,000 scale; longitudinal sections shall be plotted at 1:1,000 horizontal and 1:100 vertical scales; and cross sections shall be plotted at 1:200 horizontal and 1:100 vertical scales.
- The Consultant shall develop detailed rate analysis for every item in the bill of quantities. Market rates should be adopted and derivation of rates accurately described. Only approved rates should be used to estimate costs.

- Prepare a subproject implementation schedule for execution.

(i) Bid Process Management

- Prepare prequalification documents based on ADB standard bidding documents (SBDs) for proposed subprojects and assist the UWSCG invite statement of qualifications from bidders.
- Assist the UWSCG evaluate the submissions and shortlist contractors for bidding.
- Prepare international competitive bidding (ICB) and national competitive bidding (NCB) documents based on the subproject requirement, and assist UWSCG in inviting bids from short-listed contractors.
- Assist the UWSCG in pre-bid conferences.
- Assist UWSCG in bid evaluation and prepare bid evaluation reports for the Tender Committee and consequent review by ADB.
- Assist the UWSCG in contract negotiations and award to the lowest evaluated and substantively responsive bidder for each contract.

d. Sector Specific Scope of Work

i. Preparation of City Base Maps

52. Aerial photography and GIS-based maps are available for Investment Program towns. The Consultant should overlay all relevant information on these maps. UWSCG will provide the Consultant access to the photographs and maps. Data from corridor surveys for pipelines should be overlaid. Additional data to be incorporated will include prominent landmarks, name of localities, etc. Additional surveys shall be done in case of open areas, which are not encompassed or crossed by roads to mark open areas and boundaries of the towns. Approximate areas of Investment Program are listed below.¹⁶

No.	Name of City	Area (Km ²)
1.	Zugdidi	22
2.	Anaklia	10
3.	Mestia	5
4.	Marneuli	28
5.	Poti	65
6.	Kutaisi	55

53. The Consultant should note that GIS maps are proposed to be prepared by a separate agency for the Investment Program cities and will be made available to the Consultant once the maps are ready. The service centers and local consultants are also preparing some pipeline inventory maps for Investment Program towns. These would also be made available to the Consultant.

¹⁶ The area is indicative and the exact area to be covered will be finalized in consultation with UWSCG before commencing surveys.

ii. Topographical Surveys

54. The final scope of services will be discussed and finalized during contract negotiations with the successful Consultant. All topographical surveys have to be carried out with respect to the nearest benchmark approved by the UWSCG. The Consultant is expected to submit the list of surveys to be carried out along with the finalized scope of work to the UWSCG and the respective service center before proceeding with the surveys. The broad scope of work for topographical surveys is described below.

- Necessary survey work has to be carried out using total station equipment with its accessories. The UWSCG expects the Consultant to plan its survey work in such a way that it can start the designs as quickly as possible. The approach, methodology, and work plan should contain a detailed plan for conducting the required surveys. The survey work plan should be discussed and approved by the UWSCG during the preparation of the Inception Report.
- The surveys may be conducted by the Consultant either in house or with a survey firm which has at least 5 years of experience in doing similar type of work. The UWSCG should be kept informed about the use of survey firms and the progress of surveys.
- Survey delays would be attributable to the Consultant unless local circumstances hinder the survey progress in the field. These should be stated in writing.

(i) Pipeline Corridor and Asset Condition Survey

55. Indicative guidelines for WSS pipeline corridor and asset condition survey are detailed below:

- The surveys shall be carried out along all pipeline alignments and streets of Investment Program towns. Where data is provided by UWSCG from the ADB TA project, such surveys will not be required. The surveys shall capture existing topographical features like road boundary limits, types and width of the road, trees, storm water drains beside the roads, telephone poles, power poles, huts, bus stops, existing water lines, and related features such as valves, air valves, wells, pumps, intake points and all man-made features within the survey limit.
- If the pipe alignment runs along open areas, the survey shall be conducted for a 15m. width. The levels shall be taken at every 50m for plotting longitudinal sections. Cross sections should be taken at every 50m interval.
- A full inventory map of the existing water supply and sewerage system needs to be prepared. This shall include intake works, treatment plants, pumphouses, wells, valves, etc. Separate maps have to be provided for existing water supply facilities and underground sewer systems.

56. Water supply asset inventory will cover:

- Town Grid: Pipe alignment, pipe age, pipe material, pipe diameter, pipe depth, manholes (visible and under asphalt), valves, pressure reducers, pumps and pumping stations, chambers, gates, switches, hydrants, anomalies (e.g. bad gates, blocked elements), unregistered/illegal connections not mapped, and borehole supplying districts.

- Major Feed lines: Pipe alignment, pipe age, pipe material, pipe diameter, pipe depth, and asset condition
- Intake and treatment facilities: Coordinates, location, and dimensions.

57. Sewerage asset inventory will cover:

- Town Grid: Pipe alignment, pipe age, pipe material, pipe diameter, pipe depth, manholes (visible and under asphalt), invert levels at manholes, and unregistered/illegal connections not mapped.
- Trunk sewers to treatment plant: Pipe alignment, pipe age, pipe material, pipe diameter, pipe depth, and asset condition
- Treatment facilities: Coordinates, location, and dimensions.

(i) Area Surveys

58. In addition, the Consultant shall be required to conduct surveys for areas where the main lines are in open areas and the countryside for new and existing treatment plants. The scope of works is described below.

59. Detailed plans including the footprints of the buildings and any other structures shall be surveyed and plotted on a scale of 1:500. The survey shall also pick up all other visible features within the earmarked area such as trees, poles, manholes, etc. The survey shall also include leveling, cross sections, and longitudinal sections of alignments at regular intervals as necessary to generate a contour map of the area with 0.5m contour intervals.

60. Area surveys shall be carried out for proposed and existing location of water and sewage treatment plants on a grid of 10m x 10m. All existing features should be covered such as building areas, pumphouses, clear water tanks, channels, etc. with levels and measurements.

iii. Geo-technical Investigation

61. The Consultant should determine the actual type and extent of geotechnical investigations after discussion with UWSGC. The investigations list should include justifications and submitted to UWSCG for approval. The general types of Investigation required are listed below:

- Trail pits at different depths
- Auger boring
- Bore holes
- Laboratory Tests

iv. Hydrogeological Investigations

62. The following is a minimum amount of work the Consultant should conduct to investigate site conditions.

- Prepare a site and project description.

- Prepare a map showing the regional setting.
- Conduct field Investigations that include test borings to determine the subsurface geology.
- Analyze data to determine the impact on nearby surface water and groundwater resources.
- Evaluate the water quality suitability and evaluate the chemical quality of water in the excavation.
- The investigation report should document existing site conditions and determine if the site is suitable for project works.

v. Hydraulic Modeling

63. The Consultant will prepare a hydraulic model for each system in order to gain a full understanding of its hydraulic behavior. The model shall be a tool to plan infrastructure improvements, develop operational maintenance strategies, and manage the system proactively. The Consultant's model will include:

- Model building
- Field testing
- Model loading and allocation
- Model calibration
- Network analysis
- Maintenance

vi. Water Supply

64. The Consultant shall prepare technical and economical solutions for the overall improvement of the water supply systems in Investment Program towns. The solutions shall meet the present demand as well as future demand in 2040 in a cost effective and sustainable manner. Outline scope of work is detailed in Section III-B. The following are indicative activities for water supply design and estimates..

(i) Water Source and Demand Estimates

- Conduct technical, economic, financial, and environmental studies of water sources – surface and ground – in Investment Program towns and determine options to supply each town to meet long-term water demand for 2040.
- Conduct hydro-geological studies and investigations to ascertain groundwater potential and determine the safe aquifer yield till 2040 for tranche 1 towns.
- Finalize water sources and develop designs, drawings, cost estimates and specifications for headworks and raw water transmission system.

(ii) Water Treatment

- Conduct water quality surveys at the source and consumer points (number and location to be agreed with UWSCG) to determine type of treatment required.

- Analyze options for selecting the most technically feasible and economically viable solution. The analysis of options would delineate different alternatives and include a simulation analysis based on life cycle costs for implementation.
- Conduct a system diagnosis for existing water treatment plants, and develop preliminary technical designs and drawings to upgrade the water treatment plants.
- Carry out required surveys and investigations – topography, soil, hydrogeological, etc.
- Develop process design and design criteria with flow sheets, works layout, hydraulic level and diagram, and piping as well as fully automated arrangements and SCADA system for executing turnkey contracts.
- Prepare general arrangement drawings for water treatment plants including unit sizes, level of structures, equipment disposition with automation and layout plans, structural, masonry, and architectural drawings with site plan as well as civil and ancillary works.

(iii) Water Distribution Network

- Review existing water supply distribution network maps prepared by UWSCG or other consultants, supplement as necessary, and conduct the location and condition surveys.
- Prepare GIS-based pipeline network maps for the towns on the base maps supplied by the UWSCG. If the GIS base maps are not supplied by the UWSCG, the Consultant should prepare base maps and pipeline condition and network maps.
- Undertake computer analysis and hydraulic modeling of the existing water supply networks. Identify any existing hydraulic constraints and incorporate rectifications, if necessary, in the proposed subproject.
- Conduct a power and water audit of the water supply system. Incorporate efficiency improvements in the subproject design where appropriate.
- Provide workable solutions for reducing non-revenue water by introducing leakage control, metering, measurement, monitoring, improved maintenance practices, pressure control, etc. Incorporate detailed proposals and action plans for conducting regular water audits and leak detection studies.
- Prepare detailed estimates for fixing water meters for each household, institutional, commercial, and industrial connection to achieve 100% metering.
- Prepare a master plan for water supply system in the Investment Program towns from which packages for detailed engineering design and estimation should be derived.

vii. Sewerage and Sanitation

65. The Consultant shall prepare technical and economical solutions for the overall improvement of the sewerage systems in Investment Program towns. The solutions shall meet the present demand as well as future demand in 2040 in a cost effective and sustainable manner. The following are indicative activities for sewerage system design and estimates.

(i) Sewage Treatment Plants

- Conduct wastewater sampling and analysis, to determine the quality and volume of sewage presently discharged.
- Prepare scope for abandonment and/or demolition of old and dilapidated facilities and prepare plans for their replacement.
- Conduct a sampling and analysis program of the receiving water body where sewage treatment facilities are to be located. Propose suitable technology for treating sewage based on principles of cost effectiveness, reliability, and compliance with international effluent discharge standards (standards to be agreed with UWSCG).
- Carry out required surveys and investigations – topography, soil, hydrogeological, etc.
- Develop process design and design criteria with flow sheets, works layout, hydraulic level and diagram, and piping as well as fully automated arrangements.

(ii) Sewer Network

- Identify major wastewater producers and pollution sources that may require additional treatment prior to discharge to the public sewers. Recommend appropriate actions.
- Evaluate performance of pumping stations by conducting a power audit and the impact on energy efficiency. Develop suitable solutions to collect and discharge sewage based on hydraulic modeling and zones.
- Prepare a master plan for sewerage system in the Investment Program towns from which packages for detailed engineering design and estimation should be derived.

viii. Environmental Assessment

66. The Consultants will update existing environmental assessments in the detailed design stage, and will prepare IEEs and/or EIAs for new subprojects, where required, to comply with the Investment Program's environmental assessment and review framework. Specific tasks include:

- Conduct environmental quality monitoring (like ambient air and noise, as well as water quality).
- Update IEEs/EIAs and EMPs for Package A towns during the detailed design stage.
- Ensure that all new subprojects follow the criteria in the environmental subproject selection guidelines. Classify all new subprojects in accordance with ADB's classification system by conducting Rapid Environmental Assessment.
- Conduct EIAs for Category A and IEE for Category B subprojects. Approval of the IEE/EIAs is a condition precedent for contract award. IEEs/EIAs will be consistent with Government and ADB's Environment Policy and the Project.
- Conduct public consultations and disclosures during the IEE or EIA processes and incorporate comments in the IEE and EIA reports.

- Incorporate mitigation measures in subproject design. Appropriate mitigation measures will form part of contract documents to be implemented by contractors and UWSCG.

ix. Resettlement Planning

67. The Consultant will review and/or update any existing resettlement plans in the detailed design stage, and will prepare resettlement plans for new subprojects, where required to comply with the Investment Program's resettlement framework. Assess the impact of the scheme and determine necessary resettlement needs considering various options for avoiding or minimizing such needs. Estimate such costs of compensation including land costs. Prepare documents for acquiring land and involuntary resettlement as per the resettlement framework.

e. Deliverables

i. Detailed Design Reports

68. The Consultant shall prepare the Detailed Design Reports covering each contract package. The Detailed Design Report shall follow the requirements of the UWSCG and contain the following items.

- Background of the subproject and introduction.
- Details of subprojects taken up under the program and the packages.
- Design calculations with full back-up data.
- Maps, drawings, and database generated. The maps and drawings shall be printed on a suitable scale.
- The results of the hydraulic modeling after surveys, investigations, and analysis of alternatives.
- Final design drawings for plans and profiles showing location and size of all major features.
- Final design and drawings of the local distribution improvements integrated with new networks in map format (including digital form in GIS platform) showing all design features agreed by the UWSCG. The distribution system design shall incorporate continuous supply in different zones as per topographical and other technical requirements to be executed in phases progressively during the construction periods.

ii. Bids

69. The Consultant shall prepare bid documents for implementing each subproject in the format prescribed by the ADB. Bid documents for each package should contain full specifications and designs, drawings of the items included, conditions of contract, schedule of supplementary information to be furnished by bidders, detailed invitation for bids. The bid documents, cost estimates and schedules shall be prepared in sets according to the different packages approved by the UWSCG.

iii. Schedule

70. The sets of design and drawings, bid documents and other reports shall be furnished in preliminary draft form and in five copies. The Consultant shall incorporate UWSCG comments and furnish copies of the final version within 15 days.

No.	Schedule	Duration (Days)
1	Inception report with a detailed Work Plan	30
2	Monthly Reports	60, 90, 120, 150, 180
3	Interim Reports	As per Work Plan in Inception Report
4	Detailed Design Reports and Estimates	As per Work Plan in Inception Report
5	Procurement Documents	As per Work Plan in Inception Report
6	Master Plans for WSS Systems	As per Work Plan in Inception Report
7	Project Completion Report	210

iv. Workshops

1.71. In addition to the deliverables mentioned above, the Consultant shall make several PowerPoint presentations at different stages to the UWSCG. The costs for conducting these workshops shall be included in the contract. The Consultant shall make presentations on the progress of work showing milestones, targets, photographs, etc. during the following deliverable stages:

1. Inception Report
2. Interim Reports
3. Master Plans
4. Final Report

f. Expertise

72. The duration of the consultancy is 210 days beginning in September 2010. It will require approximately 149 person months including 36 international person months, 113 national person months, and approximately 108 national person-months for support staff. An engineering consulting firm experienced in urban water supply and sanitation system design is required to conduct the studies, investigations, and designs described above. While engineering skills and experience are required as the backbone of this work, a general understanding of the present system with institutional arrangements to carry out to the works is also essential.

