

Project Administration Manual

Project Number: 51132-002
Loan Number: LXXXX
September 2020

Georgia: Sustainable Water Supply and Sanitation Sector Development Program

CURRENCY EQUIVALENTS

(as of 10 July 2020)

Currency unit	–	lari (GEL)		
GEL1.00	=	€0.290067	or	\$0.327022
\$1.00	=	GEL3.057900	or	€0.886997
€1.00	=	GEL3.447475	or	\$1.127400

ABBREVIATIONS

ADB	–	Asian Development Bank
COVID-19	–	coronavirus disease
DMF	–	design and monitoring framework
EA	–	executing agency
EMP	–	environment management plan
GAP	–	gender action plan
GNERC	–	Georgian National Energy and Water Supply Commission
GRM	–	grievance redress mechanism
IA	–	implementing agency
IPMO	–	Investment Program Management Office
LARF	–	land acquisition and resettlement framework
LARP	–	land acquisition and resettlement plan
MRDI	–	Ministry of Regional Development and Infrastructure
O&M	–	operation and maintenance
PAM	–	project administration manual
SDP	–	Sector development program
SOE	–	statement of expenditure
UWSCG	–	United Water Supply Company of Georgia
WSS	–	water supply and sanitation
WTP	–	water treatment plant

NOTE

In this report, “\$” refers to US dollars.

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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 project on time, within budget, and in accordance with the policies and procedures of the government and the Asian Development Bank (ADB). 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) (executing agency) and United Water Supply Company of Georgia LLC (UWSCG) (implementing agency), are wholly responsible for the implementation of the ADB-financed projects as agreed jointly between the borrower and ADB. ADB staff is responsible for supporting the implementation, including the compliance by MRDI and UWSCG of their obligations and responsibilities for project implementation in accordance with ADB's policies and procedures.

At loan negotiations, the borrower and ADB shall agree to the PAM and ensure the consistency with the loan agreement. Such agreement shall be reflected in the minutes of the loan negotiations. In the event of any discrepancy or contradiction between the PAM and the loan agreement, the provisions of the loan agreement shall prevail.

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

I. PROJECT DESCRIPTION

1. The proposed sector development program (the program) supports the government's pursuit of sustainable water supply and sanitation (WSS) services and an efficient state-owned enterprise (SOE). The policy actions under the stand-alone multitranche PBL will transform WSS governance and institutions to improve performance and financial sustainability, while ensuring funding for basic services during a period of fiscal constraints brought on by the coronavirus disease (COVID-19) pandemic. The project will (i) strengthen the operation and maintenance (O&M) capacity of United Water Supply Company of Georgia (UWSCG),¹ (ii) prepare strategic investment plans for national-scale rural WSS development, and (iii) increase public awareness of infection prevention measures in the context of COVID-19 through a gender-sensitive health, hygiene, and sanitation program. The project will also improve the water supply system in Telavi city, a regional center and employment generation hub, to enable 24-hour water supply.² The TA will introduce high-level technology into asset management systems to enhance O&M in select cities.

2. The program is aligned with the following impact: living conditions and public health in Georgia improved. The program will have the following outcome: performance and financial sustainability of WSS services improved. The PBL will support output 1 by helping strengthen WSS governance and institutions, and the project loan will support output 2 by helping increase the operational efficiency of WSS services. The stand-alone multitranche PBL will be delivered in two tranches to be disbursed in 2020 and 2021 with a post-program partnership framework (P3F) covering 2021–2024.

3. **Output 1: Water supply and sanitation governance and institutions strengthened.** The PBL will support the government in creating a cohesive policy, legal, and institutional basis for balanced urban and rural WSS development. It features 20 policy actions—9 under the first tranche and 11 under the second tranche.

4. **Key reform area 1: Urban and rural water supply and sanitation governance strengthened.** Under the first-tranche policy actions, the PBL will support (i) the national adoption of the Energy and Water Supply Law—replacing the 1997 Law on Energy and Gas—and associated resolutions to strengthen the legislative and regulatory framework for WSS through an established rule for the appraisal of investments and an amended tariff-setting methodology; and (ii) the constitution of a WSS steering committee to plan, coordinate, and monitor WSS activities.

5. Under the second tranche, the PBL will support (i) the submission to Parliament of a draft law on managing water resources to harmonize Georgia's environmental legislation under the Association Agreement with the EU; (ii) an integrated urban and rural WSS policy, including a wastewater and stormwater management strategy with gender- and climate-change-specific provisions; and (iii) a WSS sector development framework for 2021–2030 that incorporates emerging priorities after the 2011–2020 urban WSS sector development plan expires in 2020.

6. **Key reform area 2: Utility's governance and management effectiveness improved.** Area 2 covers a comprehensive framework for the turnaround of UWSCG. The key corporate reforms under the first-tranche policy actions are (i) a supervisory board with at least 30% of members being women; (ii) a high-powered change management committee to prepare for

¹ UWSCG is a limited liability company established in January 2010, and the state owns 100% of the shares.

² Telavi is the 13th largest city with a population of 20,000. It is 158 kilometers east of the capital, Tbilisi. Adequate water supply is critical for Telavi's wine and agricultural production, and for tourism.

institutional transformation and facilitate corporate restructuring; (iii) a corporate strategy for public communication and a metering program to increase revenues, lower costs, and enhance the engagement with the public; (iv) internal staff regulations, an HR management policy, and an HR management committee to spearhead HR reforms; and (v) a time-bound action plan to mainstream outsourcing in UWSCG operations.

7. The second-tranche policy actions ensure UWSCG's compliance with the SOE reforms: it will be one of the first pilot SOEs to implement the statement of corporate intent. The PBL will further support (i) a charter amendment to define the responsibilities, rights, and obligations of the director of UWSCG, its supervisory board, and other committees set up under the first tranche; (ii) a blueprint for corporate restructuring to streamline operations; (iii) UWSCG's performance agreements with regional offices, and with MRDI including key performance indicators and incentives; (iv) an asset management policy and NRW reduction strategy for 2021–2025, once the metering program has yielded more accurate production and consumption data; (v) HR reforms covering an HR policy and development programs, salary and compensation review, performance-based evaluations and incentives, gender equality policy, and workforce rationalization; (vi) a water safety plan to guide emergency responses and disaster risk management; and (vii) a PSP–PPP road map and pipeline.

8. **Post-program partnership framework.** A P3F will be implemented during 2021–2024. It sets the foundation for future engagement with the government and other development partners. It will enable ADB to engage in policy dialogue that supports WSS and SOE reforms, and the implementation of corresponding activities. Through P3F, ADB will assist the government in assessing the policy impact and sustainability of its reforms. The government and ADB will jointly (i) monitor the reform progress, results, and impacts; (ii) identify strategies to overcome gaps and bottlenecks; and (iii) develop a complementary program to support further reforms and future engagement.

9. **Output 2: Operational efficiency of water supply and sanitation services increased.** The project will (i) provide O&M equipment for and improve UWSCG's operational capacity in about 57 cities and towns in 10 regions;³ (ii) develop a strategy and investment plan, and build local capacity for rural WSS development;⁴ (iii) strengthen project management, monitoring, and evaluation;⁵ and (iv) increase public awareness of infection prevention measures in the context of COVID-19 and the importance of health, hygiene, and sanitation; as well as awareness of the value of water conservation. The project will also rehabilitate transmission mains and the distribution network; repair water intakes, pumps, valves, and treatment units; and provide new reservoirs and wells in Telavi. It will enable 24-hour water supply, improving from the average daily 4-hour water supply now; achieve 100% metering from 40% now; increase the number of household connections; reduce the NRW rate; and improve water supply pressure and energy efficiency.

10. The PAM guides the implementation arrangements of the investment component of the SDP (output 2).

³ O&M improvement support includes an O&M road map and action plan; a baseline survey and gap analysis of UWSCG's field offices; capacity development, especially in wastewater management; and the financing of related modern equipment.

⁴ A rural WSS project component will provide a sustainable solution for rural WSS management and operation, including an institutional framework defining the roles and responsibilities of all key stakeholders in rural WSS; guide the formulation of an investment program; and support capacity building.

⁵ The ongoing MFF is supporting advisory services for corporate restructuring and PSP and PPP, and the program will provide additional support, as required.

II. IMPLEMENTATION PLAN

A. Project Readiness Activities

Table 1: Project Readiness Activities

Indicative Activities	2020						Responsible/Unit/Agency/ Government
	May	Jun	Jul	Aug	Sep	Oct	
Advance contracting actions							ADB, UWSCG
Establish project implementation arrangements							ADB, MRDI, UWSCG
ADB Board approval							ADB
Loan signing							ADB, MOF, UWSCG
Government legal opinion provided							MOJ
Loan effectiveness							ADB

ADB = Asian Development Bank, MRDI = Ministry of Regional Development and Infrastructure, MOJ = Ministry of Justice, UWSCG = United Water Supply Company of Georgia.
Source: ADB.

B. Overall Project Implementation Plan

Table 2: Overall Project Implementation Plan

Activities	2020				2021				2022				2023				2024				2025						
	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q						
	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J
A. DMF																											
Output 1: Not applicable																											
Output 2: Operational efficiency of WSS increased																											
2.1 Issue IFB and award Telavi water supply contract																											
2.2 Rehabilitation and construction of Telavi water supply system																											
2.3 Procure service provider for O&M																											
2.4 Install specialized equipment for O&M and conduct training																											
2.5 Recruit consultants for rural WSS strategy & investment plan development. Mobilize by Q2 2021.																											
2.6 Complete rural WSS strategy and investment plan for implementation																											
2.7 Recruit and mobilize consultants for Advisory Services																											
2.7 Complete capacity building and training programs (urban and rural WSS), gender action plan, public awareness campaigns, and communication activities																											
B. Management Activities																											
Advance action activities																											
Procurement plan key activities																											
Final draft of IEE and LARP																											
Submission and review of draft Bidding Document and Submission 1 for Telavi civil works and supervision, respectively																											
Strengthen existing PMO with additional staff resources (August 2020)																											
Conduct baseline data surveys (September 2020)																											
Implementation of environment management plan key activities																											
Gender action plan key activities																											
Develop and adopt WSS gender-sensitive WSS policy																											
Develop equal opportunities strategies																											
Trainings need assessment conducted																											
Trainings conducted for UWSCG staff by women's participation																											
Public outreach campaigns in local community and schools																											
Establish a program monitoring and evaluation system and program performance management system																											
Inception, annual and midterm review																											
Project completion report (2Q 2026)																											

DMF=design and monitoring framework; IEE=initial environmental examination; LARP=land acquisition and resettlement plan; O&M= operations and maintenance; UWSCG=United Water Supply Company of Georgia.

III. PROJECT MANAGEMENT ARRANGEMENTS

A. Project Implementation Organizations: Roles and Responsibilities

11. Under the project loan of the SDP, the executing agency (EA) is the MRDI and the implementing agency is UWSCG. The current Investment Program Management Office (IPMO) at UWSCG will support implementation of the Telavi civil works and supervision, and O&M support. MRDI will appoint its staff as focal for overseeing the development of the Rural WSS Sector Development. Table 3 guides the detailed responsibilities of each organization.

Table 3: Responsibilities of the Project Implementation Organizations

Project Implementation Organizations	Management Roles and Responsibilities
Ministry of Finance	<ul style="list-style-type: none"> ➤ Representative of Borrower • Facilitate negotiation, signing and execution of the legal agreement, and any amendments thereon during project implementation • Timely allocate and make available counterpart funds
Ministry of Regional Development and Infrastructure	<ul style="list-style-type: none"> ➤ Executing Agency • Responsible for overall coordination and implementation of the program • Provides overall strategic planning, guidance, and management support • Coordinates with other ministries on project issues under their jurisdiction • Guide the direction and supervise the consultants for the Rural WSS sector development activities
United Water Supply Company of Georgia	<ul style="list-style-type: none"> ➤ Implementing Agency • Through the existing IPMO, oversee day-to-day project coordination and ensure timely resolution of project related issues • Responsible for project account maintenance, loan disbursement, safeguards implementation, audit, and reporting to ADB. • Responsible for procurement of civil works and consultant recruitment • Administer the civil works and consulting contracts and ensure the quality control of contract execution. • Through the IPMO, review changes to civil works contract in coordination with the construction supervision consultants • Prepare and submit withdrawal applications to ADB through the ADB Disbursement Portal. • Coordinate availability and timely release of government counterpart funds. • Implement the project land acquisition and resettlement plan, including environmental safeguards due diligence, in accordance with ADB's Safeguard Policy Statement (2009) and local requirements. IPMO will submit to ADB required safeguards monitoring reports during project implementation. • Submit annual audited project and entity financial statements to ADB according to schedule stipulated in the loan agreement. • Prepare and submit consolidated quarterly monitoring report to ADB. • Establish the Grievance Redress Systems, and resolve any potential complaints in the field
Tender Committee	<ul style="list-style-type: none"> • Review and act as approval body for procurement of civil works and goods and selection of consultants

Project Implementation Organizations	Management Roles and Responsibilities
	<ul style="list-style-type: none"> • Consists of Managing Director (MD) of UWSCG as the Head of the International Procurement Committee, and a maximum of 10 members appointed by the Managing Director including deputies of MD and heads of departments, as applicable
Asian Development Bank	<ul style="list-style-type: none"> ➤ Provide financing • Guide the executing agency, implementing agency, and IPMO during project implementation • Review and approve all procurement and consultant recruitment actions, and contract modifications in accordance with the loan agreement • Conduct regular loan review missions, including midterm and project completion missions • Monitor compliance with all loan covenants, including safeguards • Review annual audit reports and any follow-up on audit recommendations

IPMO = Investment Program Management Office

B. Key Persons Involved in Implementation

Executing Agency

Ministry of Regional Development and Infrastructure

Officer's Name: Mzia Giorgobiani
 Position: Deputy Minister
 Telephone no: +995 322 510591
 Office address: Al. Kazbegi Avenue, N12, Tbilisi, Georgia

Implementing Agency

United Water Supply Company of Georgia

Officer's Name: Grigol Mandaria
 Position: Director
 Telephone no: +995 322 930000
 Office address: 76b Vazha-Pshavela Avenue, Tbilisi, Georgia

Asian Development Bank

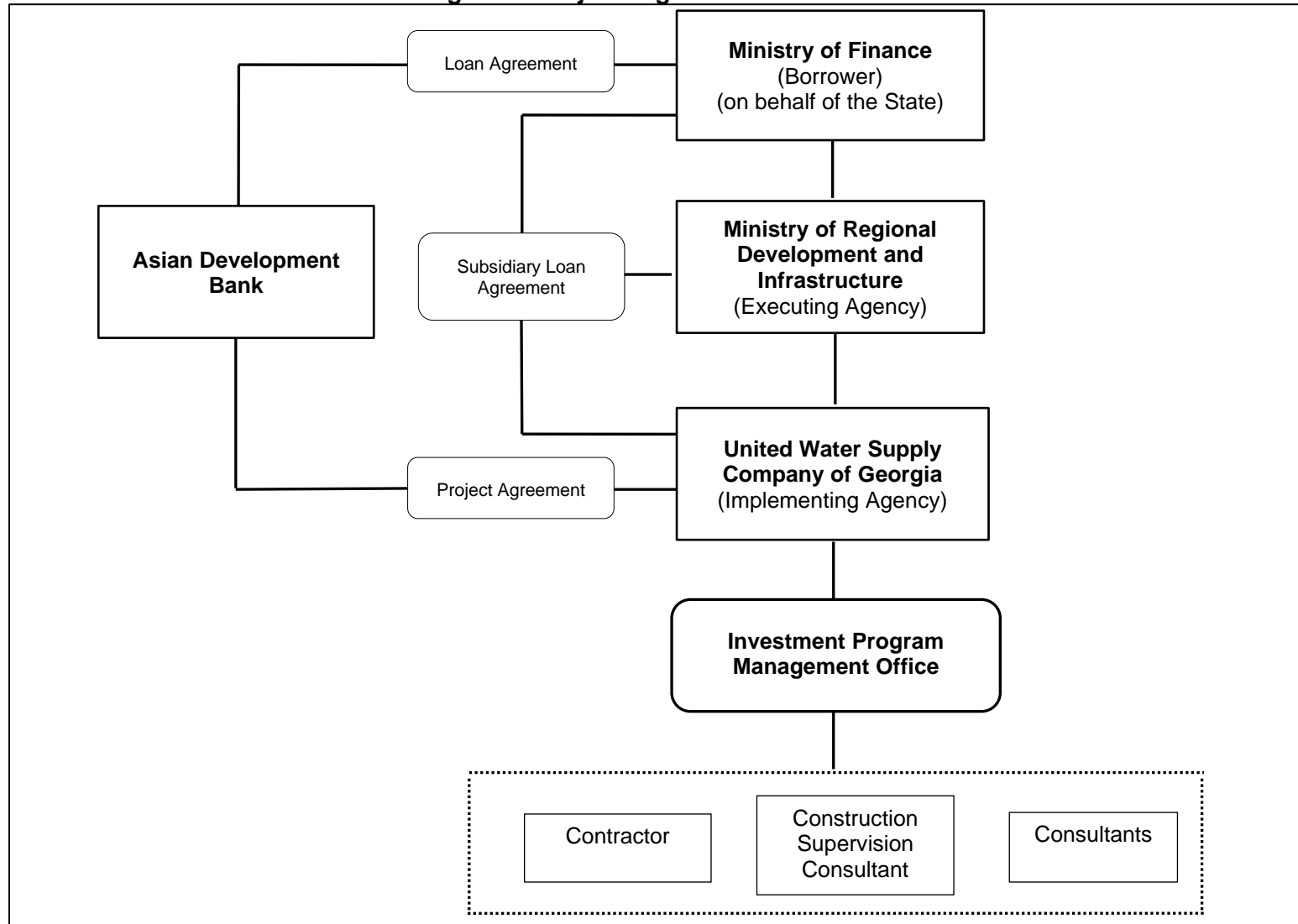
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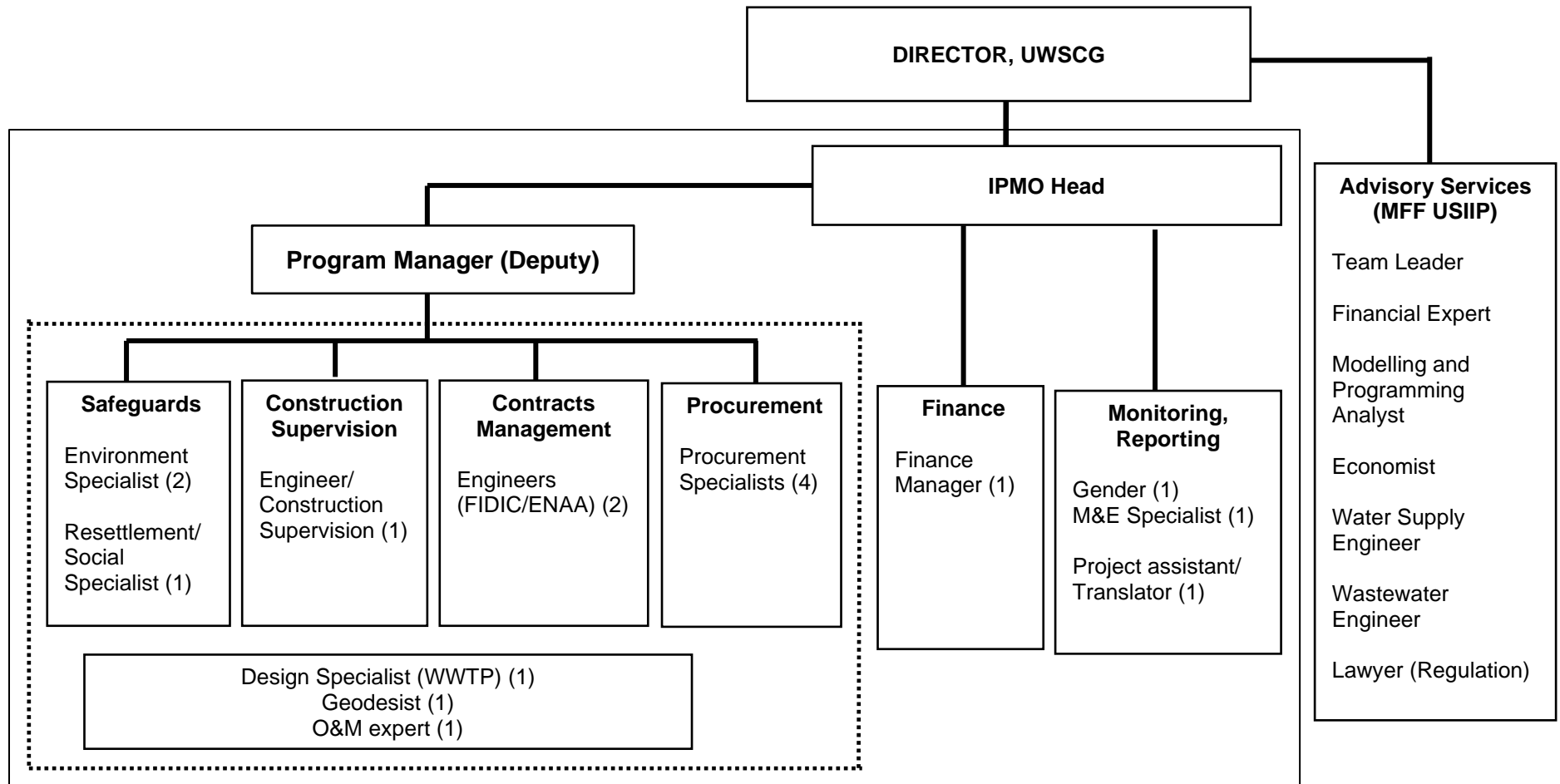
C. Project Organization Structure