73. The Consultant shall retain key personnel until the end of the consultancy period without replacement. Where replacements become unavoidable, they shall be made with persons of equivalent or higher qualifications and experience than those to be replaced with the approval of the UWSCG.

g. Client Support

74. To enable the Consultant to carry out the work, the UWSCG will provide all available data, reports, and maps of existing systems. Additional data, if any required, should be collected by the Consultant from the UWSCG and the service centers.

- UWSCG will assist in coordinating with relevant government agencies in obtaining required approvals and authorizations.
- No office accommodation will be provided by the UWSCG for the consultancy. The Consultant shall make its own arrangements for office accommodation, transportation, communication, and equipment for the consultancy.
- The Consultant will establish two project offices (i) in Kutaisi to handle works in Kutaisi and Marneuli; and (ii) in Zugdidi to handle works in Zugdidi, Poti, Anaklia and Mestia.
- The Consultant should note that it is required to provide housing for its staff and that no assistance in this connection will be provided by UWSCG.
- The Consultant will arrange its own computer software and hardware.

h. Attachments

75. The following attachments provide additional information to the SOW:

- Attachment 1: Indicative works in Investment Program towns
- Attachment 2: Staff Requirement

Attachment 1: Indicative Works in Investment Program Towns

Sector	Zugdidi	Anaklia	Poti	Mestia	Kutaisi	Marneuli
Water Supply						
- Head works	X	-	X	X	X	X
- Transmission	X	X	X	X	X	X
- Treatment	X	-	X	X	X	X
- Reservoirs	X	X	-	X	X	X
- Distribution Network	X	X	-	X	X	X
- Metering	X	X	-	X	X	X
Sewerage and Sanitation						
- Sewer Network	X	X	X	X	X	X
- Pumping	X	X	X	X	X	X
- Outfall	X	X	X	X	X	X
- Treatment Plant	X	X	X	X	X	X
Vehicles and Equipment	X	X	X	X	X	X

Attachment 2: Staff Requirement and Responsibilities
International Staff

No.	Position	Months	Preferred Minimum Qualifications and Experience	General Roles and Responsibilities
1	Team Leader / Project Management Specialist	7	Post graduate degree in civil, public health, or environmental engineering. Minimum 15 years experience in design and project management on similar projects. The TL should have experience on projects financed by multi-lateral and international agencies.	Coordinate and manage Consultant's team. Ensure that the works are designed in accordance to prescribed standards. Liaise with UWSCG and service centers. Responsible surveys and investigations for all components. Responsible for delivery of the outputs as per TOR. Guide and review designs and cost estimates. Submit monthly and completion reports. Assist client in procurement procedures.
2	Water Quality and Laboratory Specialist	2	Postgraduate degree in chemistry, microbiology or related field. Minimum 10 years of relevant experience	Supervise collection and analysis of water and wastewater samples. Recommend laboratory equipment for service centers.
3	Senior Water Supply Engineer	7	Bachelor's degree in civil public health, or environmental engineering, or equivalent. Minimum 15 years experience in design of water supply systems including treatment plants.	Supervise the preparation of designs, estimates, specifications, and bid documents for all water supply subprojects.
4	Senior Sanitation Engineer	7	Bachelor's degree in civil public health, or environmental engineering, or equivalent. Minimum 15 years experience in design of and sanitation systems including treatment plants.	Supervise the preparation of designs, estimates, specifications, and bid documents for all sanitation subprojects.
5	Economist	2	Postgraduate degree in economics. Minimum 10 years experience in evaluation of urban infrastructure projects	Analyze economic aspects of the tranche 1 subprojects. Prepare economic and financial analysis of water supply and sanitation subprojects.
6	Financial Analyst	2	Postgraduate degree in economics or finance. Minimum 10 years experience in preparing financial analyses of urban infrastructure.	Determine rates of return for water supply and sanitation projects. Provide advice for water rates.
7	Procurement Specialist	5	Bachelor's degree in relevant discipline. Minimum 10 years experience in procurement related works, particularly in externally aided projects.	Prepare prequalification and bidding documents. Advise UWSCG on all procurement issues. Assist in preparing bid evaluation formats and bid evaluations. Build the procurement capacity in the UWSCG.
8	Environmental Specialist	2	Postgraduate degree in related field. Minimum 10 years experience in Environmental Impact Assessment assignments.	Prepare environmental and social impact reports. Prepare mitigation measures.
9	Resettlement Specialist	2	Postgraduate degree. Minimum 5 years experience in similar works.	Assist UWSCG prepare resettlement plans for subprojects as needed in accordance to government and ADB guidelines. Assist in identifying land acquisition and resettlement requirements.
Total for International Staff		36		

Attachment 2: Staff Requirement and Responsibilities
National Staff

No.	Position	Months	Preferred Minimum Qualifications and Experience	General Roles and Responsibilities
1	Mechanical Engineer	4	Degree in Mechanical Engineering. Minimum 10 years experience in designing detailed engineering and installation of mechanical equipment related mainly to water supply and sanitation works.	Design of all mechanical systems for various components. Prepare mechanical specifications.
2	Electrical Engineer	4	Bachelor's degree in electrical engineering. Minimum 10 years experience in designing, detailed engineering, and installation of electrical equipment and electrification works related mainly to water supply and sanitation works.	Design of all electrical systems for various components. Prepare electrical specifications. Assist client in documentation necessary for obtaining permits.
3	Water Supply Engineers	7	<u>For all three positions:</u> Bachelor's degree in civil public health, or environmental engineering, or equivalent. Minimum 10 years experience in design of water supply systems including treatment plants.	Prepare designs, estimates, specifications, and bid documents for all water supply subprojects.
4	Sanitation Engineers	7	<u>For all three positions:</u> Bachelor's degree in civil public health, or environmental engineering, or equivalent. Minimum 10 years experience in design of sanitation systems including treatment plants.	Prepare designs, estimates, specifications, and bid documents for all sanitation subprojects.
5	Structural Engineer	3	Postgraduate degree in structural engineering. Minimum 10 years experience in design of structures mainly related to water supply and sanitation structures.	Prepare structural designs and drawings of all structural components. Prepare specifications for structural works.
6	Assistant Water Supply Engineers	7	<u>For all three positions:</u> Bachelor's degree in civil, public health, or environmental engineering or equivalent. Minimum 5 years experience in design of water supply systems including treatment plants.	Assist water supply engineers prepare designs, cost estimates, and bid documents for water supply components.
7	Assistant Sanitation Engineers	7	<u>For all three positions:</u> Bachelor's degree in civil, public health, or environmental engineering or equivalent. Minimum 5 years experience in design of sanitation systems including treatment plants.	Assist sanitation engineers prepare designs, cost estimates, and bid documents for sanitation components.
8	Geotechnical Engineer	4	Postgraduate degree in foundation engineering, geology or related field. Minimum 5 years of relevant experience.	Supervise geotechnical investigations including the collection and analysis of soil samples.
9	Quantity Surveyors	7	<u>For both positions.</u> A qualification in surveying. Minimum 5 years experience in similar survey works.	Assist design team in preparing quantities and price estimates.
Total for National Staff		113		

2. Outline Terms of Reference for Construction Supervision Consultant

a. Introduction

76. Georgia (hereinafter referred to as "the Borrower") has received a tranche 1 loan from the Asian Development Bank (hereinafter referred to as "the Bank" or "ADB") for Urban Services Improvement Investment Program to be implemented by the United Water Supply Company of Georgia (UWSCG). UWSCG was established following an order No. 11/13 of the Ministry of Economic Development of Georgia under Georgian Commercial Law on 14 January 2010, by merging the two regional water companies West Water LLC and East Water LLC. With the merger, the UWSCG took over the assets of its predecessors. UWSCG is 100% state-owned, where the share is held by the Ministry of Infrastructure and Regional Development of Georgia. Amongst the water-related competencies of the Ministry are: coordination and support for the development of water systems in Georgia; coordination of regional programs funded by national and international sources and oversight of their implementation; support and coordination of international/trans-boundary cooperation of Georgian regions and local self-governance units.

77. It is intended that part of the proceeds of the ADB loan mentioned above will be applied towards the cost of consulting services for Construction and Rehabilitation Supervision of the following contracts:

- (i) Mestia Surface water intake and transmission;
- (ii) Mestia Water treatment Plant and Reservoir;
- (iii) Mestia Water Supply and Sewerage Network;
- (iv) Anaklia Sewage Treatment Plant.
- (v) Anaklia Water Supply and Sewerage Network
- (vi) Anaklia Ground Water Intake, Transmission, Treatment, Reservoirs and Pumping Station;
- (vii) Poti Headworks, Transmission Main, (Nabada) Reservoirs and Pumping Station;
- (viii) Kutaisi Water Supply; and
- (ix) Ureki Water Supply, Sewerage and Sewage Treatment Plant

b. Background

78. The Georgia Urban Services Improvement Investment Program (USIIP) will improve the health of residents in the secondary towns of Anaklia, Zugdidi, Kutaisi, Marneuli, Mestia, and Poti. Georgia is currently discussing with ADB the inclusion of Ureki into the list of Investment Program towns. The outcome of the Investment Program is improved water supply and sanitation services in these secondary towns. The outputs comprise:

- **Component 1: Infrastructure Improvement.** The first component will include infrastructure investments to rehabilitate, improve and expand water supply and sanitation facilities in approximately 7 secondary towns, and provision of vehicles and equipment for system operation and maintenance for these towns
- **Component 2: Institutional Effectiveness.** The second component will provide capacity development for the Ministry of Environmental Protection and Natural Resources (MEPNR), Georgia National Energy and Water Supply Regulating Commission (GNEWSRC), and the UWSCG. This includes providing management contractor support to improve management and technical capabilities of UWSCG. This

component will also include skill development of graduating students from the Georgia Technical University through a water management program in partnership with UWSCG.

- **Component 3: Investment Project Implementation.** The third component will provide project implementation support comprising detailed engineering, construction supervision, safeguards compliance, preparing subsequent projects of the Investment Program and a public awareness program on health, hygiene, sanitation and water conservation.

79. The Construction Supervision Consultant (the Consultant) will supervise construction of water and wastewater facilities under Component 1 in the towns of Anaklia, Mestia, Kutaisi, Poti and Ureki. The construction works shall include: headworks (river water intakes, wellfields, etc.); water treatment plants; water transmission pipelines and appurtenant structures; storage reservoirs; water supply networks; sewerage systems; and sewage treatment plants. The works to be supervised will include house connections. It is envisaged that separate contractors will be appointed to undertake the construction works for each town, but it is possible that a contractor may obtain two or more contracts.

80. The Consultant will be responsible for:

- a. Supervision of all construction works;
- b. Design review of water treatment plant, reservoirs and wastewater treatment plant being implemented under Design and Build contracts;
- c. Providing on-the-job training to counterpart UWSCG engineers seconded to the consultants team; and
- d. Providing assistance for commissioning and handing over of works to UWSCG

c. Objectives

81. The objective of the Program is to improve water supply and sewerage networks in Georgia. This consulting service for construction supervision is required to assist United Water Supply Company of Georgia (UWSCG, the Employer) to supervise and control construction of all below listed civil works (with mechanical and electrical components) in the five towns of Anaklia, Mestia, Kutaisi, Poti and Ureki.

d. **Project Description**

Table 1: Project Description

Package Name	Description of Works	Commence-ment Date	Completion Time
Mestia			
Surface water intake and transmission pipeline and Reservoir;	The main works will comprise the construction of a Tyrolean Weir in Mestiachala River, the laying of a transmission line DCI, DN 300 of about 10 km and the construction of a 2,000 m ³ concrete reservoir.	Oct 10, 2011	18
Water Supply and Sewerage Network;	The Works include the construction of the water supply and wastewater network for Mestia. The main works will comprise the laying of 24 km water supply pipelines, 28,5 km sewage pipelines DN 200 to 400, 9 km house connections, 720 sewage manholes, the construction of two wastewater pumping stations and one drinking water pumping station.	Oct 31, 2011	24
Water Treatment Plant, Reservoir and Transmission Pipelines	A water treatment plant to reduce the turbidity of the raw water of Mestiachala River will be constructed. This tender will complete the water supply network by the construction of a high level reservoir of 2,000 m ³ volume, the laying of transmission mains, the extension of the existing reservoir at Lanchvali by 1,000 m ³ .	Jul 2012	24
Anaklia			
Water Supply and Sewerage Network;	The Works include the construction of the water supply and wastewater network for Anaklia and Ganmukhuri. The main works will comprise the laying of 43 km water supply pipelines, 40 km gravity sewage pipelines DN 200 - 500, the construction of 30 wastewater pumping stations, 7 km wastewater pressure pipelines DA 100 to 400 and important water drainage measures.	Jan 2012	18
Sewage Treatment Plant	A wastewater treatment plant for 25,000 residents and tourists will be constructed in Anaklia. The wastewater treatment plant will have mechanical and biological treatment.	Jul 2012	24
Ground water wells, water pumping stations, transmission pipelines, Reservoirs treatment plant	The headworks will comprise the drilling of about 8 wells for the water supply of Anaklia. In addition, pumping stations and transmission lines to Anaklia will be part of the tender. Treatment may be limited to disinfection depending on the results of the current hydrogeological investigations.	Jul 2012	24
Poti			
Poti Headworks, Transmission Main, Nabada reservoirs and pumping station	The existing transmission main to Poti is being rehabilitated. Also this tender will comprise the construction of new reservoirs, a pumping station, a chlorination facility and administration building on the existing Nabada site owned by UWSCG	Jul 2012	24

Package Name	Description of Works	Commence- ment Date	Completion Time
Kutaisi			
Kutaisi Water Supply	The tender will comprise rehabilitation of 45 km. water distribution lines, rehabilitation of 3 reservoirs with the total capacity of 15,000 m ³ , rehabilitation of pumping stations and installation of water meters for 42,000 customers	Jul 2012	24
Ureki			
Ureki Water supply and Sewerage Networks	The tender will comprise construction of 30 km water supply and 35 km sewerage system, transmission line and reservoirs. The accurate figures for the length of networks and transmission line as well as the capacity of reservoir will be determined after the detailed design is ready.	Feb 2013	24
Ureki Wastewater Treatment Plant	A wastewater treatment plant for 25,000 residents and tourists will be constructed in Ureki. The wastewater treatment plant will have mechanical and biological treatment.	Feb 2013	24

e. Scope of Work

82. The Program will improve water systems in the above mentioned towns. The contracts to be supervised are given in the table above. The Consultant is expected to assist UWSCG supervise the civil work contract packages as planned.