Figure 1: Project Organization Structure



D. Organogram of Investment Program Management Office

Figure 2: Investment Program Management Office Structure



IV. COSTS AND FINANCING

12. The total cost of the project is €20.84 million, inclusive of price and physical contingencies, taxes and duties, and financial charges. The government has requested a regular loan of €17.74 million (\$20 million equivalent) from ADB's ordinary capital resources to help finance the project component of the program. The loan will have a 23-year term, including a grace period of 14 years; an annual interest rate determined in accordance with ADB's LIBOR-based lending facility; a commitment charge of 0.15% per year (the interest and other charges during construction to be capitalized in the loan); and such other terms and conditions set forth in the draft loan agreements. Based on the straight-line method, the average maturity is 18.75 years, and there is an 0.20% maturity premium payable to ADB. ADB will finance civil works, goods, consulting and nonconsulting services, and related contingencies and financial charges during implementation. The government will finance expenditures related to taxes and duties. The summary financing plan is in Table 6.

13. The loan will finance civil works, construction supervision, consulting services, equipment and machinery, public awareness, IPMO consultant salaries, financial charges during implementation, and commitment charges. The government will finance 14.9% of the total project expenditures. Detailed cost estimates by expenditure category and financier are in Sections C and D.

A. Cost Estimates Preparation and Revisions

14. The cost estimates were prepared based on the analysis by the transaction technical assistance consultants and were refined by ADB project team and UWSCG during fact-finding. The cost estimates were based on current market prices. The final estimates were reviewed by ADB and endorsed by UWSCG.

B. Key Assumptions

15. The following key assumptions underpin the cost estimates and financing plan:

- (i) Exchange rate: GEL3.0579 = \$1.00 or €0.886997 (as of 10 July 2020)
- (ii) Price contingencies based on expected cumulative inflation over the implementation period are as follows:

Table 4: Escalation Rates for Price Contingency Calculation

Item	2020	2021	2022	2023	2024	Average
Foreign rate of price inflation	-0.5%	1.6%	1.7%	1.7%	1.8%	1.3%
Domestic rate of price inflation	4.5%	3.0%	3.0%	3.0%	3.0%	3.3%

Sources: Asian Development Bank, Asian Development Outlook, International Monetary Fund, World Economic Outlook Database, World Bank, Main Directions of Monetary Policy 2020-2022 (National Bank of Georgia, December 2019).

C. Summary Cost Estimates and Financing Plan

Table 5: Summary Cost Estimates of Project Loan
(€ million)

Item	Amount ^a
A. Base Cost	
Operational efficiency of water supply and sanitation services increased	17.74
Subtotal (A)	17.74
B. Contingencies^b	2.57
C. Financial Charges During Implementation^c	0.53
Total (A+B+C)	20.84

^a Includes taxes and duties of €3.10 million to be financed from the government.

^b 10% physical and 10% price contingencies, and a provision for exchange rate fluctuation, are included.

^c Includes interest, commitment, and other charges on all sources of financing.

Source: Asian Development Bank.

Table 6: Summary Financing Plan of Project Loan

Source	Amount (€ million)	Share of Total (%)
Asian Development Bank		
Ordinary capital resources (regular project loan)	17.74	85.1
Government ^a	3.10	14.9
Total	20.84	100.0

^a Government contribution includes taxes and duties.

Source: Asian Development Bank estimates.

D. Detailed Cost Estimates by Expenditure Category

Table 7: Detailed Cost Estimates by Expenditure Category

Item	GEL million			\$ million			% of Total Base Cost
	Foreign Exchange	Local Currency	Total Cost	Foreign Exchange	Local Currency	Total Cost	
A. Investment Costs							
1. Equipment	-	11.38	11.38	-	3.72	3.72	18.7%
2. Civil Works	-	26.34	26.34	-	8.61	8.61	43.2%
3. Consulting Services	8.36	9.80	18.16	2.73	3.21	5.94	29.8%
a. Telavi Supervision Package	1.46	1.13	2.59	0.48	0.37	0.85	4.2%
b. Rural WSS Sector Development	4.27	7.41	11.68	1.39	2.42	3.82	19.1%
c. O&M Improvement	2.63	1.26	3.90	0.86	0.41	1.27	6.4%
4. Public Awareness	-	0.21	0.21	-	0.07	0.07	0.3%
Sub-total (A)	8.36	47.73	56.09	2.73	15.61	18.34	91.9%
B. Recurrent Costs							
1. Project Management, IPMO Training, and Audit	0.00	4.92	4.92	0.00	1.61	1.61	8.1%
Sub-total (B)	0.00	4.92	4.92	0.00	1.61	1.61	8.1%
Total Base Cost	8.36	52.65	61.01	2.73	17.22	19.95	100.0%
C. Contingencies							
1. Physical Contingency	0.84	5.27	6.10	0.27	1.72	2.00	10.0%
2. Price Contingency	0.24	2.74	2.98	0.08	0.90	0.97	4.9%
Sub-total Contingencies	1.08	8.00	9.08	0.35	2.62	2.97	14.9%
D. Financing Charges During Implementation	1.76	-	1.76	0.57	-	0.57	2.9%
Total Project Cost (A + B + C + D)	11.19	60.66	71.85	3.66	19.84	23.50	117.8%

Notes:

1. Numbers may not sum precisely because of rounding.

2. Base cost includes taxes and duties of \$3.5 million.

3. Includes estimated audit fees of \$90,000 for the audit of the annual project financial statements for the period 2020–2025 to be financed from ADB loan resources.

Sources: Asian Development Bank, Ministry of Rural Development and Infrastructure, and United Water Supply Company of Georgia estimates.

E. Allocation and Withdrawal of Loan Proceeds

Table 8: Allocation of Loan Proceeds

Number	Item	Total Amount Allocated for ADB Financing (EUR)	Basis for Withdrawal from the Loan Account
1	Civil works, Consulting Services, Equipment, Public Awareness	13,788,000	84.7% of total expenditure claimed*
2	Project Management and Audit	1,210,000	84.7% of total expenditure claimed*
3	Interest Charge	510,000	100% of total amount due
4	Unallocated	2,232,000	
	Total	17,740,000	

* No withdrawals shall be made from the Loan Account until the Subsidiary Loan Agreement, in the form and substance satisfactory to ADB, has been duly authorized and executed and delivered on behalf of the Borrower (represented by Ministry of Finance), MRDI and UWSCG, and is legally binding upon such parties in accordance with its terms.

F. Detailed Cost Estimates by Financier

Table 9: Detailed Cost Estimates by Financier (\$ million)

Item	ADB		Government		Total Cost	
	Amount	% of Cost Category	Amount	% of Cost Category	Amount	Taxes and Duties
A. Investment Cost						
1. Equipment	3.15	84.7%	0.57	15.3%	3.72	0.57
2. Civil Works	7.30	84.7%	1.31	15.3%	8.61	1.31
3. Consulting Services	5.03	84.7%	0.91	15.3%	5.94	0.91
a. Telavi Supervision Package	0.72	84.7%	0.13	15.3%	0.85	0.13
b. Rural WSS Sector Development	3.24	84.7%	0.58	15.3%	3.82	0.58
c. O&M Improvement	1.08	84.7%	0.19	15.3%	1.27	0.19
4. Public Awareness	0.06	84.7%	0.01	15.3%	0.07	0.01
Sub-total (A)	15.55	84.7%	2.80	15.3%	18.34	2.80
B. Recurrent Costs						
1. Project Management, IPMO Training, and Audit	1.36	84.7%	0.25	15.3%	1.61	0.25
Sub-total (B)	1.36	84.7%	0.25	15.3%	1.61	0.25
Total Base Cost	16.91	84.7%	3.04	15.3%	19.95	3.04
C. Contingencies						
1. Physical Contingency	1.69	84.7%	0.30	15.3%	2.00	0.30
2. Price Contingency	0.83	84.7%	0.15	15.3%	0.97	0.15
Subtotal (C)	2.52	84.7%	0.45	15.3%	2.97	0.45
D. Financial Charges During Implementation	0.57	100.0%	-	0.0%	0.57	-
Total Project Cost (A + B + C + D)	20.00	85.1%	3.50	14.9%	23.50	3.50
% Total Project Cost	85.1%		14.9%		100.0%	

Note: Numbers may not sum precisely because of rounding.

Sources: Asian Development Bank, Ministry of Rural Development and Infrastructure, and United Water Supply Company of Georgia estimates.

G. Detailed Cost Estimates by Outputs**Table 10: Detailed Cost Estimates by Outputs (\$ million)**

Item	Output 2		
	Total Cost	Amount	% of Project Cost
A. Investment Costs			
1. Equipment	3.72	3.72	16%
2. Civil Works	8.61	8.61	37%
3. Consulting Services	5.94	5.94	25%
a. Supervision Consultant	0.85	0.85	4%
b. Rural WSS Sector Development	3.82	3.82	16%
c. O&M Improvement	1.27	1.27	5%
4. Public Awareness	0.07	0.07	0%
Sub-total (A)	18.34	18.34	78%
B. Recurrent Costs			
1. Project Management, IPMO Training, and Audit	1.61	1.61	7%
Sub-total (B)	1.61	1.61	7%
Total Base Cost	19.95	19.95	85%
C. Contingencies			
1. Physical Contingency	2.00	2.00	8%
2. Price Contingency	0.97	0.97	4%
Sub-total Contingencies	2.97	2.97	13%
D. Financing Charges During Implementation	0.57	0.57	2%
Total Project Cost (A + B + C + D)	23.50	23.50	100%

Sources: Asian Development Bank, Ministry of Rural Development and Infrastructure, and United Water Supply Company of Georgia estimates.

H. Detailed Cost Estimates by Year

Table 11: Detailed Cost Estimates by Year (\$ million)

Item	Total Cost	2020	2021	2022	2023	2024	2025
A. Investment Costs							
1. Equipment	3.72	0.00	0.00	0.56	3.16	0.00	0.00
2. Civil Works	8.61	0.86	5.17	1.72	0.86	0.00	0.00
3. Consulting Services	5.94	0.08	1.02	2.91	1.29	0.64	0.00
a. Construction Supervision	0.85	0.08	0.51	0.17	0.08	0.00	0.00
b. Rural WSS Sector Development	3.82	0.00	0.38	2.29	0.76	0.38	0.00
c. O&M support	1.27	0.00	0.13	0.45	0.45	0.25	0.00
4. Public Awareness	0.07	0.00	0.04	0.03	0.00	0.00	0.00
Sub-total (A)	18.34	0.95	6.23	5.21	5.32	0.64	0.00
B. Recurrent Costs							
1. Project Management, IPMO Training, and Audit	1.61	0.00	0.33	0.33	0.33	0.37	0.25
Sub-total (B)	1.61	0.00	0.33	0.33	0.33	0.37	0.25
Total Base Cost	19.95	0.95	6.56	5.54	5.65	1.00	0.25
C. Contingencies							
1. Physical Contingency	2.00	0.09	0.66	0.55	0.56	0.10	0.03
2. Price Contingency	0.97	0.01	0.18	0.31	0.48	0.00	0.00
Sub-total Contingencies	2.97	0.10	0.84	0.87	1.04	0.10	0.03
D. Financing Charges During Implementation	0.57	0.01	0.07	0.12	0.18	0.20	0.00
Total Project Cost (A + B + C + D)	23.50	1.05	7.46	6.53	6.87	1.31	0.28

Note: Numbers may not sum precisely because of rounding.

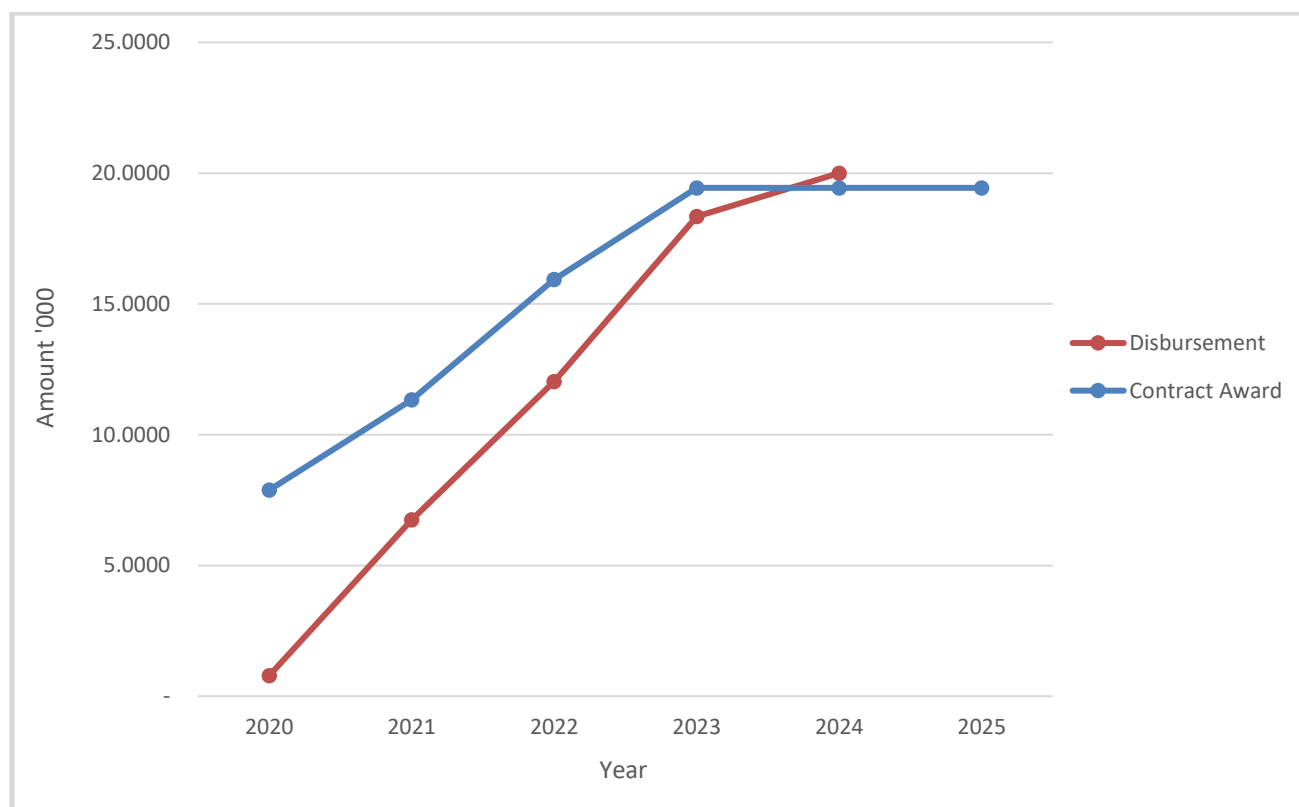
Sources: Asian Development Bank, Ministry of Rural Development and Infrastructure, and United Water Supply Company of Georgia estimates.

I. Contract and Disbursement S-Curve

Table 12: Contract Awards and Disbursements for Project Loan
(\$ million)

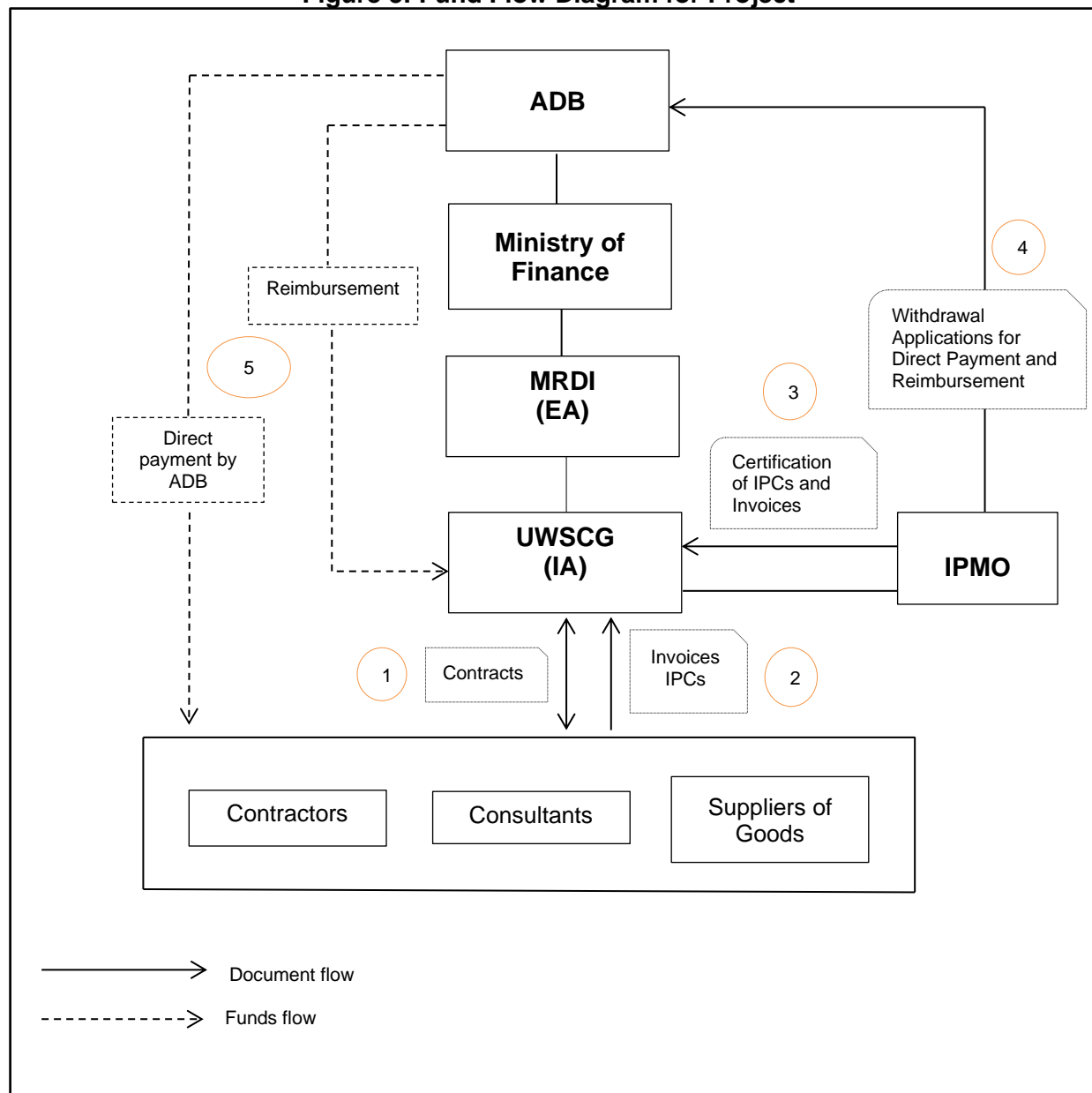
	Contract Award					Disbursement					
Year	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	
2020				7.8825	7.8825				0.7883	0.7883	
2021		0.1182	3.3363		3.4545	0.9013	1.8935	2.2249	0.9302	5.9499	
2022	1.8646	2.7271			4.5917	0.7223	1.8158	2.1651	0.5823	5.2854	
2023		1.2226	2.2855		3.5081	3.0555	1.7689	0.9740	0.5203	6.3187	
2024					-	0.7613	0.3131	0.3454	0.2379	1.6578	
2025					-					-	
Total					19.4350	Total					20.0000