83. A Consultant Team will be engaged to perform as the Engineer for all the above contracts, which will be under FIDIC MDB Harmonized Edition Conditions of Contract and Plant – Design Supply and Install Conditions of Contract (based on the Model Form of International Contract for Process Plant Construction published by the Engineering Advancement Association of Japan (ENAA). The Consultant will administer the construction contracts and ensure that the works are constructed in accordance with the provisions of the construction contracts, as stated in the Conditions of Contract, Drawings, Specifications and Bills of Quantities.

84. The Consultant's representatives will be full-time professional engineers in the Project area under each contract and will make all necessary arrangements for quality control and implementation of the works.

85. The Consultant will carry out a critical review the detailed design prior to the commencement of works to identify defects or omissions that compromise on consistency of the design and completeness of works. This review will be carried out immediately after the services commence and will be completed within 4 weeks. On completion of the review, the Supervision Consultant will prepare a report, setting out all findings and recommendations for correcting any defects or omissions identified. Notwithstanding these, the Supervision Consultant will immediately inform the Employer of any defect or omission that may have a substantial impact on the Program at the time the defect or omission is uncovered. The Consultant will submit four copies of the review report to the employer.

86. The task of the Consultant will include but not be limited to:

- a. ensure that the construction methods as proposed by the contractor for carrying out the works are satisfactory in accordance with international best practice; checking of Contractor's setting out of the Works;
- b. Inspection of contractor's construction equipment; materials;
- c. Monitor safety of the works, property, personnel, and general public; monitoring the schedule of mitigation measures for adverse environmental impacts;
- d. Establish efficient procedures for verifying contractor performance and reporting progress and problems in a timely manner, including quality control reports, quantity survey records, requests for variation or change orders, contractor's claims and invoices;
- e. Agree measurements for works completed and in progress with the Contractor; check Contractor's interim and final valuations and prepare payment certificates;
- f. Develop and implement procedures for timely payments to the Contractors by the Employer and monitor for compliance;

- g. Regularly monitor physical and financial progress against the milestones as per the Contract so as to ensure completion of contract on time; maintain a daily diary of site activities including plant and labor records; hold weekly progress meetings with the Contractors to discuss progress and problems on the Contracts and take Minutes of Meetings
- h. attend third party inspections as necessary and provide certification on the quality of the supplies based on such inspections (Note: time inputs associated with this requirement are deemed to be included in Table 1, but associated expenses will be reimbursed at cost);
- i. assess Contractors' claims for time extension, variations, additional compensation etc and recommend appropriate decisions;
- j. check Contractors' design and drawings for Design and Build Contracts;
- k. undertake project performance monitoring and evaluation in accordance with the Program Framework and ADB's *Project Performance Management System (PPMS) Handbook* including the baseline data survey and the following annual survey and reporting up to project completion;
- l. ensure that the Contractors do not involve child labor for the execution of the civil works contracts in accordance with the provisions of the contract agreement;
- m. prepare and issue a monthly progress report for each Contract detailed quarterly reports giving physical and financial progress against approved Contract Programs and a detailed Project Completion Report;
- n. undertake all site testing of the Works and commissioning tests prior to issuance of a Taking Over certificate;
- o. review Contractors' submitted Operation Manuals; monitor preparation of and approve the "as built" drawings before submission to the Employer;
- p. review the Contractors' Environmental Management Plans (EMP), supervise and monitor the implementation of environmental mitigation measures required, in the event of occurrence of any unexpected environmental impacts, coordinate with the UWSCG, to provide necessary mitigation measures; and prepare quarterly reports on compliance with the EMPs for the Employer and the ADB;
- q. monitor performance of the Contractor during the Defects Liability Period (and O&M period, if applicable);
- r. prepare and submit draft Project Completion Report two months before end of Defects Notification Period (DNP)
- s. prepare and submit final Project Completion Report on completion of DLP or alternative date as agreed with the Employer; and

- t. provide on the job training for any counterpart staff seconded to the project by the UWSCG for strengthening their capacity in supervision of construction and managing and monitoring social and environmental safeguards; and

87. With reference to quality control, the Consultant shall submit reports or other relevant documents which include:

- a. completed plan-schedules (Forms will be provided by UWSCG);
- b. measurement sheets supporting interim valuations;
- c. completed and signed Forms (Form N2)
- d. materials quality certificates;
- e. certificates for pipe testing; and
- f. laboratory certificates for external concrete testing

88. If so required by the Employer, the Consultant will provide any of the following as additional services: (i) prepare reports, including technical appraisals, additional contract documentation, and/or review and comment on the contractor's proposals, as may be required for the successful completion of the Contracts; and (ii) provide any other specialist services as may be required from time to time.

89. The Employer will authorize all additional services, other than minor extras that do not materially affect the scope of the supervision work, at the rates established in the construction supervision contract, or at rates mutually agreed upon when the services require the use of specialists not listed in the contract.

f. Implementation Arrangements:

90. The Construction Supervision Consultant will assist the UWSCG in construction supervision but will be the Engineer to the Contracts. The Consultant's Team will be headed by a Team Leader/Chief Resident Engineer, and composed of international and domestic experts. The consultant will provide independent teams for each civil works contract headed by an international Resident Engineer. Each team will report to the Team Leader/Chief Resident Engineer.

g. Staffing Requirement

91. The Consultant shall provide services over a 56 months period. The staff requirement is detailed in Table 2 below.

Table 2: Staff Requirement for Construction Supervision Consultants

	Professional	Location	Nos	Months	Total
I.	International Staff				
	Team Leader / Chief Resident Engineer1	Central office	1	51	51
	Resident Engineer (1)	Mestia	1	36	36
	Resident Engineer (2)	Anaklia Networks & WWTP	1	36	36
	Resident Engineer (3)	Anaklia & Poti Headworks	1	29	29
	Resident Engineer (4)	Kutaisi	1	26	26
	Resident Engineer (5)	Ureki		37	37
	Mechanical Engineer	Central office	1	41	41
	Electrical/ICA Engineer	Central office	1	40	40
	Contracts Engineer/QS	Central office	1	46	46
	Planner/Programmer	Central office	1	32	32
	Subtotal -- International Staff				374
II.	National Staff				
	Deputy TL/Civil Engineer	Central office	1	51	51
	Mechanical Engineer	Central office	1	41	41
	Electrical/ICA Engineer	Central office	1	40	40
	Assistant Resident Engineer (1)	Mestia (a)	1	17	17
	Assistant Resident Engineer (2)	Mestia (b)	1	25	25
	Assistant Resident Engineer (3)	Anaklia (Networks)	1	12	12
	Assistant Resident Engineer (4)	Anaklia WWTP	1	23	23
	Assistant Resident Engineer (5)	Anaklia Headworks		23	23
	Assistant Resident Engineer (6)	Poti (all contracts)		23	23
	Assistant Resident Engineer (7)	Kutaisi Water Supply		34	34
	Assistant Resident Engineer (8)	Ureki (a)		34	34
	Assistant Resident Engineer (9)	Ureki (b)		34	34
	QS/Measurement Engineer (1)			41	41
	QS/Measurement Engineer (2)			41	41
	Civil Works Inspector (1)	Mestia (a)	2	25	25
	Civil Works Inspector (2)	Mestia (b)	1	25	25
	Civil Works Inspector (3)	Anaklia (a)	1	12	12
	Civil Works Inspector (4)	Anaklia (b)	2	23	23
	Civil Works Inspector (5)	Anaklia ©		23	23
	Civil Works Inspector (6)	Poti		23	23
	Civil Works Inspector (7)	Kutaisi (a)		34	34
	Civil Works Inspector (8)	Kutaisi (b)		34	34
	Civil Works Inspector (9)	Ureki (a)		34	34
	Civil Works Inspector (10)	Ureki (b)		34	34
	Public Awareness Specialist	Central office	1	41	41

	Professional	Location	Nos	Months	Total
	Environmental Specialist	Central office	1	41	41
	Resettlement Specialist			3	3
	Subtotal -- National Professional Staff				791
	Total – International and National Professional Staff				1165
III.	Support Staff¹⁷				
	Document Controller	Central office	1	44	44
	Secretary/translator (1)	Central office	1	52	52
	Secretary/translator (2)	Mestia	1	28	28
	Secretary/translator (3)	Anaklia	1	28	28
	Secretary/translator (4)	Poti	1	29	29
	Secretary/translator (5)	Kutaisi	1	26	26
	Secretary/translator (6)	Ureki	1	36	36
	Accountant	Central office	1	39	39
	Draftsman/CAD Operator	Each office	6		191
	Driver	Each office	7		324
	Total – Support Staff				797
	Total				1962

h. Project Staff

i. Team Leader/Chief Resident Engineer (International)

92. The Team Leader will be responsible for overall supervision of all construction activities as described in the Duties of the Consultant with a Degree in Civil Engineering, or similar qualification, and corporate membership of a relevant professional institution. He/she will have 20 years experience in planning and implementation of large-scale water supply and sanitation projects, construction of water transmission mains and distribution networks, sewerage networks and wastewater treatment plants. Five years of this experience will have been as Team Leader and a minimum of 10 years experience will have been in developing countries and some CIS countries. He/she will have extensive experience with FIDIC based contracts and be fluent in English. Skills in human resource management, previous experience on ADB projects and familiarity with ADB Guidelines would be advantageous. A post graduate qualification in construction or project management would be advantageous but is not as essential as proven experience of similar projects. The Team leader will be based in the Consultant's central project office in Georgia and will report regularly to the UWSCG project management unit.

ii. Resident Engineers (International)

93. The five Resident Engineers will each be responsible for supervision of construction activities in one of the towns of Anaklia, Poti, Mestia, Kutaisi and Ureki. Each Resident Engineer should have a Degree in Civil Engineering, or similar qualification, and 15 years experience in the implementation of large-scale water supply and sanitation projects, construction of water transmission mains and distribution networks, sewerage networks and wastewater treatment plants. He/she should have 7 years experience in developing countries and CIS countries. Skills in human resource management, previous experience on ADB projects

¹⁷ These numbers are indicative and funds to pay for inputs will be drawn from the provisional sum in the budget.

and familiarity with ADB Guidelines, and a working knowledge of FIDIC contracts, particularly the MDB harmonized edition, would be advantageous. A post graduate qualification in construction or project management would be an advantage but is not essential. He/she should be fluent in English.

iii. Mechanical Engineer (International)

94. The Mechanical Engineer (International) will be based in the Consultant's central office and will assist the Resident Engineers in supervising the construction activities in the towns of Anaklia, Poti, Mestia, Kutaisi and Ureki. He/she should have a Degree in Mechanical Engineering, or similar qualification, and 12 years experience in the implementation of large-scale water supply and sanitation projects, including water and wastewater pumping stations and treatment plants. He/she should have 5 years experience in developing countries and CIS countries. Previous experience on ADB projects and familiarity with ADB Guidelines would be advantageous. He/she should be fluent in English.

iv. Electrical/ICA Engineer (International)

95. The Electrical Engineer will assist the Resident Engineers in supervising the construction activities in the towns of Anaklia, Poti, Mestia, Kutaisi and Ureki. He/she should have a Degree in Electrical Engineering, or similar qualification, and 12 years experience in the implementation of large-scale water supply and sanitation projects, including water and wastewater pumping stations and treatment plants, and associated SCADA. He/she will be familiar with the latest European standards for electrical safety and have 5 years experience in developing countries and CIS countries. Previous experience on an ADB projects and familiarity with ADB Guidelines would be advantageous. He/she should be fluent in English.

v. Contracts Engineer/QS (International)

96. The Contracts Engineer will assist the Team Leader/Chief Resident Engineer in the contract management of all construction activities. He/she should have a Degree in Engineering or Quantity Surveying, or similar qualification, and 10 years experience in the implementation of large-scale construction projects, including water and sanitation projects. He/she have 5 years experience in developing and CIS countries. Previous experience on ADB projects and familiarity with ADB Guidelines would be advantageous. He/she should have experience in the use of FIDIC contracts; particularly the MDB harmonized edition, and in assessing and evaluating Contractor's claims. He/she must be fluent in English.

vi. Planner/Programmer (International)

97. The Planner/Programmer will assist the Chief Resident Engineer in the contract management of all construction activities. He/she should have a Degree in Engineering or similar qualification, and 7 years experience in the implementation of large-scale construction projects, including water and sanitation projects. He/she should have experience in developing and CIS countries. Previous experience on an ADB projects and familiarity with ADB Guidelines would be advantageous. He/she should be thoroughly familiar with proprietary software for project management, resource and document management, and scheduling, such as Primavera, MS Office Project Server, Project Manager, etc. He/she should be fluent in English.

vii. Deputy Team Leader/Civil Engineer (National)

98. The Deputy Team Leader/Civil Engineer will assist the Team Leader for overall supervision of all construction activities as described in the Duties of the Consultant. He/she should have a Degree in Civil Engineering, or similar qualification, and be fluent in the English language. He/she should have 15 years experience in planning and implementation of large-scale construction projects, construction of water transmission mains and distribution networks, sewerage networks and wastewater treatment plants. Previous experience on ADB projects and familiarity with ADB Guidelines would be advantageous. He/She should be familiar with FIDIC Conditions of Contract, have a sound knowledge of Georgian Government regulations and have experience of working with international organizations.

viii. Mechanical Engineer (National)

99. The Mechanical Engineer will assist the International Mechanical Engineer in supervising the construction activities in the towns of Anaklia, Poti, Mestia, Kutaisi and Ureki. He/she should have a Degree in Mechanical Engineering, or similar qualification, and 8 years experience in the implementation of large-scale water supply and sanitation projects, including pumping stations and treatment plants. Fluency in the English language and experience with international organizations shall be an advantage.

ix. Electrical/ICA Engineer (National)

100. The Electrical/ICA Engineer will assist the International Electrical Engineer in supervising the construction activities in the towns of Anaklia, Poti, Mestia, Kutaisi and Ureki. He/she should have a Degree in Electrical Engineering, or similar qualification, and 8 years experience in the implementation of large-scale water supply and sanitation projects, including water and wastewater pumping stations and treatment plants, and associated SCADA. He/she will be familiar with the latest European standards for electrical safety and any Georgian regulations covering electrical installations and safety. Fluency in the English language and experience with international organizations shall be an advantage.

x. Assistant Resident Engineers (National)