Note: Total contract award amount excludes interest and commitment fee.



J. Fund Flow Diagram

Figure 3: Fund Flow Diagram for Project



ADB = Asian Development Bank, EA = executing agency, IA = implementing agency, IPC = interim payment certificate, IPMO = Investment Program Management Office, MRDI = Ministry of Regional Development and Infrastructure, UWSCG = United Water Supply Company of Georgia.

V. FINANCIAL MANAGEMENT

A. Financial Management Assessment

16. A financial management assessment was conducted on UWSCG in accordance with ADB's Guidelines for the Financial Management Technical Guidance Note for Financial Management Assessment – 2015. The assessment considered the capacity of UWSCG, including funds-flow arrangements, staffing, accounting and financial reporting systems, financial information systems, and internal and external auditing arrangements.

17. UWSCG was assessed to possess sufficient financial management capacity to manage ADB funds. UWSCG has demonstrated satisfactory financial management (FM) performance during the implementation of on-going program. The departmental structure is adequately segregated and currently supported by sufficient and appropriately qualified staff to undertake the mandated roles and responsibilities. The accounting and finance function is governed by adequately documented policies and procedures, and requisite tools and templates. Financial reporting at entity level is performed using international financial reporting standards, while internal reporting includes monthly management reporting and quarterly reporting to MRDI. The external audit process remained significantly delayed for FYs 2016-18, the Entity's management contends addressing the issues contributing to such delays. The audit of entity financial statements for FY2019 was completed in May 2020, a demonstrated track of compliance with statutory and ADB requirements for entity level audited financial reporting is expected in medium term. The Statement of Expenditures (SOE) procedure will be used for reimbursement of small eligible expenditures such as salary of IPMO consultants. The IPMO Financial Manager was appointed to her current position in 2015 and had 3 years prior experience in USIIP implementation. The IPMO Financial Manager is highly conversant with the various ADB disbursement procedures including the use of SOE. IPMO has been using SOE procedure since 2011.

18. The internal audit department functionally and administratively reports to the Director who is responsible for overall management of UWSCG. Since the Director is appointed by MRDI, an element of independence might be perceived, however, a review of local laws and regulations shall be performed to evaluate the feasibility of adopting direct functional reporting of the internal audit department to MRDI.

19. The overall pre-mitigation financial management risk was accordingly assessed as ***moderate***.

Table 13: Summary of Risks and Mitigating Measure

Risk type	Risk Assessment	Risk Description	Mitigation Measures
1. Country Specific	L	Budget Execution Risk – Actual expenditure deviates from budget estimates.	PEFA Performance Assessment (2018) concluded that public financial management systems in Georgia are strong. The expenditure side of the budget performs according to plan. Control of contractual commitments is effective.
	M	The current COVID-19 pandemic might have negative implications on the country's macroeconomic conditions. Containment measures adopted by the country and related governments might impact the implementation schedule and costs estimates of the project activities.	The project implementation schedule and cost estimates shall be reviewed to assess the need for update due to COVID-19 pandemic.
2. Entity-specific	S	UWSCG delays the application and implementation of the tariff determined by GNERC because of a prolonged economic slowdown associated with COVID-19.	The program aims to achieve sustainable operations of UWSCG. The comprehensive reform program will help minimize adverse impacts on the end-user tariff through (i) cost optimization (i.e., energy efficiency, commercial orientation, outsourcing); and (ii) revenue enhancement (i.e., metering program, reduction in illegal connections and unbilled customers). More proactive tariff rationalization is required to reduce cross-subsidies between residential and commercial customers and to provide support to low-income households. ADB's ongoing technical assistance is helping redesign the tariff structure to further rationalize tariffs. ADB will continue to engage in policy dialogue and monitor tariffs through the post-program partnership framework.
Overall Assessment	M		

ADB = Asian Development Bank, COVID-19 = coronavirus disease, L = low, M = moderate, MOF = Ministry of Finance, MRDI = Ministry of Regional Development and Infrastructure, PEFA = Public Expenditure and Financial Accountability, UWSCG = United Water Supply Company of Georgia, S = substantial.

Table 14: Project Risks

Risk type	Risk Assessment	Risk Description	Risk Mitigation Measures / Justification for risk assessment
1. Implementing entity	L	The Entity might not have adequate and appropriate structure for effective financial management.	UWSCG has an appropriately established departmental structure for the accounting and financial reporting functions. The accounting department is mandated with the day-to-day recording and asset management whereas reporting department is responsible for preparing periodic financial reports and exercising control function.
2. Funds Flow	L	The Project funds might not be timely available for the Project, and trackable to validate their utilization for intended purposes.	UWSCG has sufficient treasury controls to track and monitor the funds flow, with assigned staff roles and documented policies and procedures. However, as a further mitigating measure, a dedicated bank account shall be opened and maintained with a bank, for managing the Project funds. The Borrower shall ensure that funds are timely released and made available for the Project activities.
3. Staffing	L	The Project might not have sufficient and adequately qualified FM and Accountability staff, thus affecting the implementation of segregation controls and timely completion of FM and accountability activities.	<p>The FM function is adequately staff with experienced and qualified professional staff. A severance might affect the segregation of duties and workload management. The FM activities are not expected to significantly increase due to the addition of the Project.</p> <p>The Internal Audit team is adequately staffed with appropriately experienced staff.</p> <p>The project team shall require the Entity's management to ensure that adequate and sufficiently qualified staff shall remain allocated over the Project activities.</p>

Risk type	Risk Assessment	Risk Description	Risk Mitigation Measures / Justification for risk assessment
4. Planning and budgeting	L	The Project budgets might not be adequately monitored, resulting in adverse variances which might limit budget availability for key activities of the Project.	UWSCG has an adequate budget monitoring system which includes monthly management reporting using a bottom-up approach. A quarterly budget utilization report is also submitted to MRDI. Despite the controls, the Project is exposed to risk of budget variations which require constant and effective monitoring of actual results and timely decision making.
5. Asset management	M	UWSCG continues to have low technical capacity and resources for effective O&M.	The project allocated significant resources for O&M support, training, and capacity building. This will be supported by corporate policies, strategies and programs for better HR and change management under the policy-based loan.
6. Financial reporting and external audits	L	The Entity might not be able to comply with the statutory and ADB requirements for submission of audited entity financial statements within prescribed timelines.	<p>The financial reporting controls are adequately designed and operate as per identified policies and procedures. Accrual basis of accounting is used for accounting of financial transactions while IFRSs have been adopted for preparation of statutory annual financial statements.</p> <p>UWSCG has satisfactorily performed in terms of compliance with covenants pertaining to submission of APFSs.</p> <p>External audits are performed based on ISAs. Although UWSCG has been able to expedite the external audit for the FY 2019, which is expected to complete in June 2020, the external audit process remained significantly delayed for FYs 2016-18. Firm arrangements are required to ensure that auditors' appointment and conclusion of audit process is carried out in accordance with entity's internal policies and ADB's requirements.</p>

Risk type	Risk Assessment	Risk Description	Risk Mitigation Measures / Justification for risk assessment
7. Procurement	L	COVID-19 adversely impacts project implementation schedule and cost estimates	The civil works package is relatively small at an estimated \$9 million of the \$20 million project loan. ADB will revisit the implementation plan and cost estimates if the impact of COVID-19 continues to threaten the project's timely implementation.
8. Internal audit	M	The internal audit department's independence appears to be impaired with functional and administrative reporting to the senior management.	Established supervisory board is a key policy action under the policy-based loan. The internal audit charter will be updated to allow direct functional reporting by the internal audit department to the supervisory board.
9. Information Systems	L	The information systems might not be sufficient to ensure accurate recording and reporting of the Project's financial transactions.	<p>The existing accounting software is capable of generating basic financial reports including trial balance, payroll, and procurement related information. Financial statements are manually generated.</p> <p>The Entity has been in the process of deploying an integrated ERP. The acquisition of ERP system is planned and covered by ADB's on-going program. Consultants hiring is in process to initiate the vendor selection process.</p>
Overall Project Risk	L		

ADB = Asian Development Bank, ERP = enterprise resource planning, FM = financial management, FY = fiscal year, L = low, M = moderate, GNERC = Georgia National Energy and Water Supply Regulatory Commission, IFRSs = International Financial Reporting Standards, MOF = Ministry of Finance, MRDI = Ministry of Regional Development and Infrastructure, TA = technical assistance, UWSCG = United Water Supply Company of Georgia, S = substantial.