101. The Assistant Resident Engineers will assist the International Resident Engineers in supervising construction activities in each of the towns of Anaklia, Poti, Mestia, Kutaisi and Ureki. They should have a Degree in Civil Engineering, or similar qualification, and 8 years experience in the implementation of large-scale water supply and sanitation projects, construction of water transmission mains and distribution networks, sewerage networks and wastewater treatment plants. Fluency in the English language and experience with international organizations shall be an advantage.

xi. QS/Measurement Engineers (National)

102. The QS/Measurement Engineers will assist the Resident Engineers in supervising construction activities in each of the towns of Anaklia, Poti, Mestia, Kutaisi and Ureki. He/she should have a Degree in Civil Engineering or Quantity Surveying, or similar qualification, and at least 5 years experience in the implementation of large-scale construction projects, including water and sanitation projects. Fluency in the English language and experience with international organizations shall be an advantage.

xii. Civil Works Inspectors (National)

103. The Civil Works Inspectors will assist the Resident Engineers in supervising construction activities in each of the towns of Anaklia, Poti, Mestia, Kutaisi and Ureki. He/she should have a Diploma in Civil Engineering, or similar qualification, and 5 years experience in the implementation of large-scale water supply and sanitation projects, construction of water transmission mains and distribution networks, sewerage networks and wastewater treatment plants. Knowledge of English and experience with international organizations shall be an advantage.

xiii. Public Awareness Specialist (National)

104. The Public Awareness Specialist will be responsible for informing stakeholders of the activities of the contractors in all towns. He/she should have a Degree in a relevant discipline and some experience in the implementation of large-scale construction projects, construction of water transmission mains and distribution networks, sewerage networks and wastewater treatment plants. Experience with international organizations shall be an advantage.

xiv. Environmental Specialist (National)

105. The Environmental Specialist will be responsible for monitoring compliance with the contractors' environmental management plans in all towns. He/she should have a Degree in a relevant discipline and experience with monitoring compliance with ADB safeguard policies in the implementation of large-scale construction projects, including water and sanitation projects. Fluency in the English language and experience with international organizations shall be an advantage.

xv. Resettlement Specialist (National)

106. Inputs will be based on impacts identified during construction phase. Currently, the Resettlement Plan for Mestia has been implemented and confirmed. No involuntary resettlement is anticipated under the two projects.

i. Reports

107. The Consultant will submit the following reports:

Table 3: Required Reports

Types of Reports	UWSCG	ADB
Inception Report (month 1) English and Georgian versions	3	1
Progress Reports (monthly) English and Georgian versions	3	1
Progress Reports (quarterly) English and Georgian versions	3	1
Draft Contract Completion Report. English and Georgian versions	3	1
Final Contract Completion Report. English and Georgian versions	3	1

j. Duration of the Assignment

108. It is currently envisaged that the assignment will commence in June 2012 and be completed in February 2016 following the expiry of the Defects Liability Period for the water and sewage treatment plants.

3. Outline Terms of Reference for Audit Services Consultant

A. Audit of Annual IFRS Financial Statements of the UWSCG

1. Objective

109. The objective of the audit is to enable the auditor express his opinion whether the financial statements of the United Water Supply Company of Georgia (“the Company”) for the year ended December 31, 2010 and for the year ended December 31, 2011 give a true and fair view of the financial position of the Company as at December 31, 2010 and as at December 31, 2011 of the profit or loss for the year then ended and of the cash flows, and whether they are prepared in accordance with International Financial Reporting Standards (IFRS). a

2. Applicable Standards and Methods

a. Applicable Standards

123. The audit shall be performed in accordance with International Standards on Auditing (ISA) effective for the audits of financial statements prepared for the periods ending December 31, 2010 and December 31, 2011.

b. Planning of the Audit

124. At the planning stage of the audit the Auditor shall request the Company and obtain the financial statements of the Company for the year ended December 31, 2010 and for the year ended December 31, 2011 the Company’s internal policy and procedure manuals relevant for financial reporting and other information which will enable the Auditor to obtain understanding of the Company and its business sufficient to prepare the overall audit plan.

125. The Auditor shall prepare the overall audit plan based on collected information before commencement of the audit fieldwork. The audit plan shall include a description of the nature, timing and extent of planned audit procedures. The overall audit plan, among other matters, shall also include the Auditor’s assessment of the critical areas for the audit and relevant approach to these.

126. Before commencement of the audit fieldwork the engagement partner and audit team manager shall hold an opening meeting with the management of the Company and present the overall working approach and the audit plan.

127. At the meeting the engagement partner and the audit team manager shall inform the Company’s management any matter which may, in their opinion (based on the preliminary data they have at that moment), become a reason for qualified audit opinion or the disclaimer of opinion. Auditors shall describe the approach they plan to use to solve such matters and also

the necessary measures which the management of the Company shall implement to avoid modified audit report.

128. At the meeting the engagement partner and the audit team manager shall present their preliminary assessment of materiality level and briefly describe how they plan to use the concept of materiality during the audit.

129. The auditors and the management of the Company shall agree the date on which the team of auditors will enter the Company for the fieldwork, the date(s) of physical count of inventory and of fixed assets, the level of involvement of the Company's staff in the audit, the level of assistance they may require from the Company's internal auditors.

c. Audit Fieldwork

130. The Auditor shall study the internal control system of the Company with the purpose and to the level sufficient to enable him to define the nature, timing and extent of audit procedures which will be sufficient to form an opinion on the financial statements.

131. The Auditor shall obtain sufficient appropriate audit evidence to be able to draw reasonable conclusions on which to base his opinion whether the financial statements of the Company contain material misstatements.

132. The Auditor shall obtain sufficient appropriate audit evidence in regards to each component of the financial statements to confirm the following:

- (i) **Existence** — all assets, liabilities and equity balances presented in the financial statements actually exist;
- (ii) **Completeness** — all assets, liabilities and equity balances and all transactions that should have been presented in the financial statements have been presented;
- (iii) **Rights and Obligations** — the Company holds or controls the rights to its assets and owes obligations to its liabilities;
- (iv) **Occurrence** — the transactions actually took place;
- (v) **Valuation and Allocation** — assets, liabilities and equity balances are included in the financial statements at appropriate amounts and any resulting valuation or allocation adjustments are appropriately recorded;
- (vi) **Accuracy** — the transactions were recorded at the appropriate amounts;
- (vii) **Cutoff** — the transactions have been recorded and presented in the financial statements in the correct reporting period;
- (viii) **Presentation and disclosure** — financial statements are appropriately presented and described, all disclosures that should have been included in the financial statements have been included and information in disclosures are clearly expressed.

133. The Auditor shall attend physical count of inventory and of fixed assets in July 2012. The Auditor shall plan and implement audit approach and other relevant audit procedures based on his own professional judgments, views and considerations.

134. The engagement partner and the audit team manager shall have regular communications with the Company's top management and promptly inform relevant level of management on any possible problems related to access to requested information or availability of explanations from the Company's staff or managers.

d. Audit Completion

135. Before completing the audit and issuing the final audit opinion the engagement partner and the audit team manager shall meet the management of the Company to discuss the results of audit works. The auditors shall inform the management of the Company about all discovered misstatements and present the list of adjusting entries to the financial statements. The nature and justification of each material entry shall be described in sufficient detail including relevant statements of respective IFRSs.

136. For all the material matters for which the Auditor could not obtain sufficient appropriate audit evidence the Auditor shall present his understanding of the reasons for the absence of such evidence. If it can be reasonably expected that some additional audit procedures conducted in reasonably short time can help the auditor to obtain sufficient appropriate audit evidence for such matters, then the auditor shall perform such additional procedures.

137. In the result of the audit the Auditor shall present following reports:

- (i) The Independent Auditors' Report – expression of the Auditor's opinion on the financial statements of the Company for the year ended December 31, 2010 and for the year ended December 31, 2011. The Auditor shall express an opinion whether the financial statements of the Company are free of material misstatements in accordance with IFRS. The complete set of financial statements of the Company for the years 2010 and 2011 shall be attached to the Independent Auditors' Report and presented as one document (separately for the year 2010 and for the year 2011);
- (ii) The Management Letter – the report containing the Auditor's observations of the weaknesses in the Company's accounting and internal control systems, together with their recommendations to improve identified weaknesses. In line with other issues the Auditor shall report the instances of non-compliance of the Company's accounting policies to the requirements of IFRS, if any, identify which specific policy is not compliant with which specific IFRS statement and present their recommendations of how to update the Company's policy.

138. The Auditor shall present 6 hard copies of each report in Georgian, 6 hard copies of each report in English and the electronic versions of each in Ms Word and PDF formats (separately for the year ended December 31, 2010 and for the year ended December 31, 2011).

3. Other matters which the management of the Company considers to be significant for the audit purposes

139. The Company has been founded on the basis of 2 predecessor water companies, which in turn were formed by consolidation of 66 separate water companies established in soviet era.

From those predecessor companies the Company has inherited some specific problems related to the fixed assets, plus there are some specific operations and relationship with large international creditors and the government which we consider may be significant for the purposes of the audit. Such matters are briefly presented below.

e. Property, plant and equipment

140. The balance of property, plant and equipment represents almost 80% of the Company's total assets. Large part of these assets has been transferred to the Company as part of a statutory capital at the moment of foundation. The Company is currently considering the need for independent professional valuation of its fixed assets. Determination of the fair value shall be conducted by professional independent valuers in accordance with International Valuation Standards (IVA).

141. The Auditors shall note that the majority of the Company's property, plant and equipment is specialized in nature and is rarely sold on the open market other than as part of a continuing business. The market for similar property, plant and equipment is not active in Georgia and does not provide a sufficient number of sales of comparable property, plant and equipment for using a market-based approach for determining fair value. Consequently, the fair value of property, plant and equipment will probably be primarily determined using depreciated replacement cost. This method considers the cost to reproduce or replace the property, plant and equipment, adjusted for physical, functional or economical depreciation, and obsolescence. In some cases it may happen that due to the lack of detailed technical information, the depreciated replacement cost will be estimated based on the aggregated information available at the Company.

142. It is important for the Company that the Auditors provide their views, considerations and possible guidance on the valuation to make sure that the valuation methods, assumptions used, procedures conducted and the valuation report presented by the valuers are acceptable for the audit purposes.

f. Government grants (subsidies)

143. In the ordinary course of business the Company receives subsidies from the government to cover operational expenses as well as for the acquisition, construction or renovation of property, plant and equipment.

144. It is important that the Auditor gets thorough understanding of subsidies received, their purposes and actual use. It is important that the subsidies are correctly classified as related to revenues or related to assets and are then respectively accounted for by presenting as deferred income in the balance sheet or crediting to the profit or loss as period income in accordance with all applicable IFRS. It will be significant to correctly identify which specific assets have been purchased or constructed by the funds provided as subsidy and to determine respective useful lives of those assets to be then used to determine how much of deferred income to transfer to respective period's incomes and for how long.

g. Borrowing costs

145. The Company has borrowings from international finance organizations. Under some of the loan agreements which finance large-scale infrastructure construction and reconstruction

projects acquisition or construction of assets are managed by the third parties who directly receive funds from the lenders and pay cash to suppliers or construction companies.

146. The Auditor is required to obtain good understanding of loan agreements, project management processes and the assets constructed or acquired and to determine what part of borrowing cost shall be capitalized and to which assets in accordance with IAS 23 and other applicable IFRS. The Auditor shall ensure he receives all relevant documents, descriptions, information or calculations in time to enable himself to form a conclusion whether the capitalization of borrowing costs is in line with IFRS requirements.

h. Double debts reserve

147. The Company has material accounts receivable balance. The Company considers ageing analysis of debtors in its analysis of collectability of trade receivables. The doubtful debts reserve presented in the financial statements is assessed based on this analysis.

148. The Auditor is required to review the methods, assumptions and calculations of doubtful debts reserve performed by the Company to obtain sufficient appropriate audit evidence that the doubtful debts reserve is free of material misstatement.

B. For the Audit of the Urban Services Improvement Investment Program – Project 1 (Loan 2749-Geo(SF), Loan Agreement Dated on 10 May 2011) and Project 2 (Loan 2807-Geo(SF), Loan Agreement Dated on 1 December 2011) For the Year Ending December 31, 2011

1. Objectives

149. The objective of the audit is to enable the auditor to express professional opinion on (i) the financial position of the Project 1 and Project 2 (Urban Services Improvement Investment program) as of 31 December 2011 and of the funds received and expenditures for the year then ending, as reported by the Project Financial Statements (PFS) of the project; and (ii) the project's Statement of Expenditures (SOEs).

150. The Projects' accounts (books of account) provide the basis for the preparation of the PFS and are established to reflect the financial transactions in respect of the projects as maintained by the Project Management Office (PMO).

2. Scope

151. The audit will be conducted in accordance with International Standards of Auditing (ISA) as published by the International Auditing and Assurance Standards Board of the International Federation of Accountants (IFAC), with special reference to ISA 800 (Auditor's Report on Special Purpose Audit Engagements) and to relevant Asian Development Bank (ADB) guidelines. In conducting the Projects audit, special attention should be paid to the following:

- (i) All funds provided by the Asian Development Bank (ADB) and its cofinanciers have been used in accordance with the conditions of the Financing Agreement of Loan 2749GEO(SF) dated 10 May 2011 and Financing Agreement of Loan 2807GEO(SF) dated 01 December, 2011 with due attention to economy and efficiency, and only for the purposes for which the loan was granted;

- (ii) Counterpart funds have been provided and used in accordance with the conditions of the relevant financing agreement, with due attention to economy and efficiency, and only for the purposes for which the financing was provided;
- (iii) Goods and services financed have been procured in accordance with the relevant financing agreement;
- (iv) All necessary supporting documents, records, and accounts have been kept in respect of all projects ventures (including expenditures reported using Statement of Expenditures. Clear linkages should exist between the accounting records and the financial reports presented to the ADB.
- (v) The PFS have been prepared in accordance with generally accepted accounting principles and practices and relevant ADB guidelines, and give a true and fair view of the financial position of the Project 1 and Project 2 as of December 31, 2011 and of resources and expenditures for the year ended;
- (vi) Review the compliance with covenants in the financing agreement and with ADB's specific requirements with respect to the financial management of the Projects in Article IV of the Loan Agreement;
- (vii) Provide a statement on the scale, effectiveness and reliability of the accounting and administrative procedures of the borrower;
- (viii) Provide a report on the efficiency and economy on the use of resources;
- (ix) Provide comments on the accounting principles adopted by the entity under audit (if other accounting principles were adopted, provide comments on the impact of the financial statements arising from deviations from international accounting standards);
- (x) Verify financial and administrative internal systems controls; and
- (xi) Define areas of improvement in the PMO's systems (e.g., improvements in accounting and data processing operations).

3. Project Financial Statements

152. The Projects Financial Statements should include:

- (i) a Statement of Sources and Uses of Funds for the current fiscal year and accumulated to date, showing comparison of budget and actual funds received from ADB, and counterpart funds separately and used of funds by main categories of expenditures;
- (ii) a Statement of Expenditures showing comparison of budget and actual expenditures under the main project headings, both for the current fiscal year and accumulated to date; and
- (iii) a Balance Sheet showing Accumulated Funds of the Projects, bank balances, other assets of the project and liabilities, if any.

153. As part of the audit of the PFS, the auditor is required to audit all SOEs / Summary Sheets used as the basis for the submission of withdrawal applications. These SOEs should be compared for Projects eligibility with the relevant financing agreements and with reference to the Projects Appraisal Documents for guidance when considered necessary. Where ineligible expenditures are identified as having been included in withdrawal applications and reimbursed against, these should be separately noted in separate note disclosures and also in the management letter, by the auditor. The PFS (or included within the notes to the project financial statements) should be a schedule listing individual SOEs withdrawal applications by specific reference number and amount.

154. The auditor should pay particular attention as to whether:

- the SOEs / Summary Sheets have been prepared in accordance with the provisions of the relevant financing agreement;
- expenditures have been made wholly and necessarily for the realization of Project objectives;
- information and explanation necessary for the purpose of the audit have been obtained;
- supporting records and documents necessary for purpose of the audit have been retained; and
- the SOEs/Summary Sheets can be relied upon to support the related withdrawal applications.

4. Audit Opinions

155. Besides a primary opinion on the Project Financial Statements, the annual reports of the Project Accounts should include a separate paragraph commenting on the accuracy and property of expenditures withdrawn under SOE procedures and the extent to which the Bank can rely on SOEs as a basis for loan/grant disbursement.

5. Management Letters

156. In addition to the audit reports, the auditor will prepare a “management letter” in which the auditor will:

- (i) give comments and observation on the accounting records, systems, and controls that were examined during the course of the audit;
- (ii) identify specific deficiencies and areas of weakness in systems and controls and make recommendation for their improvement;
- (iii) report on the degree of compliance of each of the financial covenants on the financing agreement and give comments, if any, on internal and external matters affecting such compliance;
- (iv) communicate matters that have come to attention during the audit which might have significant impact on the implementation of the project;

- (v) bring to the borrower's attention any other matters that the auditor considers pertinent; and
- (vi) include management's comments in the final management letter.

6. General

157. The responsibility for the preparation of financial statements including adequate disclosure is that of the management of the PMO. This includes the maintenance of adequate accounting records and internal controls, the selection and application of accounting policies, and the safeguarding of the assets of the company. As part of the audit process, the auditor may request from management written confirmation concerning representation made to the auditor in connection with the audit.

158. The PMO will cooperate fully with the auditor and will make available to the auditor whatever records, documentation and other information is requested by the auditor in connection with the audit. The auditor should be given access to all legal documents, correspondence, and any other information associated with the project and deemed necessary by the auditor. Confirmation should also be obtained of amounts disbursed and outstanding at ADB.

159. The financial statements, including the audit opinions, and management letters should be received by the PMO for presentation to ADB no later than nine months after the end of the audited fiscal year.

160. It is highly desirable that the auditor become familiar with the relevant ADB guidelines, which explain the ADB's financing reporting and auditing requirements. Please refer to *Handbook for Borrowers on the Financial Management and Analysis of Projects* which can be accessed from the following website:
http://www.adb.org/Documents/Handbooks/Borrowers_Fin_Gov_Mgt_Investment/default.asp

161. The term of engagement will remain effective for future fiscal years unless it is terminated, amended or superseded.

162. The auditor should understand that working papers under ADB Projects can be subject to the review by authorized ADB staff.

163. The financial statements and auditor's opinion thereon shall be submitted in both Georgian and English. The Auditor shall present 6 hard copies of each report in Georgian, 6 hard copies of each report in English and the electronic versions of each in Ms Word and PDF formats.

i. Individual Consultants

164. The following is a list of individual consultants planned under the Investment Program.

Table 1: Staff Requirement for Individual Consultants

	Expert	Input (in pm)	Activity
	IPMO Consultants		
1	Independent Engineer	260	To oversee designs of the detailed engineering design consultants
2	Environmental Specialist	300	To oversee implementation of the EMPs developed as a part of the IEE for subprojects in each tranche, and to develop MEPNR and MA staff capacity on environmental monitoring (effluent and drinking water quality standards)
3	Social Safeguard Specialist	150	To oversee implementation of the RPs developed as a part of the subprojects in each tranche
4	Gender Specialist	300	To oversee implementation of the Gender Action Plan and participate in the public awareness program
5	Procurement Specialist	150	To assist the UWSCG in procuring works, goods, and consulting services compliant with relevant ADB guidelines
	Capacity Building		
1	Regulatory Specialist	90	To develop GNEWSRC staff capacity on regulatory functions
2	Tariff Setting Specialist	90	To assist GNEWSRC in setting a methodology for water and sewerage tariffs
	PPP Transaction		
1	Transaction Advisor/TL	120	To lead the PPP Transaction Advisory team and advise on appointment of the Management Contractor
2	WSS Specialist	120	To establish baseline performance levels and technical monitoring parameters
3	Legal Specialist (International and National)	120	To prepare the RFQ and RFP documents in accordance with international best practices and local laws
4	Financial Analyst	30	To establish baseline financial performance levels and establish financial monitoring parameters
	WSS Management Program		
1	NRW Detection Expert	60	To train UWSCG staff on NRW detection and rectification
2	Financial and Accounts Manager	40	To train UWSCG Staff on IAS and IFRS
3	Communications Expert	30	To train customer care unit staff in public relations and communications

IPMO = Investment program management Office, GNEWSRC = Georgia National Energy and Water Supply Regulatory Commission, PPP = public private partnership, RFQ = request for qualification, RFP = request for proposal, UWSCG = United Water Supply Company of Georgia LLC, WSS = water supply and sanitation, MEPNR = Ministry of Environmental Protection and Natural Resources, MA = Ministry of Agriculture, IEE = initial environmental examinations, EMP = environmental management plan

3. SAFEGUARDS

a. Social Safeguards

165. In order to ensure compliance with ADB Safeguard Policy Statement (2009), MRDI as Executing Agency and UWSCG as Implementing Agency will ensure social safeguards compliance under the Investment Program. MRDI has endorsed the Resettlement Framework (RF) that has been prepared for the Investment Program (see Linked Document 16 of the RRP). The involuntary resettlement process as required under the RF will be followed during implementation and necessary resettlement plans will be prepared.

166. The RF will be reviewed regularly and, if necessary, updated during later tranches of the MFF, if indicated by unanticipated new types of impacts (review of applicability and relevance). The eligibility and entitlement provisions of the RF will not be lowered in subsequent revisions and updates.

b. Environmental Safeguards

167. In order to ensure compliance with ADB Safeguard Policy Statement (2009), MRDI as Executing Agency and UWSCG as Implementing Agency will ensure the implementation of the following requirements and procedures for the Investment Program. MRDI has endorsed the Environmental Assessment and Review Framework (EARF) that has been prepared for the Investment Program (see Linked Document 14 of the RRP). The EARF and the environmental assessment process as required under the EARF will be followed during implementation and necessary IEE and EMP will be prepared.

Environmental Management Actions	Implementation Activities	Conditions Required to Complete Actions
<i>Pre-construction commences</i>	Activity 1: Project becomes effective	
Environmental recording system established in PMU, UWSCG.	Activity 2: PIU established with ESU. Environment staff appointed to ESU	Budget, facilities and staff for ESU have been provided according to Loan Agreement
Design and implement baseline monitoring for environmental conditions; unless this has been undertaken during the environmental assessment stage	Activity 3: Prepare project baseline environmental matrix	
<ul style="list-style-type: none"> • Environment Specialist (ES) prepares Design Brief for D&S consultant that incorporates EMP Design requirements • ES checks Design Brief meets EMP requirements 	Activity 4: Pre-construction: Design; Incorporation of EMP requirements	Appointment of Design and Supervision consultant with necessary technical capacity to address EMP requirements
<ul style="list-style-type: none"> • ES extracts construction requirements from EMP and pass to D&S consultant for inclusion in Tender documents 	Activity 5: Tender documents prepared	Standard environmental conditions have been prepared which are integrated into Tender documents

Environmental Management Actions	Implementation Activities	Conditions Required to Complete Actions
<ul style="list-style-type: none"> ES reviews Tender documents and confirm that environmental management provisions are sufficient 		
ESU review environmental conditions of Bid and rank contractors on this ability	Activity 6: Tenders evaluated and Contractor appointed	ES to be a member of the Bid Evaluation Panel
ES reviews SEMP and EMS	Activity 7: Contractor prepares Site EMP (SEMP) and EMS if required	<ul style="list-style-type: none"> Contractor appoints Environmental Manager. After award of contract Contractor has 30 days to prepare SEMP/EMS. ADB CWRD Guidance notes on preparing SEMP available
ESU verifies compliance of Contractor with SEMP at site meeting	Activity 8: Contractor inducted to site by ESU	Contractor cannot take possession of construction site until (i) SEMP/EMS has been approved and (ii) induction is completed satisfactorily
ES informs PMU that Contractor is now cleared to start work	Activity 9: Contractor approved to start work	
<i>Pre-construction completed</i>		
<i>Construction commences</i>		
<ul style="list-style-type: none"> ES, PMU monitors contractor's SEMP compliance activities. ES audits construction activities ES evaluates monitoring program 	Activity 2: Environmental monitoring undertaken and reports prepared. <ul style="list-style-type: none"> By Contractor: Monthly environmental report sent to PMU Quarterly environmental report to ADB and country environmental agency 	Contractor complies with SEMP requirements for implementing and monitoring work on-site <ul style="list-style-type: none"> ADB CWRD Guidance notes on preparing monitoring reports available
<i>Construction completed</i>	Activity 3: Construction completed and project commissioned	<ul style="list-style-type: none"> Project works completed in accordance with the SEMP and all sites satisfactorily rehabilitated and restored. ES reviews and sign-off on completed work Final environmental monitoring report prepared Payments may be withheld if sites not cleared and closed to meet SEMP specifications.
<i>Note: Work on sub-projects for subsequent tranches is likely to begin during implementation of Tranche 1 sub-projects</i>		
<i>Sub Projects for subsequent</i>	Activity 1: Potential sub-projects	

Environmental Management Actions	Implementation Activities	Conditions Required to Complete Actions
<p>tranches Sub-projects assessed against the selection criteria set out in the environmental assessment and review framework</p>	for new tranche identified	
<ul style="list-style-type: none"> • Environmental classification completed. Categorisation forms sent to ADB regional Department and local Environment Authority for confirmation. • ES prepares TOR for environmental assessment requirements • Consultant appointed to prepare the necessary environmental assessment documents 	Activity 2: Preliminary Design undertaken for sub-projects	
Environmental Assessment documents to accompany PFR Documents to be reviewed by ES CWRD.	Activity 3: Project Financing request submitted to ADB Activity 4: Sub-projects in new tranche approved	
<ul style="list-style-type: none"> • Design and implement baseline monitoring for environmental conditions; unless this has been undertaken during the environmental assessment stage 	Activity 5: Prepare project baseline environmental matrix	
<ul style="list-style-type: none"> • ES prepare Design Brief for D&S consultant that incorporates EMP Design requirements • ES check Design Brief meets EMP requirements 	Activity 6: Pre-construction: Design; Incorporation of EMP requirements	
<ul style="list-style-type: none"> • ES extracts construction requirements from EMP and pass to D&S consultant for inclusion in Tender documents • ES reviews Tender documents and confirm that environmental management provisions are sufficient 	Activity 7: Tender documents prepared	
ES review environmental conditions of Bid and rank contractors on this ability	Activity 8: Tenders evaluated and Contractor appointed	
ES reviews SEMP and EMS	Activity 9: Contractor prepares Site EMP (SEMP) and EMS if required	
	Activity 10: Contractor inducted to site by ESU	

168. The EARF will be reviewed regularly and, if necessary, updated during later tranches of the MFF, if indicated by unanticipated new types of impacts (review of applicability and relevance). The eligibility and entitlement provisions of the EARF will not be lowered in subsequent revisions and updates.

4. GENDER AND SOCIAL DIMENSIONS

169. See Appendix 2 for Summary Poverty Reduction and Social Strategy and Appendix 3 for Gender Action Plan.

170. **Gender Development Strategy.** To support the primary goal of the Investment Program in ensuring effective and sustainable WSS systems, gender development will be addressed in a twofold approach in this Investment Program. A gender and social development consultant will be hired to assist UWSCG in implementing the GAP and reaching the targets.

- (i) One approach is to improve career and employment opportunities in the UWSCG. This will be facilitated by introducing a sex-disaggregated database for human resource management, which will provide information for an annual gender analysis of the staff development, improve management support for gender balanced human resource management and staff development. Additionally, employment opportunities for women will be created in customer care centers. According to UWSCG's human resource department, around 35% of women are employed in the UWSCG with a large proportion in administrative tasks. In the top management, 4 out of 14 department heads are women (30%). An improved database will be developed to monitor career development for women at UWSCG.
- (ii) The second approach is to improve the outreach of the UWSCG to communities and in doing this, particularly address women as household managers and water collectors. There is a clear lack of knowledge, information and awareness of water and sanitation related issues such as health, household expenses, customer rights, and environmental issues. For that reason, the Investment Program will develop an information, education and communication (IEC) campaign in all appropriate languages to educate communities on the above issues and inform them about the Investment Program benefits. Before rolling out a country wide IEC, the content and mode of delivery of the IEC will be tested in the urban centers of Mestia and Marneuli.

171. Through a pilot project in Mestia and Marneuli, baseline data on household water management and sanitation practices will be created by conducting a household survey. A post-intervention survey will be conducted after the IEC campaign and compared with the baseline. This will show if and why households were convinced to access the water and sanitation services of the UWSCG. Household survey and IEC will be conducted by an apex NGO with an extensive experience of working on gender issues and dissemination of information throughout the country. The Apex NGO will work through local NGOs to address gender issues within the Investment Program. Besides delivering the IEC campaign and the survey, the involvement of NGOs will facilitate better participation of communities, will improve grievance and complaint mechanism and improve awareness of the communities about the Investment Program. Impact assessment of the public awareness program in Mestia and Marneuli will expand UWSCG's country wide PR campaign.

172. Additional capacity building support for the UWSCG for designing a marketing campaign catering to women's needs as household managers is envisaged to optimize the utilization of the information gathered in the pilot project.