Table 15: Financial Management Action Plan

Action Plan	Responsibility	Timing
The project implementation schedule and cost estimates shall be re-assessed to evaluate the impact(s) of COVID-19 pandemic on project implementation schedule and cost estimates.	Deputy Director – Finance	Upon completion of six months from loan effectiveness
Established supervisory board is a key policy action under the policy-based loan. The internal audit charter will be updated to allow direct functional reporting by the internal audit department to the supervisory board.	UWSCG	Within six months from the establishment of UWSCG's supervisory board
A dedicated bank account shall be opened and maintained with a bank for managing the Project funds.	UWSCG	Within 2 weeks after effectiveness
Contract with a reputable external audit firm is executed for the audits of entity financial statements. An external audit plan for the FY2020 is agreed with the external auditors and submitted to ADB.	Deputy Director – Finance Deputy Director – Finance	Not later than 31 December 2020 Within three months from the date of signing of agreement with auditors.

ADB = Asian Development Bank, COVID-19 = coronavirus disease, FY = fiscal year, MRDI = Ministry of Regional Development and Infrastructure, UWSCG = United Water Supply Company of Georgia.

B. Disbursement

1. Disbursement Arrangements for ADB Funds

20. The loan proceeds will be disbursed in accordance with ADB's Loan Disbursement Handbook (2017, as amended from time to time)⁶, and detailed arrangements agreed upon between the Government and ADB. Online training for project staff on disbursement policies and procedures is available⁷. Project staff are encouraged to avail of this training to help ensure efficient disbursement and fiduciary control. The IPMO Head will be responsible for (i) collecting and retaining supporting documents, and (ii) preparing and sending withdrawal applications to ADB.

21. **Direct payment procedure.** This procedure will generally be used for payment to contractor, suppliers of goods, and consultants. There is one civil works contract under the project. The contractor will submit an invoice along with an interim progress certificate showing the completed civil works for the period. The construction supervision consultant will review the interim progress certificate against the contract and endorse the invoice to Investment Program Management Office (IPMO). Upon satisfactory review, IPMO will endorse the interim progress certificate to UWSCG and prepare a withdrawal application for direct payment to the contractor and have this signed by the loan authorized signatories. ADB will make a direct payment to the contractor based on the submitted withdrawal application.

⁶ The handbook is available electronically from the ADB website (<http://www.adb.org/documents/loandisbursement-handbook>)

⁷ Disbursement eLearning. http://wpqr4.adb.org/disbursement_elearning.

22. Direct payment procedure will generally be used for payment to consultants. Individual consultants and three consulting firms are anticipated to be recruited. The consulting firms will submit their invoices to IPMO for verification. Once the invoices and inputs are verified, IPMO will prepare a withdrawal application for direct payment and have this signed by the loan authorized signatories. ADB will make direct payment to the account of the consultant based on the withdrawal application.

23. The suppliers of equipment and vehicles will prepare their invoices according to the conditions in the contract and submit these to IPMO for approval. Upon approval, IPMO will prepare a withdrawal application for direct payment to the supplier, for signature of the loan authorized signatories. ADB will make direct payment to the account of the supplier based on the withdrawal application.

24. **Advance fund procedure.** This procedure will be used for small payments of eligible project expenditures. An advance account will be established at a commercial bank acceptable to ADB in the name of the project. UWSCG, through IPMO, will administer the advance account including preparation of applications for replenishment and liquidation. Separate advance accounts should be established and maintained by UWSCG for each funding source. The currency of the advance accounts is the US dollar. The advance account is to be used exclusively for ADB's share of eligible expenditures. UWSCG is accountable and responsible for proper use of advances to the advance account.

25. The total outstanding advance to the advance account should not exceed the estimate of ADB's share of expenditures to be paid through the advance account for the forthcoming six months. UWSCG may request for initial and additional advances to the advance account based on an Estimate of Expenditure Sheet⁸ setting out the estimated expenditures to be financed through the account for the forthcoming 6 months. Supporting documents should be submitted to ADB or retained by UWSCG in accordance with ADB's *Loan Disbursement Handbook* (2017, as amended from time to time) when liquidating or replenishing the advance account.

26. **Reimbursement procedure.** This procedure will be used for payment of IPMO consultants' salaries and goods contracts. UWSCG will use the government counterpart funds for payment of consultants' salaries and goods contracts and submit a withdrawal application for reimbursement to ADB.

27. **Statement of expenditure procedure.**⁹ The statement of expenditure (SOE) procedure may be used for reimbursement of eligible expenditures or liquidation of advances to the advance account. The ceiling of the SOE procedure is the equivalent of \$50,000 per individual payment. Supporting documents and records for the expenditures claimed under the SOE should be maintained and made readily available for review by ADB's disbursement and review missions, upon ADB's request for submission of supporting documents on a sampling basis, and for independent audit. Reimbursement and liquidation of individual payments in excess of the SOE ceiling should be supported by full documentation when submitting the withdrawal application to ADB.

⁸ Estimate of Expenditure sheet is available in Appendix 8A of ADB's [Loan Disbursement Handbook](#) (2017, as amended from time to time),

⁹ SOE forms are available in Appendix 7B and 7D of ADB's *Loan Disbursement Handbook* (2017, as amended from time to time).

28. Before the submission of the first withdrawal application, the borrower should submit to ADB sufficient evidence of the authority of the person(s) who will sign the withdrawal applications, together with the authenticated specimen signatures of each authorized person. The minimum value per withdrawal application is stipulated in the Loan Disbursement Handbook (2017, as amended from time to time). Individual payments below such amount should be paid by UWSCG and subsequently claimed to ADB through reimbursement, unless otherwise accepted by ADB. The borrower should ensure sufficient category and contract balances before requesting disbursements. Use of ADB's Client Portal for Disbursements¹⁰ system is encouraged for submission of withdrawal applications to ADB.

29. UWSCG, through the IPMO, will be responsible for (i) preparing disbursement projections, (ii) requesting budgetary allocations for counterpart funds, (iii) collecting and retaining supporting documents, and (iv) preparing and sending withdrawal applications to ADB.

30. Before the submission of the first withdrawal application, the borrower should submit to ADB sufficient evidence of the authority of the person(s) who will sign the withdrawal applications, together with the authenticated specimen signatures of each authorized person.

2. Disbursement Arrangements for Counterpart Funds

31. UWSCG will be responsible for (i) preparing disbursement projections, and (ii) requesting budgetary allocations for counterpart funds for financing local taxes and duties.

C. Condition for Withdrawal

32. Prior to the first withdrawal from the Loan Account, the Subsidiary Loan Agreement, in form and substance satisfactory to ADB, has been duly authorized and executed and delivered on behalf of the Borrower (represented by its Ministry of Finance), MRDI and UWSCG.

D. Accounting

33. UWSCG will maintain, or cause to be maintained, separate books and records by funding source for all expenditures incurred on the project following International Public Sector Accounting Standard for cash-based accounting. UWSCG, through the IPMO, will prepare project financial statements in accordance with the government's accounting laws and regulations which are consistent with international accounting principles and practices.

E. Auditing and Public Disclosure

34. UWSCG will cause the detailed project financial statements to be audited in accordance with International Standards on Auditing, by an independent auditor acceptable to ADB. The audited project financial statements together with the auditor's opinion will be presented in the English language to ADB within 6 months from the end of the fiscal year by the UWSCG.

35. The audit report for the project financial statements will include a management letter and auditor's opinions, which cover (i) whether the project financial statements present an accurate and fair view or are presented fairly, in all material respects, in accordance with the applicable

¹⁰ The Client Portal for Disbursements facilitates online submission of withdrawal application to ADB, resulting in faster disbursement. The forms to be completed by the Borrower are available online at <https://www.adb.org/documents/client-portal-disbursements-guide>.

financial reporting standards; (ii) whether the proceeds of the loan were used only for the purpose(s) of the project; and (iii) whether the borrower or executing agency was in compliance with the financial covenants contained in the legal agreements (where applicable).

36. The audited entity financial statements of UWSCG, together with the auditor's report and management letter, will be submitted in the English language to ADB within 1 month after their approval by the relevant authority.

37. Compliance with financial reporting and auditing requirements will be monitored by review missions and during normal program supervision, and followed up regularly with all concerned, including the external auditor.

38. The government and UWSCG have been made aware of ADB's approach to delayed submission, and the requirements for satisfactory and acceptable quality of the audited project financial statements.¹¹ ADB reserves the right to require a change in the auditor (in a manner consistent with the constitution of the borrower), or for additional support to be provided to the auditor, if the audits required are not conducted in a manner satisfactory to ADB, or if the audits are substantially delayed. 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.

39. Public disclosure of the audited project financial statements, including the auditor's opinion on the project financial statements, will be guided by ADB's Access to Information Policy.¹² After the review, ADB will disclose the audited project financial statements and the opinion of the auditors on the project financial statements no later than 14 days of ADB's confirmation of their acceptability by posting them on ADB's website. The management letter, additional auditor's opinions, and audited entity financial statements will not be disclosed.

VI. PROCUREMENT AND CONSULTING SERVICES

A. Advance Contracting and Retroactive Financing

40. All advance contracting and retroactive financing will be undertaken in conformity with ADB Procurement Policy (October 2017, as amended from time to time) and Procurement Regulations for ADB Borrowers: Goods, Works, Nonconsulting and Consulting Services (October 2017, as amended from time to time). The issuance of invitations to bid under advance contracting and retroactive financing will be subject to ADB approval. The borrower, MRDI, and UWSCG have

¹¹ ADB's approach and procedures regarding delayed submission of audited project financial statements:

- (i) When audited project financial statements are not received by the due date, ADB will write to the executing agency advising that (a) the audit documents are overdue; and (b) if they are not received within the next 6 months, requests for new contract awards and disbursement such as new replenishment of advance accounts, processing of new reimbursement, and issuance of new commitment letters will not be processed.
- (ii) When audited project financial statements are not received within 6 months after the due date, ADB will withhold processing of requests for new contract awards and disbursement such as new replenishment of advance accounts, processing of new reimbursement, and issuance of new commitment letters. ADB will (a) inform the executing agency of ADB's actions; and (b) advise that the loan may be suspended if the audit documents are not received within the next 6 months.
- (iii) When audited project financial statements are not received within 12 months after the due date, ADB may suspend the loan.