173. The pilot project will be partly financed through Output 3 of RETA-7563: Promoting Gender Inclusive Growth in Central and West Asia, in which the development and

implementation of a pilot project in each developing member country including Georgia is planned to showcase effective gender mainstreaming in infrastructure projects. The subprojects may include customer services and client-oriented project development and marketing and other country-specific project proposals that promote gender equality and women's empowerment. The gender specialist, financed through the RETA, will develop the detailed project design for the pilot project and will supervise its timely implementation by the apex NGO.

5. PERFORMANCE MONITORING, EVALUATION, REPORTING AND COMMUNICATION

a. Design and Monitoring Framework

174. See Appendix 1 of the PAM.

b. Monitoring

175. **Project performance monitoring.** Disaggregated baseline data for output and outcome indicators gathered during Investment Program processing will be updated and reported quarterly through Investment Program quarterly progress reports prepared by the IA, and after each ADB review mission. These quarterly reports will provide information necessary to update ADB's project performance reporting system.¹⁹

176. **Compliance monitoring.** Compliance on covenants will be monitored through regular ADB review missions and on a quarterly basis in discussion with the MRDI.

177. **Safeguards monitoring.** Monitoring and reporting of the implementation on safeguards requirements and procedures will be prepared by UWSCG. The Investment Program Management Office (IPMO) will undertake internal monitoring of safeguard covenants' compliance to be included in the quarterly/semiannually project progress report. An ADB Staff Consultant will validate the internal monitoring reports and evaluate compliance of Investment Program activities with the ADB's *Safeguard Policy Statement* (2009). External monitoring will be carried out by an Independent Monitoring Agency appointed by MRDI and in two phases, once during the RP implementation and once a year later.

178. **Gender and social dimensions monitoring.** See Appendix 1 on DMF and the GAP for monitoring indicators.

c. Evaluation

179. Within 6 months of physical completion of each project under the Investment Program the MRDI will submit a project completion report to ADB.²⁰

d. Reporting

180. UWSCG through MRDI will provide ADB with (i) quarterly progress reports in a format consistent with ADB's project performance reporting system; (ii) consolidated annual reports including (a) progress achieved by output as measured through the indicator's performance targets, (b) key implementation issues and solutions, (c) updated procurement plan and (d) updated implementation plan for next 12 months; and (iii) a project completion report within 6 months of physical completion of each tranche of the Investment Program. To ensure that the Investment Program is efficiently managed, accounts of every tranche of the facility together with the associated auditor's report, should be adequately reviewed.

¹⁹ ADB's project performance reporting system is available at:

<http://www.adb.org/Documents/Slideshows/PPMS/default.asp?p=evaltool>

²⁰ Project completion report format is available at: <http://www.adb.org/Consulting/consultants-toolkits/PCR-Public-Sector-Landscape.rar>

6. ANTICORRUPTION POLICY

181. ADB reserves the right to investigate, directly or through its agents, any violations of the Anticorruption Policy relating to the Investment Program.²¹ All contracts financed by ADB shall include provisions specifying the right of ADB to audit and examine the records and accounts of the executing agency and all Investment Program contractors, suppliers, consultants and other service providers. Individuals/entities on ADB's anticorruption debarment list are ineligible to participate in ADB-financed activity and may not be awarded any contracts under the Investment Program.²²

182. To support these efforts, relevant provisions are included in the framework financing agreement, loan and project agreements, loan regulations, and the bidding documents for the Investment Program. The Government will disclose to the public, and update annually the current status of the Investment Program and how the proceeds of the facility are used. For each contract financed under the Investment Program, the MRDI and UWSCG will disclose on their respective websites information on, among others, the: (a) list of participating bidders; (b) name of the winning bidder; (c) basic details on bidding procedures and procurement methods adopted; (d) amount of contract awarded; (e) list of goods/services, including consulting services procured; and (f) intended and actual utilization of the facility proceeds.

²¹ Available at: <http://www.adb.org/Documents/Policies/Anticorruption-Integrity/Policies-Strategies.pdf>

²² ADB's Integrity Office web site is available at: <http://www.adb.org/integrity/unit.asp>

7. ACCOUNTABILITY MECHANISM

183. People who are, or may in the future be, adversely affected by the project may address complaints to ADB, or request the review of ADB's compliance under the Accountability Mechanism.²³

²³ For further information see: <http://compliance.adb.org/>.

8. RECORD OF PAM CHANGES

184. PAM Updates

Initial PAM	: 24 February 2011
Revision 1	: 28 March 2011
Revision 2	: 14 May 2011
Revision 3	: 27 September 2011
Revision 4	: 12 April 2012
Revision 5	: 21 April 2012
Revision 6	: 16 September 2012
Revision 7	: 29 April 2013
Revision 8	: 18 July 2013

REVISED DESIGN AND MONITORING FRAMEWORK FOR THE INVESTMENT PROGRAM

Design Summary	Performance Targets and/or Indicators	Data Sources and/or Reporting Mechanisms	Assumptions and Risks
<p>Impact Improved health of residents in the secondary towns of Georgia</p>	<p>By the end of the investment program plus 3 years (2022):^a</p> <ul style="list-style-type: none"> (i) Prevalence of waterborne illness in households reduced by at least 75% from current the incidence of 4% of households per annum^b (ii) Productive days lost to waterborne illness reduced by at least 75% from the current 8 days per person per annum (iii) Average annual expenditure to treat waterborne illness reduced by at least 75% from the current \$74 per household per annum 	<p>Sex-disaggregated baseline survey conducted at investment program inception (2011), completion (2019), and in 2022</p> <p>Surveys conducted as a part of the PPMS and by UWSCG</p>	<p>Assumption The government continues to provide support for an enabling investment climate.</p>
<p>Outcome Improved water supply and sanitation services in the secondary towns of Georgia</p>	<p>By the end of the investment program in 2019:</p> <ul style="list-style-type: none"> (i) Residents' access to safe sanitation^c increased from 25% in 2011 to 88% by 2019 (ii) Residents' access to 24-hour potable water supply increased from 74% in 2011 to 95% by 2019 <p>100% households headed by women in the region covered</p>	<p>Annual sex-disaggregated socioeconomic surveys undertaken as part of the PPMS to determine public satisfaction with the quality of water supply and sanitation</p> <p>National statistics on water supply quality and effluent discharge from MEPNR, MA, and UWSCG</p>	<p>Assumption The government ensures water company staff and the management contractor efficiently deliver services.</p> <p>Risk Political systems interfere with the enforcement of legislative and regulatory control.</p>
<p>Outputs Component 1: Infrastructure Improvement</p> <p>Water supply system efficiency improved through rehabilitation and replacement, and coverage expanded</p>	<p>By 2019:</p> <ul style="list-style-type: none"> (i) 60,000 cubic meter reservoirs, 110 km of water transmission mains, and 350 km of distribution networks rehabilitated, reconstructed, or newly constructed (ii) 36 MLD capacity water treatment plants constructed (iii) Nonrevenue water progressively reduced from 60% to 30% (baseline and target to be established at investment program tranche inception) (iv) Energy savings achieved through efficient pumping systems (baseline and target to be established at investment program tranche 1 inception) 	<p>Semiannual progress reports prepared by UWSCG</p> <p>Disbursement and reimbursement records maintained by UWSCG</p> <p>PPMS reports prepared by UWSCG</p> <p>UWSCG annual work plans</p> <p>As-built drawings developed by contractors</p> <p>Project component</p>	<p>Assumption Ongoing internationally financed projects are efficiently implemented.</p> <p>Risk The cost of construction materials suddenly increases.</p>

Design Summary	Performance Targets and/or Indicators	Data Sources and/or Reporting Mechanisms	Assumptions and Risks
	(v) Residual chlorine at tail ends of water supply system maintained at 0.2–0.4 parts per million	completion and commissioning certificates provided by investment program construction supervision consultant	
Sewerage and sanitation system efficiency improved through rehabilitation and reconstruction, and coverage expanded	(i) Access to sewerage network increased from 83,000 people in 2011 to 305,000 in 2019 (ii) Sewer-cleaning vehicles procured and made operational by 2011 (iii) Sewage pumps operating daily and discharging sewage to treatment plants (iv) Sewage treatment plants rehabilitated or constructed to treat and safely discharge sewage ^d		
<p>Component 2: Institutional Effectiveness</p> <p>Business plans developed and implemented</p> <p>Financial management improved; management information system and accounting system developed</p> <p>Geospatial WSS utility management systems operationalized</p> <p>Management capacity of UWSCG enhanced</p>	<p>By 2019:</p> <p>UWSCG develops long-term capital improvement plans, asset strengthening plans, resource mobilization, and expenditure management plans</p> <p>(i) UWSCG operating ratio improved from 1.8 in 2010 to 1 by 2019, indicating improved financial management</p> <p>(ii) UWSCG revenue collection efficiency improved from 49% in 2010 to 95% by 2019</p> <p>(iii) Sex-disaggregated consumer database created for UWSCG to develop targeted marketing campaigns for households headed by women</p> <p>Calibrated network models developed for water and sewerage networks based on geographic information system maps</p> <p>(i) WSS management program with Georgian universities operationalized</p> <p>(ii) Women in 30% of key management staff positions in UWSCG</p> <p>(iii) UWSCG staff trained in financial management and accounting (30% of them women)</p> <p>(iv) Sex-disaggregated data base for human resource management in</p>	<p>Semiannual progress reports prepared by UWSCG</p> <p>UWSCG annual work plans</p>	<p>Risk</p> <p>Enrollment in the WSS management program is low.</p>

Design Summary	Performance Targets and/or Indicators	Data Sources and/or Reporting Mechanisms	Assumptions and Risks
Sector regulatory capacity of GNEWSRC, MEPNR, and MA developed	place (v) MEPNR confirming treated sewage meets discharge standards (i) GNEWSRC staff approve tariff and monitor WSS service delivery (ii) MEPNR staff undertake monitoring of treatment facility performance and effluent discharge standards (iii) MA staff undertake monitoring of drinking water quality standards		
Component 3: Project Implementation Support Public awareness program effectively implemented, materials on hygiene and sanitation disseminated, and women developed as hygiene and sanitation advocates	By 2019: (i) Each investment program service center having a customer care unit at least 30% staffed by women that informs, educates, and communicates on water, hygiene, and sanitation (ii) Public awareness program targeting women as household managers rolled out in all investment program towns	Semiannual progress reports prepared by UWSCG PPMS reports prepared by UWSCG UWSCG annual work plans	Assumption Nongovernment organizations are actively involved in educating beneficiaries on project benefits.

ADB = Asian Development Bank, ADF = Asian Development Fund, GNEWSRC = Georgia National Energy and Water Supply Regulatory Commission, km = kilometer, MA = Ministry of Agriculture, MEPNR = Ministry of Environmental Protection and Natural Resources, MLD = million liters per day, OCR = ordinary capital resources, PPMS = project performance management system, UWSCG = United Water Supply Company of Georgia Limited Liability Company; WSS = water supply and sanitation.

^a The baseline will be re-established during socioeconomic surveys conducted as a part of the project performance management system and will include knowledge, attitude, and practice surveys.

^b Waterborne diseases cause diarrhea and will be confirmed during baseline surveys.

^c Includes pour-flush latrines with reticulated sewerage networks.

^d Capacity to be determined during implementation.

Source: Asian Development Bank.

REVISED DESIGN AND MONITORING FRAMEWORK – Tranche 1

Design Summary	Performance Targets and/or Indicators	Data Sources and/or Reporting Mechanisms	Assumptions and Risks
<p>Impact Improved water supply in Kutaisi, Mestia, Poti and Anaklia</p>	<p>By the end of Tranche 1 plus three years (2019).²⁴</p> <p>(i) Population access to 24-hr potable water supply increased from 9% in 2011 to 36% by 2016</p> <p>(100% female headed households in the region will be covered)</p>	<p>Sex-disaggregated baseline survey conducted at Investment Program inception (2011) and completion (2014) and annually thereafter.</p> <p>Surveys conducted as a part of PPMS and by the UWSCG</p>	<p>Assumptions The Government continues to provide support for an enabling investment climate.</p>
<p>Outcome Improved operations of the UWSCG</p>	<p>By end of Tranche 1 (2016):</p> <p>(i) UWSCG operating ratio improved from 1.8 in 2010 to 1.4 by 2015, indicating improved financial management</p> <p>(ii) UWSCG revenue collection efficiency improved from 49% in 2010 to at least 75% in 2015</p>	<p>UWSCG Annual Reports and audited statements</p>	<p>Assumptions Government provides adequate incentives to ensure water company staff and Management Contractor provides efficient service delivery.</p> <p>Risks Political systems interfere with enforcement of legislative and regulatory control.</p>
<p>Outputs Component 1: Infrastructure Improvement</p> <p>Water intake, treatment and transmission pipeline constructed</p>	<p>(i) 39,500 cum reservoirs are rehabilitated and/or reconstructed</p> <p>(ii) 110 km of transmission and distribution mains are newly constructed</p> <p>(iii) 30 MLD capacity water treatment plants constructed</p> <p>(iv) Energy savings achieved through efficient pumping systems</p> <p>(v) Residual chlorine at tail ends of water supply system maintained between 0.2 and 0.4 parts per million</p>	<p>Semiannual progress reports prepared by the UWSCG</p> <p>Disbursement and reimbursement records maintained by UWSCG</p> <p>PPMS reports prepared by UWSCG</p> <p>UWSCG annual work plans</p> <p>As-built drawings developed by contractors</p> <p>Project component</p>	<p>Assumptions Ongoing donor financed projects are efficiently implemented.</p> <p>Risks Sudden increase in cost of construction items.</p>

²⁴ Baseline will be re-established during socioeconomic surveys conducted as a part of the project performance management system (and will include knowledge, attitude, and practice surveys).