¹² Access to Information Policy: <https://www.adb.org/documents/access-information-policy>

been advised that approval of advance contracting and retroactive financing does not commit ADB to finance the project.

41. **Advance contracting.** Advance contracting will be undertaken for procurement of the construction of Telavi water supply system and construction supervision consultant prior to loan effectiveness. This will include (i) Bidding Document for Telavi water supply system and RFP for construction supervision consultant will be reviewed and approved by ADB; and (ii) Invitation for Bids for Telavi water supply system and consultant selection recruitment notice for construction supervision consultant are advertised.

42. **Retroactive financing.** Retroactive financing will be applied for payment of the maximum amount of eligible expenditures up to the equivalent of 20% of the total ADB project loan, incurred for a period not exceeding 12 months before loan signing.

B. Procurement of Goods, Works, and Consulting Services

43. All procurement of goods, works, and consulting services financed under the project will be undertaken in conformity with ADB Procurement Policy (October 2017, as amended from time to time) and Procurement Regulations for ADB Borrowers: Goods, Works, Nonconsulting and Consulting Services (October 2017, as amended from time to time).

44. For goods and works packages, open competitive bidding (OCB) with international advertising will be used. Single Stage One Envelope will be followed. All contracts will be advertised in the ADB website. Domestic preference will be applied for the goods contract.

45. For consulting services packages, depending on the nature, complexity, and the value, both OCB international and OCB national advertising and different selection methods will be used. For construction supervision consultant, rural water supply and sanitation sector development, O&M support, OCB with international advertising will be used, of which, except for the package for construction supervision consultant using CQS, other packages will use QCBS with quality–cost ratio of 90:10 and full technical proposal (FTP). For Audit, OCB national advertising (LCS) will be used. Individual consultant selection will be used for other packages. An estimated 542 person-months (162 international, 380 national) of consulting services are required. All contracts should be advertised in the ADB website.

46. ADB's latest version (2018) of standard bidding documents for goods and works and consulting services applied for Procurement Regulations for ADB Borrowers (2017, as amended from time to time) will be used for procurement of goods, works, and consulting services depending on the nature of different packages.

47. An 18-month procurement plan indicating threshold and review procedures, goods, works, and consulting service contract packages is in the following Section C.

C. Procurement Plan

Basic Data

Project Name: Sustainable Water Supply and Sanitation Sector Development Program	
Project Number: 51132-002	Approval Number: tba
Country: GEORGIA	Executing Agency: Ministry of Regional Development and Infrastructure
Project Procurement Classification: B	Implementing Agency: United Water Supply Company of Georgia
Procurement Risk: Low	
Project Financing Amount: \$23.5 million ADB Financing: \$20.0 million Non-ADB Financing: \$3.5 million	Project Closing Date: 30 June 2025
Date of First Procurement Plan {loan approval date}:	Date of this Procurement Plan: 19 June 2020

A. Methods, Thresholds, Review and 18-Month Procurement Plan

1. Procurement and Consulting Methods and Thresholds

48. Except as the Asian Development Bank (ADB) may otherwise agree, the following methods shall apply to the procurement of goods, works and consulting services.

Procurement of Goods, Works, and Nonconsulting Services	
Method	Comments
Open Competitive Bidding with international advertisement for procurement of goods	Equipment are not available in local market.
Open Competitive Bidding with national advertisement for procurement of works	Local contractors have no capacity.

Consulting Services	
Method	Comments
OCB with international advertising using quality- and cost-based selection (QCBS) (90:10)	Rural water supply and sanitation sector development, O&M support, International expertise is required
OCB with international advertising using consultants' qualifications selection (CQS)	Construction supervision consultant: Consultant experience is most important, urgency of the project
OCB with national advertising using consultants' qualifications selection least-cost selection (LCS)	Audit. Standard assignment with low value
Individual consultant selection (ICS)	Investment Program Management Office; Public awareness

2. Goods and Works Contracts Estimated to Cost \$1 Million or More

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

Package Number	General Description	Estimated Value	Procurement Method	Review [Prior / Post/Post (Sampling)]	Bidding Procedure	Advertisement Date (quarter/year)	Comments
TEL-01	Rehabilitation and Upgrading of Water Supply System in Telavi	8,610,000	OCB (internationally advertised)	Prior	1S1E	Q3/2020	Domestic preference is not applicable. Advertising: International Number of contracts: one Prequalification of Bidders: No Advance contracting: Yes Bidding Document: SBD for Large Works E-Gp: Yes
EQ1	Equipment for Operations and Maintenance	3,720,000	OCB (internationally advertised)	Prior	1S1E	Q2/2021	Domestic preference is applicable. Advertising: International Number of contracts: multiple Prequalification of Bidders: No Advance contracting: NO Bidding Document: SBD for Goods E-Gp: Yes

3. Consulting Services Contracts Estimated to Cost \$100,000 or More

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

Package Number	General Description	Estimated Value	Recruitment Method	Review (Prior / Post)	Advertisement Date (quarter/year)	Type of Proposal	Comments
CS-1	Construction Supervision Consultant	850,000	CQS	Prior	Q3/2020	STP	International
CS-2	Rural Water Supply and Sanitation Sector Development	3,820,000	QCBS	Prior	Q4/2020	FTP	International
CS-3	O&M Support	1,270,000	QCBS	Prior	Q1/2021	FTP	International
CS-5	Project audit	112,000	LCS	Prior	Q4/2020	BTP	National

4. Goods and Works Contracts Estimated to Cost Less than \$1 Million and Consulting Services Contracts Less than \$100,000 (Smaller Value Contracts)

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

Goods and Works								
Package Number	General Description	Estimated Value	Number of Contracts	Procurement Method	Review [Prior / Post/Post (Sampling)]	Bidding Procedure	Advertisement Date (quarter/year)	Comments

Consulting Services								
Package Number	General Description	Estimated Value	Number of Contracts	Recruitment Method	Review (Prior / Post)	Advertisement Date (quarter/year)	Type of Proposal	Comments
IND-1	IPMO	448,000	6-7	ICS	Prior	Q2/2022	na	National
CS-4	Public Awareness	70,000	3	ICS	Prior	Q2/2021	BTP	National

B. Indicative List of Packages Required Under the Project

52. The following table provides an indicative list of goods, works and consulting services contracts over the life of the project, other than those mentioned in previous sections (i.e., those expected beyond the current period).

Goods and Works							
Package Number	General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Procurement Method	Review [Prior / Post/Post (Sampling)]	Bidding Procedure	Comments

Consulting Services							
Package Number	General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Recruitment Method	Review (Prior / Post)	Type of Proposal	Comments

C. List of Awarded and On-going, and Completed Contracts

53. The following tables list the awarded and on-going contracts, and completed contracts.

1. Awarded and On-going Contracts

Goods and Works							
Package Number	General Description	Estimated Value	Awarded Contract Value	Procurement Method	Advertisement Date (quarter/year)	Date of ADB Approval of Contract Award ¹	Comments ²

¹ Date of ADB Approval of Contract Award is the date of No-Objection letter to the EA/IA.

² Indicate the Contractor's name and the contract signing date.

Consulting Services							
Package Number	General Description	Estimated Value	Awarded Contract Value	Recruitment Method	Advertisement Date (quarter/year)	Date of ADB Approval of Contract Award ¹	Comments ²

¹ Date of ADB Approval of Contract Award is the date of No-Objection letter to the EA/IA.

² Indicate the Consulting Firm's name and the contract signing date.

2. Completed Contracts

Goods and Works								
Package Number	General Description	Estimated Value	Contract Value	Procurement Method	Advertisement Date (quarter/ year)	Date of ADB Approval of Contract Award ¹	Date of Completion ²	Comments

¹ Date of ADB Approval of Contract Award is the date of No-Objection letter to the EA/IA.

²The Date of Completion is the physical completion date of the contract.

Consulting Services								
Package Number	General Description	Estimated Value	Contract Value	Recruitment Method	Advertisement Date (quarter/ year)	Date of ADB Approval of Contract Award ¹	Date of Completion ²	Comments

¹ Date of ADB Approval of Contract Award is the date of No-Objection letter to the EA/IA.

² The Date of Completion is the physical completion date of the contract.

D. Consultants' Terms of Reference

54. The terms of reference for the consulting services contracts are in Appendix 1.

VII. SAFEGUARDS

55. The Government through MRDI will ensure that all safeguard requirements prescribed for the Project are implemented. The Project is categorized as B for Environment and Involuntary Resettlement, and C category for Indigenous People impacts. Therefore, UWSCG shall prepare an environmental management plan (EMP) and a Land Acquisition and Resettlement Plan (LARP) or Social Due Diligence Report (SDDR) as applicable. The project does not involve impacts to ethnic minority villages or communities that would trigger ADB's Safeguard Policy Statement (2009) requirements on indigenous peoples.

A. Environment

56. Impacts from the Project are expected to be temporary and site-specific, mostly related to construction and rehabilitation of the existing infrastructure, distribution centers and distribution networks. Potential impacts include dust, noise, vibration, hazardous solid wastes (asbestos containing materials, scrap metals and oils from old equipment), labor and public safety, temporary blockage of household access, traffic disturbance, production and transportation of construction materials. Environmental impacts during the operation phase include an increase of water use from the water sources, disposal of sludge from the water treatment plant and borehole sites, accidental leakage from chlorination, noise from water treatment plant and pumping stations, and increase in production of sewage compared to the capabilities of community facilities.