Design Summary	Performance Targets and/or Indicators	Data Sources and/or Reporting Mechanisms	Assumptions and Risks
		completion and commissioning certificates provided by Investment Program Construction Supervision Consultant	
<p>Component 2: Institutional Effectiveness</p> <p>Business Plans developed and implemented</p> <p>Financial management improved, MIS and Accounting systems developed</p> <p>Geospatial WSS utility management systems operationalized</p> <p>Management capacity of UWSCG enhanced</p> <p>Sector regulatory capacity of GNEWSRC, MEPNR, and MA developed</p>	<p>(i) UWSCG develops long-term capital improvement plans, asset strengthening plans, resource mobilization and expenditure management plans</p> <p>(i) UWSCG operating ratio improved from 1.8 in 2010 to 1.4 by 2015, indicating improved financial management</p> <p>(ii) UWSCG revenue collection efficiency improved from 49% in 2010 to at least 75% in 2015</p> <p>(iii) Sex-disaggregated consumer database created for UWSCG to develop targeted marketing campaigns for female household heads</p> <p>(i) Calibrated network models developed for water and sewerage networks based on GIS maps</p> <p>(i) WSS management program with Georgian universities operationalized</p> <p>(ii) UWSCG staff trained on financial management and accounting (30% number of women)</p> <p>(iii) Sex-disaggregated data base for human resource management in place</p> <p>(i) GNEWSRC staff approve UWSCG tariff and monitor service delivery</p> <p>(ii) MEPNR staff monitor treatment facility</p>	<p>Semiannual progress reports prepared by UWSCG</p> <p>UWSCG annual work plans</p>	<p>Risks</p> <p>Poor enrollment in the WSS management program</p>

Design Summary	Performance Targets and/or Indicators	Data Sources and/or Reporting Mechanisms	Assumptions and Risks
	performance and effluent discharge standards (iii) MA staff monitor drinking water quality standards		
Component 3: Project Implementation Support Public awareness program effectively implemented, materials on hygiene and sanitation disseminated, and women developed as hygiene and sanitation advocates	(i) UWSCG service center in Anaklia, Kutaisi, Mestia, and Poti has a customer care unit staffed by women (at least 30%), which disseminates IEC on water, hygiene and sanitation practices (ii) Public awareness program (targeting women as household managers) rolled out in all Investment Program towns	Semiannual progress reports prepared by UWSCG PPMS reports prepared by UWSCG UWSCG annual work plans	Assumption Nongovernment organizations actively involved in educating beneficiaries on project benefits

Activities and Milestones:	Inputs
Component 1: Infrastructure Improvement <ul style="list-style-type: none"> – Water intake, treatment, transmission main and distribution network constructed (January 2015) – Equipment for system performance monitoring and improvement procured (July 2013) Component 2: Institutional Effectiveness <ul style="list-style-type: none"> – Management Contractor appointed (January 2013) – Sex-disaggregated consumer database created (January 2013) – MIS and revenue enhancement plans rolled out (January 2014) Component 3: Investment Project Implementation <ul style="list-style-type: none"> – Sex-disaggregated baseline surveys conducted (October 2012) – Detailed Engineering Design consultants appointed (October 2010) – Supervision Engineers appointed (October 2012) – GAP targets confirmed (December 2013) 	ADB ADF loan: \$80 million Government: \$25 million Total: \$105 million

cum = cubic meter, IEC = information, education and communication, GAP = gender action plan, GNEWSRC = Georgia National Energy and Water Supply Regulatory Commission, km = kilometer, MLD = million liters per day, MA = Ministry of Agriculture, MEPNR = Ministry of Environmental Protection and Natural Resources, PPMS = project performance management system, UWSCG = United Water Supply Company of Georgia LLC, WSS = water supply and sanitation

Source: Asian Development Bank estimates.

SUMMARY POVERTY REDUCTION AND SOCIAL STRATEGY

Country: Georgia	Project Title: Urban Services Improvement Investment Program		
Lending / Financing Modality: Multitranche Financing Facility	Department / Division:	Central and West Asia Department Urban Development and Water Division	

I. POVERTY ANALYSIS AND STRATEGY	
A. Links to the National Poverty Reduction Strategy and Country Partnership Strategy	
<p>The investment program links with the national policy document <i>United Georgia Without Poverty</i>^a by improving the quality of water supply and the sanitation system and by expanding households' access to water supply and sanitation (WSS) infrastructure. The investment program assists the government in realizing Millennium Development Goals (MDGs), especially MDG 7, by broadening urban water supply coverage. The Basic Data and Directions Program (2007), which prepares implementation plans for national programs, states that there will be improvements to WSS infrastructure in the regions of Samegrelo–Zemo Svaneti and Kvemo Kartli, where the investment program is planned. It also links with national targets to improve health and reduce household expenditure on medical care. In the interim operational strategy for Georgia of the Asian Development Bank (ADB), developing infrastructure is a core investment area.^b</p>	
B. Poverty Analysis	Targeting Classification: Targeted intervention (TI-M7)
1. Key issues.	
<p>Widespread poverty has been a major unresolved problem for Georgians since independence in 1991. According to official statistics and comprehensive poverty studies in 2010, 21% of the country's population lives in poverty,^c including 8.8% in extreme poverty. A 2009 United Nations Children's Fund survey monitoring social welfare found that poverty was concentrated in secondary towns. Further, the survey found poverty incidence high among households headed by women, at 25%.^d</p> <p>The main reason for persistently high poverty is high unemployment, at 16.9%. Economic recovery has recently occurred, but it has not yet reduced unemployment or alleviated poverty. Limited job opportunities encourage a high rate of out migration. An increasing percentage of migrants are women, now 56%, as opportunities for men to find work in the Russian Federation declined after the economic crisis and the war in 2008.</p> <p>Georgia's targeted social assistance program is key to improving living standards for the poor. One third of officially recognized poor households and 40% of extremely poor households receive no social assistance at all. Free health insurance for vulnerable families is concentrated in the poorest quintile of household, but even in this group only 21.3% are covered. The government is improving the targeting mechanism of the targeted social assistance program but realizes that creating employment is the best way to reduce poverty.</p>	
2. Design features.	
<p>Physical investment. Improving WSS services and generating awareness of the importance of clean water and hygiene will improve public health and hygiene, especially among the poor, internally displaced, and households headed by women. In communities of internally displaced people, the improved water quality and provision of public toilets and washing facilities will reduce waterborne and sanitation-related disease and significantly cut coping costs incurred to compensate for inadequate water supply and low water pressure. The quality of life will be enhanced by environmental improvement consequent to introducing proper sewerage and wastewater treatment in towns with decaying infrastructure and pit latrines. Construction for physical investments under the investment program will create temporary employment and require labor for system operation and maintenance in the long term.</p> <p>Investment in institutional effectiveness. Residents will be educated on their customer rights and the creation of a reliable grievance-hearing mechanism. Monitoring the efficiency of WSS services for the poor will be based on consumer groups' feedback, census information, disconnection rates, complaint statistics, and information collected by local nongovernment organizations (NGOs). The investment program will benefit from the regional technical assistance (TA) Promoting Gender-Inclusive Growth in Central and West Asia Developing Member Countries.^e Through the regional TA, a pilot project on consumer education and awareness generation will be implemented in Mestia and Marneuli by an apex NGO. The apex NGO will conduct a comprehensive household survey to determine the improvements needed in water and wastewater management in households before and after an information, education, and communication (IEC) campaign, which will especially target women as household managers. The results of the pilot project will inform the public awareness campaign of the United Water Supply Company of Georgia (UWSCG), the investment program's implementing agency. The public awareness campaign will then be rolled out in parallel in all six secondary towns to create awareness and ownership of the investment program. Sex-disaggregated data on poor households' access and affordability will guide long-term WSS services to the poor.</p>	

II. SOCIAL ANALYSIS AND STRATEGY

A. Findings of Social Analysis

Key issues. A socioeconomic survey conducted by the policy and advisory TA consultants in June 2010 covered 450 households to analyze social, poverty, and gender development issues in the Georgia's urban centers, where 39.7% of households live below the minimum subsistence level of GEL220/month, equivalent to \$33.50/person for an average household with 3.5 members. At 40.7%, proportionately more Georgians live below the minimum subsistence level than do Azeris and Armenians, who receive more remittances from Azeris and Armenians working abroad. The different prevalence of poverty in secondary towns and national average is confirmed by the recent United Nations Children's Fund survey monitoring social welfare.

Only 87% urban residents have access to piped water service in Georgia, where the MDG 7 target is 95%. Almost 64% of customers served by UWSCG experience only intermittent service, as only 25% of service centers provide 24-hour coverage. Almost half of urban residents lack piped sewer connections and rely on other onsite sanitation systems, including pit latrines and septic tanks. Wastewater treatment is extremely limited, threatening public health and the environment.

The number of households directly supplied by UWSCG with tap water is 57.4%, while 32.7% of households obtained water through a tap from another source or water tanker and the rest has no supply at home. These figures actually reflect a wide range of conditions, as some secondary towns, such as Poti, are fully equipped with piped water and others, such as Zugdidi or Anaklia, require all families to use alternative sources because the piped water system has not operated since the war in 1993. Among those with access to piped water, almost half have supply for only 3–4 days per week, mostly for only 2–4 hours per day.

To cope with the situation, consumers purchase storage tanks and water pumps to cover the times when water supply is cut. Those without access to a piped water dig wells or boreholes and pump water into a range of containers. Only 2% of households try to improve the quality of water before using it for drinking and cooking by filtering, boiling or chlorinating it. The proportion of all households spending more than 3% of their income on utilities was 7.5%. Average water-related costs are GEL2.5/month. Functional central sewerage systems reach 38.2% of households (38.2%).

Knowledge and information on the importance of WSS services are conspicuously lacking, as are customer rights and tariff schemes.

B. Consultation and Participation

1. Provide a summary of the consultation and participation process during the project preparation.

Policy and advisory TA consulted with the central and local governments, civil society including NGOs, and community men and women meeting separately, using key informant interviews, surveys, and focus group discussions.

2. What level of consultation and participation is envisaged during the project implementation and monitoring?

Information sharing Consultation Collaborative decision making Empowerment

3. Was a consultation and participation plan prepared? Yes No

All stakeholders will be consulted as part of a structured participation process, which will commence with an IEC campaign to be conducted in the two pilot areas of Mestia and Marneuli by an apex NGO, thereby creating a direct feedback mechanism for the community. The IEC campaign will generate awareness of the benefits of improved WSS, the cost savings of having safe and continuous water supply, safe sanitation, and the reasons why the improved service will require a higher tariff.

C. Gender and Development

Gender Mainstreaming Category: Effective gender mainstreaming

1. Key issues.

Georgian society is still influenced by prevailing gender norms that a man's role is to work outside the home to support the family and a woman's is to tend to family obligations and manage the household. Because of the difficult economic situation, more women carry the double burden of running the household and contributing to family income. This is especially true of the high number of households headed by women because of male labor out migration. The limited availability of reliable WSS services, especially for women, is important for its implications for health and hygiene. In addition, women are not fully aware of their WSS consumer rights.

In the urban WSS sector, women's participation still needs to be increased. According to the human resource department of the UWSCG, 35% of employees are women, largely performing administrative tasks. In top management, 4 out of 14 department heads, or 30%, are women. A career development plan for UWSCG is not yet in place, and there are plans now to create a computerized database of UWSCG employees, which would allow sex-disaggregated analysis of human resource management. Regarding policy, women's representation in the State Commission on Water Supply and Energy is low, with only 2 women among its 19 members.

2. Key actions. <input checked="" type="checkbox"/> Gender plan <input type="checkbox"/> Other actions/measures <input type="checkbox"/> No action/measure The investment program will improve women's participation in WSS management and service delivery by creating employment and career development opportunities. It will improve the awareness and education of women, as household managers, of WSS issues and thus empower women as informed customers. An impact analysis of a comprehensive IEC campaign in the two pilot areas of Mestia and Marneuli on consumer behavior and new clients' rates of signing for UWSCG services will be conducted in 2012, supported by TA for Promoting Gender-Inclusive Growth in Central and West Asia Developing Member Countries, ^e to inform the public awareness campaigns of UWSCG, which will be rolled out in all investment program towns, with evidence-based research on the most effective IEC campaign methods.			
III. SOCIAL SAFEGUARD ISSUES AND OTHER SOCIAL RISKS			
Issue	Significant/Limited/ No Impact	Strategy to Address Issue	Plan or Other Measures Included in Design
Involuntary resettlement	Limited	Temporary impact during construction is anticipated along a water transmission pipeline in Mestia.	<input checked="" type="checkbox"/> Resettlement plan <input checked="" type="checkbox"/> Resettlement framework
Indigenous peoples	No impact	Indigenous peoples safeguards will not be triggered by this investment program, as Georgia has no such communities as defined by ADB.	<input checked="" type="checkbox"/> No action
Labor <input checked="" type="checkbox"/> Employment opportunities <input type="checkbox"/> Labor retrenchment <input checked="" type="checkbox"/> Core labor standards	Limited	Employment in UWSCG and career development opportunities will accrue. Subprojects may generate employment for local people during construction and operation.	<input type="checkbox"/> Plan <input checked="" type="checkbox"/> Other action <input type="checkbox"/> No action
Affordability	Significant	The tariff scheme will be developed in line with willingness to pay and social economic survey.	<input checked="" type="checkbox"/> Action <input type="checkbox"/> No action
Other risks and/or vulnerabilities <input checked="" type="checkbox"/> HIV/AIDS <input type="checkbox"/> Human trafficking <input type="checkbox"/> Others (conflict, political instability, etc.), please specify	No impact	The influx of construction workers may spread HIV/AIDS. Prevention programs will be provided for the construction workers through public awareness programs.	<input type="checkbox"/> Plan <input checked="" type="checkbox"/> Other action <input type="checkbox"/> No action
IV. MONITORING AND EVALUATION			
Are social indicators included in the design and monitoring framework to facilitate monitoring of social development activities and/or social impacts during project implementation? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			

^a Government of Georgia. 2008. *United Georgia Without Poverty*. Tbilisi.

^b ADB. 2008. *Georgia: Interim Operational Strategy, 2008–2009*. Manila.

^c The current official Geostat threshold of poverty is set at GEL89.7 per person per month; 60% of median consumption in 2009, the threshold for extreme poverty, is set at GEL61.1 in 2009, which is equivalent to \$1.25/day, the minimum required to meet daily caloric needs.

^d In 2009, Georgia scored 0.414 in the gender empowerment index, reflecting high gender inequality. To remove such inequalities, the government has enacted the Gender Equality Law.

^e ADB. 2010. *Technical Assistance for Promoting Gender Inclusive Growth in Central and West Asia Developing Member Countries*. Manila (TA 7563-GEO).

Source: Asian Development Bank.

GENDER ACTION PLAN (GAP)²⁶

Objective	Actions and Description	Target/Indicator and Timeframe	Institutional Responsibility
Component 2: Institutional Effectiveness			
<p>1. Knowledge of consumer behavior of male and female headed households gained</p> <p>2. Management capacity of UWSCG enhanced and human resource management gender mainstreamed</p>	<ul style="list-style-type: none"> - Train staff working on MIS and accounting system on sex-disaggregated data collection - Establish sex-disaggregated consumer database - Maintain equal employment opportunities for women and men in UWSCG, and facilitate their career development - Conduct capacity development on gender equality at the workplace - Inform annual report on human resources of UWSCG with gender analysis 	<ul style="list-style-type: none"> - Sex-disaggregated consumer database created for UWSCG (2011) - UWSCG Annual Report on consumer profile informed by gender analysis of sex-disaggregated consumer data base (2012) - Women representation in key management staff of UWSCG is ensured (approximately 30% by 2013) - At least 50% of staff in Investment Program town customer service care centers are women (2013) - Sex-disaggregated data base introduced for human resource management (2011) - Yearly report on human resource development informed with gender analysis (2012) - UWSCG staff trained on financial management and accounting (30% number of women) 	UWSCG
Component 3: Project Implementation Support			
<p>1. Public Relations (PR) campaign of UWSCG is informed by survey on household water management, household needs and knowledge gaps</p> <p>2. UWSCG PR campaign is supported by country wide information, education and communication (IEC) campaigns</p> <p>3. Complaints redressed</p>	<ul style="list-style-type: none"> - Conduct survey on household water management and sanitation practices - Analyze knowledge gaps of households (especially women as household managers) on water, hygiene, sanitation, environmental impact of sewage, consumer rights, and efficient water use - Develop IEC material on water, hygiene, sanitation, customer rights and water usage efficiency based on consumer needs and knowledge gaps - Train staff of customer care centers as hygiene and sanitation advocates - Roll out public awareness program from Marneuli and Mestia (pilot area) to the 6 Investment Program towns - Establish complaint mechanism and database in customer care centers and identify consumer service requirement (targeting the needs of women in specific) 	<ul style="list-style-type: none"> - Results of survey are analyzed in report (2011) - Public awareness program is informed by survey results (2011) - Apex NGO contracted and IEC material on water, hygiene and sanitation practices, consumer rights, complaint mechanisms is disseminated in the 6 Investment Program towns (2011- continuous) - Local women NGOs and female community leaders are involved in IEC material distribution and are trained to conduct public awareness program (2011-continuous) - All staff of customer care centers are trained on water, hygiene, sanitation practices, customer rights and complaint mechanisms (2011- continuous) - Feedback mechanism on effectiveness of IEC campaign through women determined - Annual report on quantity and redress of complaints published (2011-continuous) 	UWSCG, Apex NGOs, and local NGOs

²⁶ Applied to all tranches.

PROJECT SPECIFIC COVENANTS - AS DISPLAYED IN LEGAL AGREEMENTS (Loan 2749) – T1

Schedule	Para No.	Description	Remarks/Issues	Type
3	6	Withdrawals from the Loan Account may be made for reimbursement of eligible expenditures incurred under the Project before the Effective Date, but not earlier than 12 months before the date of this Loan Agreement in connection with Works, Goods, and Consulting Services, subject to a maximum amount equivalent to 20% of the Loan amount	Disbursements achieved in Q3 2011 under retroactive financing.	Financials
3	7	Notwithstanding any other provision of this Loan Agreement, no withdrawal shall be made from the Loan Account for Components 1 and 3 of the Project until the Subsidiary Loan Agreement, in form and substance satisfactory to ADB, has been duly authorized or ratified, and executed and delivered on behalf of, the Borrower and UWSCG, and is legally binding upon the parties thereto in accordance with its terms	Subsidiary Loan Agreement (SLA) has been executed in the form and substance satisfactory to ADB. Initial withdrawal application processed and value dated 11 Aug 2011.	Financials
LA		Sec 4.03 (a)The Borrower shall: (i) maintain, or cause to be maintained, separate accounts for the Project; (ii) have such accounts and related financial statements audited annually, in accordance with appropriate auditing standards consistently applied, by independent auditors whose qualifications, experience and terms of reference are acceptable to ADB; (iii) furnish to ADB, as soon as available but in any event not later than 9 months after the end of each related fiscal year, certified copies of such audited accounts and financial statements and the report of the auditors relating thereto (including the auditors' opinion on the use of the Loan proceeds and compliance with the financial covenants of this Loan Agreement), all in the English language; and (iv) furnish to ADB such other information concerning such accounts and financial statements and the audit thereof as ADB shall from time to time reasonably	Separate accounts are maintained. Audit firm has been selected for auditing of Company's Financial Statement of FY2010-2011 and Project's Financial Audit of FY 2011. Final Audit Report has been sent to ADB by Feb. 2013. Extended submission date was prior agreed with ADB. For starting new selection process we are waiting for ADB's approval on Financial Audit only for Projects, not for whole Company, considering that without exact information regarding Company's assets and full valuation of all property, UWSCG will not be able to receive an unmodified audit opinion on its financial statements in future period as well.	Financials

Schedule	Para No.	Description	Remarks/Issues	Type
		request		
LA		<p>Sec 4.03</p> <p>(b) The Borrower shall enable ADB, upon ADB's request, to discuss the Borrower's financial statements for the Project and its financial affairs related to the Project from time to time with the auditors appointed by the Borrower pursuant to subparagraph (a) of this Section, and shall authorize and require any representative of such auditors to participate in any such discussions requested by ADB, provided that any such discussion shall be conducted only in the presence of an authorized officer of the Borrower unless the Borrower shall otherwise agree</p>		Financials
PA		<p>Sec 2.06</p> <p>UWSCG shall maintain, or cause to be maintained, records and accounts adequate to identify the Goods, Works and Consulting Services and other items of expenditure financed out of the proceeds of the Loan, to disclose the use thereof in the Project, to record the progress of the Project (including the cost thereof) and to reflect, in accordance with consistently maintained sound accounting principles, its operations and financial condition</p>	<p>Records and accounts have been maintained. Adequacy to be checked and confirmed by the auditor - Projects Financial Statements give true and fair view of Project's sources and payments for the FY 2011 in accordance with relevant financial agreements and accounting principles.</p> <p>Final Audit Report for FY 2011 has been submitted to ADB by Feb. 2013 (extended submission date has been prior agreed with ADB).</p>	Financials
4	5	The Borrower shall not award any Works contracts until the applicable IEE and RP have been approved by ADB	<p>No contracts for works were awarded without/prior to ADB approval of applicable IEEs and RPs.</p> <p>MES - 01 (headworks) was awarded after implementation of the RRP, and issuing final compliance report.</p> <p>IEEs for Kutaisi, Zugdidi, Poti and Marneuli were submitted in Nov 2011</p> <p>Revised IEEs for REG-01 package (Kutaisi, Poti, Anaklia Headworks) were submitted in Jul 2012</p>	Safeguards

Schedule	Para No.	Description	Remarks/Issues	Type
5	10	The Borrower shall ensure that the Project is developed, implemented and maintained in accordance with all applicable laws and regulations of the Borrower, ADB's Safeguard Policy Statement (2009), the EARF, the IEE and the EMP	Anaklia and Mestia IEEs posted at ADB website in June 2011. IEEs for Kutaisi, Zugdidi, Poti, and Marneuli submitted 10 Nov 2011. EARF prepared in November 2010 EMP prepared on 4 July 2010.	Safeguards
5	11	The Borrower shall cause UWSCG to ensure that: (a) an IEE is prepared for the Project in accordance with all applicable laws and regulations of the Borrower, ADB's Safeguard Policy Statement (2009) and the EARF, and that the IEE is approved by ADB and adhered to during the design, construction and operation phases of the Project; (b) the EMP is implemented by the contractors, all recommendations of the EMP are incorporated in the bidding documents and civil works contracts to ensure compliance, and adequate budgetary allocation is made by the contractors for implementation of the EMP. Prior to commencement of civil works, UWSCG shall update the EMP in consultation with the construction supervision consultant and the contractors; and (c) semiannual monitoring reports on EMP implementation are submitted to ADB in a timely manner.	Anaklia and Mestia IEEs posted at ADB website in June 2011. IEEs for Kutaisi, Zugdidi, Poti, and Marneuli submitted 10 Nov 2011. EARF prepared in November 2010 EMP prepared on 4 July 2010	Safeguards
5	12	The Borrower shall ensure that no proceeds of the Loan is used to finance any activity included in the list of prohibited investment activities provided in Appendix 5 of ADB's Safeguard Policy Statement (2009).	Ensured.	Safeguards
5	13	The Borrower shall cause UWSCG to ensure that no water intake facility under the Project shall be commissioned and made operational until UWSCG has been issued with a license or permit for water	In progress. UWSCG abides by local legislation and regulation as to water abstraction.	Safeguards

Schedule	Para No.	Description	Remarks/Issues	Type
		abstraction activities for such facility.		
5	14	The Borrower shall ensure that the Project is developed, implemented and maintained in accordance with all applicable laws and regulations of the Borrower, ADB's Safeguard Policy Statement (2009), the RF and the RP.	In progress. Mestia RP approved on 29 July 2011. The final compliance report for RP implementation was approved on 9 September 2011. RF prepared and posted in November 2010. Compliance Report on resettlement in Mestia submitted/posted Sep 5, 2011	Safeguards
5	15	The Borrower shall cause UWSCG to ensure that: (a) a RP acceptable to ADB is prepared for the Project in accordance with all applicable laws and regulations of the Borrower, ADB's Safeguard Policy Statement (2009) and the RF; (b) all land and rights-of-way required by the Project are made available free and clear from any and all rights and claims of third parties and any other encumbrances in a timely manner, subject to compliance with all applicable laws and regulations of the Borrower, ADB's Safeguard Policy Statement (2009), the RF and the RP; and (c) contractors shall only commence civil works after the RP has been implemented in accordance with its terms (including compensation of affected persons based on the detailed engineering design estimates confirming pipeline alignment), as verified by an independent body or person.	In progress. Resettlement plan for MES – 01 agreed with ADB on July 14, 2011. As indicated in Compliance Report, all land and rights-of-way required by the Project are made available free and clear from any and all rights and claims of third parties and any other encumbrances in a timely manner, subject to compliance with all applicable laws and regulations of the Borrower, ADB's Safeguard Policy Statement (2009), the RF and the RP State-owned parcel of land identified for Anaklia reservoir registered under UWSCG (completed). The contractors commenced Civil Works, after implementation of the RP in accordance with its terms was verified by an External Monitoring Consultant (EMC). This was stipulated in the Compliance Report.	Safeguards
5	4	The Borrower shall ensure that: (a) ADB is kept informed of the Borrower's policies and programs for the WSS sector that will materially affect the	Ensured through permanent consultations with UWSCG. No issue so far.	Sector

Schedule	Para No.	Description	Remarks/Issues	Type
		economic viability of the Project; and (b) best efforts are used to sustain and strengthen the WSS sector		
5	5	The Borrower shall cause GNEWSRC to strengthen its regulatory function, including tariff setting and regulation of service standards of service providers	To be supported by particular activities under Component 2 of the program that target strengthening regulatory function of GNEWSRC, including tariff setting and regulation of service standards of service providers	Sector
5	6	The Borrower shall cause UWSCG to strengthen its financial management through: (a) adoption of a 3-year business plan by the end of 2013 to improve services, enhance revenue and reduce system loss; and (b) achievement of financial sustainability through attainment of an operating ratio (i.e. the ratio of expenditure over revenue) of 1 by the end of 2019	In progress.	Sector
5	7	The Borrower shall cause UWSCG to improve its service delivery and revenue collection through attainment of an aggregate 95% revenue collection rate per annum from all domestic consumers and non-domestic consumers by the end of 2019.	In progress.	Sector
5	8	The Borrower shall cause UWSCG to improve its management of WSS assets through the establishment and implementation of a geospatial WSS management system by the end of 2013	6 towns completed by May 31, 2011. The remaining cities under UWSCG coverage to be included in the Geospatial WSS management system after GIS mapping of WSS systems (Financing of GIS mapping is considered from Tr 3).	Sector
5	9	The Borrower shall ensure that ADB's consent is obtained at least 3 months prior to the implementation of any of the following: (a) any change in the ownership or control of UWSCG or any asset, facility or structure rehabilitated, procured or constructed under the Project; or (b) any change to UWSCG's authority or functions, that may affect implementation of the Project. The Borrower shall ensure that any such change is carried out in accordance with all applicable laws and regulations of the Borrower	From December 5, 2013 Management of UWSCG has been changed in accordance with applicable laws and regulations.	Sector
5	16	The Borrower shall cause UWSCG to ensure	No issues so far.	Social

Schedule	Para No.	Description	Remarks/Issues	Type
		monitoring of the social impacts throughout the implementation of the Project in consultation with local governments, local communities and nongovernment organizations. UWSCG shall ensure that all civil works contractors: (a) comply with all applicable labor laws of the Borrower; (b) use their best efforts to employ women and local people, including disadvantaged people, living in the vicinity of the Project; (c) disseminate information at worksites on health safety (including HIV prevention programs) for those employed during construction; (d) maintain equal pay to men and women for work of equal type; (e) provide safe working conditions and appropriate facilities for male and female workers; and (f) abstain from child labor.		
5	17	The Borrower shall cause UWSCG to: (a) ensure that the gender action plan prepared for the Investment Program is implemented in a timely manner under the Project; and (b) submit semiannual reports to ADB	The Tender for Gender Consultant is announced on 04.06.13, selected candidate should prepare GAP, and he/she will guide the implementation process in UWSCG.	Social
5	18	The Borrower and UWSCG shall: (a) comply with ADB's Anticorruption Policy (1998, as amended to date); and (b) cooperate with any such investigation and extend all necessary assistance for satisfactory completion of such investigation.	The Borrower and UWSCG cooperated with an investigation conducted by OAI under advance actions taken by the Borrower to appoint detailed engineering design consultants. The matter has been resolved.	Social
PA		Sec 2.08. UWSCG shall furnish to ADB promptly after physical completion of the Project, but in any event not later than 3 months thereafter or such later date as ADB may agree for this purpose, a report on the execution and initial operation of the Project, including its cost, the performance by UWSCG of its obligations under this Project Agreement and the accomplishment of the purposes of the Loan.		Others
		Established, Staffed, and Operating PMU or PIU	UWSCG implements ADB funding projects without PIU, staff is selected from existing departments of UWSCG with assistance of ADB independent	Others

Schedule	Para No.	Description	Remarks/Issues	Type
			local and international consultants.	
		Fielding of Consultants	<p>Contract of detailed engineering design consulting firm signed on 19 October 2010. Above mentioned contract expires on 31th of Aug.</p> <p>Audit service is as well implemented. Contracted firm submitted Audit report on Feb 2013.</p> <p>Construction Supervision contractor is awarded, contract implementation has been started on 29th of October 2012.</p> <p>Management Contractor is awarded, contract signed in 2 July 2013.</p>	Others
LA		<p>Sec 5.01</p> <p>A date 30 days after the date of this Loan Agreement is specified for the effectiveness of the Loan Agreement for the purposes of Section 9.04 of the Loan Regulations</p>	Loan made effective on 15 Jun 2011.	Others
PA		Section 2.08. UWSCG shall furnish to ADB semiannual reports on the execution of the Project and on the operation and management of the Project facilities.	July - December 2011 semi-annual report due in January 2012	Others