57. The Initial Environmental Examination (IEE) was prepared during the project preparation stage to assess environmental impacts of the project and present mitigation measures to avoid, minimize, mitigate, and compensate adverse environmental impacts of the project. The IEE included Environmental Management Plan that summarized the proposed mitigation measures, environmental monitoring and reporting requirements, emergency response procedures, related institutional or organizational arrangements, capacity development and training measures, implementation schedule, cost estimates, and performance indicators during pre-construction, construction, operation, and decommissioning phases. The EMP will form a part of the bidding documents. Based on the EMP, the Contractor prepares the site-specific (Contractor's) Environmental Management Plan detailing mitigation and monitoring arrangements for a specific construction site during construction.

58. To ensure that mitigation actions are implemented in accordance with the requirements of the EMP, monitoring shall be undertaken as follows:

- Instrumental Monitoring for environmental quality such as air, noise, vibration, water – This shall be performed monthly by a certified laboratory to be hired under the contractors' contract with guidance and approval from the Construction Supervision Consultant (CSC). Schedules, parameters, sampling locations are indicated by the site-specific EMP and shall be endorsed by the CSC.
- Observational Monitoring – Throughout the construction phase CSC shall continually monitor the Contractors actions. This will be achieved through weekly inspections of the Contractors environmental performance by CSC's national environmental specialist throughout the construction period. SCS shall have the right to suspend works or payments if the Contractor is in violation of any of his obligations under the Site-Specific Environmental Management Plans (SSEMPs).

59. **UWSCG will be responsible** for overall implementation of the EMP to comply with ADB's safeguards requirements and environmental national regulations. For this, IPMO will be required to designate a qualified full-time safeguard position who will be assisted by the environmental specialists of the construction supervision consultant (CSC) in overseeing the implementation of EMP. The cost for implementing EMP will be financed by the project, specifically: the costs of mitigation measures and environmental monitoring will be included in the construction contracts, and the cost for environmental supervision will be included in the consulting service of the CSC. IPMO is responsible for overall environmental compliance with SPS 2009. A grievance redress mechanism to handle both environmental and social safeguard issues will be established after the project effectiveness.

60. UWSCG will hire full-time Environmental Officer who will be in charge for implementation of EMP and ensure compliance with national environmental requirements. Along with implementation mitigation measures indicated in EMP, he/she will responsible for in-time development and submission environmental reports to National Statistical Office of Georgia and Ministry of Environmental Protection and Agriculture; obtaining and timely updating permissions on discharge wastewater, exhausted gases in air and disposal of solid wastes; special permission on water use.

61. **Contractor's responsibilities** will include the following:

- Site-specific EMP. Prepare SS EMP(s) with supplemented topic EMP(s) such as traffic management plan, solid waste management plan, etc. at pre-construction stage based on IEE/EMP within 30 days after contract award and prior to commencing any physical works and be endorsed by CSC before submission to

IPMO for approval. No access to the site(s) will be allowed until the site specific EMPs is approved by the IPMO.

- Implement SEMP approved by IPMO during construction phase.
- Changes in the design: Provide details of design changes to CSC required to update IEE/EIA, or SEMP. Implement the updated SEMP.
- Unanticipated impacts: Inform CSC about unanticipated environmental impact of the project (the one that has not been covered by the IEE/EPM), and follow the instructions received from IPMO.
- Reporting: Prepare monthly environmental monitoring reports and send them to CSC and IPMO for review.
- Non-compliance: Prepare a corrective action plan (CAP).
- Public consultations: Participate in public consultations during project implementation.
- GRM: Project site's focal person to record environmental grievances in the logbook and follow up with UWSCG established practice for grievance redress
- Training: Attend on-site trainings organized by IPMO and ADB/RETA Consultant.
- Staffing: Retain the expertise of a full-time Environmental Officer (EO) to implement and continually update the SSEMPs, and to report on the implementation of mitigation measures throughout the contract period.

62. **Construction's Supervision Consultant's (CSC).** The CSC is tasked with specific responsibility to assist IPMO in ensuring safeguard compliance of civil works – with emphasis on the monitoring of implementation of EMP through the Contractors SSEMP and related aspects of the project. **CSC's responsibilities** will include the following:

- Site-specific EMP. Review and endorse the SSEMP submitted by the Contractor. Monitor implementation of SSEMP on daily basis. Monitor monthly environmental monitoring reports or results prepared by the Contractor and report to IPMO.
- Changes in the design: Approve the design change to be submitted to IPMO. Make environmental assessment of the change and update the IEE and/or SSEMP.
- Unanticipated impacts: Make environmental assessment of the unanticipated impact and update the IEE and/or SSEMP.
- Reporting: Prepare inputs to environmental part of quarterly construction progress reports. Prepare inputs to semi-annual environmental monitoring report (SAEMR) to be submitted to IPMO for further review, comments, and improvement. Conduct Post-Construction Final Environmental Audit and prepare final environmental audit report.
- Non-compliances: Assist contractor in preparing the Corrective Action Plan.
- Public consultations: Organize public consultations: inform people about activities and prepare the record of consultations.
- GRM: Ensure that grievances, if any, are being properly documented and addressed timely and effectively. Assist IPMO to develop consolidated GRM database and consolidation of GRM cases both for ENV and Social safeguards.
- Training: Assist the IPMO in organization of trainings for the Contractors on environmental safeguards requirements. Training EHS for Contractors need to be conducted throughout project implementation.
- Staffing: Retain the expertise of a full-time Environmental Officer (EO) to supervise implementation of SSEMPs, and to report on the environmental performance to IPMO throughout the contract period.

63. **The IPMO will be responsible** for implementation of EMP to comply with ADB's safeguards requirements and environmental national regulations. Present unit has environmental and social specialist. The PMU's environmental and social specialist will be assisted by the environmental specialists of the CSC in overseeing the implementation of EMP. The cost for implementing EMP will be financed by the project, specifically: the costs of mitigation measures and environmental monitoring will be included in the construction contracts, and the cost for environmental supervision will be included in the consulting service of the CSC. PMO is responsible for overall environmental compliance with requirements of the SPS 2009.

64. **The IPMO's responsibilities** include, but not limited to:

- Site-specific EMP: Review and approve the SEMP. Monitor implementation of EMP and ensure the environmental safeguards compliance. Ensure the bidding documents of CSC and Contractors include all tasks as described in the approved EMP
- Permits and licenses: Ensure all necessary government permits and license, including ecological expertise statement, for all civil works will be obtained.
- Changes in the design: Review the updated IEE and/or SEMP and send it for clearance to ADB.
- Unanticipated impacts: Review the updated IEE and/or SEMP and send it for clearance to ADB.
- Reporting: Finalize SAEMRs (and Final EMRs upon project completion), send it to ADB, and address potential ADB's comments until SAEMR disclosure. Provide English and Georgian language final versions of SAEMRs to be uploaded on UWSCG website.
- Non-compliance: Review and approve the CAP and provide to ADB for review and comments if any.
- Public consultation: Participate in public consultations during project implementation.
- Grievance Redress Mechanism: If needed, assist IPMO Social/Resettlement Consultant in resolving process of environmental safeguards related complaints. Assist IPMO Social/Resettlement Consultant in GRM database consolidation and data analysis.
- Training: Organize trainings for the Contractors in coordination with ADB/RETA consultant. Participate in external trainings in environmental management and environmental auditing. Build up and sustain institutional capacity in environmental management

65. The Ministry of Environmental Protection will be also involved in the process of project implementation and further operation. The Ministry will review local environmental assessment and approve it if it complies with national requirements. Moreover, requirements indicated in Environmental Appraisal will be mandatory for implementation and it will be monitored by inspectors from district branches of the Committee. Representatives of the Committee will also participate into the handover process as member of State Acceptance Commission.

B. Land Acquisition and Resettlement

66. In compliance with ADB's Safeguard Policy Statement, the project's safeguard categorization is B for involuntary resettlement. UWSCG conducted social due diligence in regard to rehabilitation of Telavi water system following ADB's Safeguard Policy Statement (SPS). Findings of due diligence reflected in the Social Due Diligence Report (SDDR) confirm that no

land acquisition and resettlement impacts are expected since the project activities are planned to be carried out within the state-owned land plots and not used by any person. Any land acquisition or economic and/or physical displacement will not be anticipated to occur unless the need for further alignment change is required at a later phase of civil works.

67. For increased efficiency or due to specific technical reasons the realignment of the existing water supply system (transmission mains and distribution network) may be considered as feasible option, even though realignment may cause the need for new land acquisition or impact private assets and possessions, subject to cash compensation. The proportion of the land taken is not expected to be significant since the project is dealing with renovation of existing water supply systems. Considering the possible alignment changes during the implementation, some minor impacts may occur, therefore the land acquisition and resettlement framework (LARF) has been specifically developed to be followed during the further screening and to develop applicable land acquisition and resettlement plan (LARP) for Telavi project to be undertaken by UWSCG.

68. During project SDDR and LARF preparation, community consultations were conducted in accordance with ADB's SPS (2009). The broad structure, procedure, and function of GRM has been disclosed to stakeholders during the public consultations. The GRM will allow stakeholders to appeal any decision, practice or activity arising from project implementation. Additional public consultations along with GRM disclosure will be conducted during the LARP preparation (if any), where APs will be informed about their rights and procedures for addressing complaints. Consultation and disclosure activities will continue to be undertaken with the affected households and other concerned groups throughout LARP implementation period.

69. In case of any realignment changes or other design changes, the prepared SDDR will be updated to confirm absence of LAR impacts. In case the assessment under social due diligence confirms magnitude and type of likely LAR impacts, then project specific LARP will then be prepared in compliance with the approved LARF, country legislation, and requirements of ADB SPS 2009 and publicly disclosed. The LARP will include impact assessment and compensation details, as well as and administration budgets and implementation schedules linking land acquisition and resettlement tasks to the initiation of civil works.

70. During LARP preparation, census of affected persons (APs) and detailed measurement surveys (DMS) including socio-economic survey (SES) will reveal all vulnerable groups and severely affected households potentially creating the risk of impoverishment of an affected household. These cases, if such confirmed during census and SES, will be addressed in the LARP that will cover relevant mitigation and/or rehabilitation measures as stipulated in the LARF.

71. With the intention to give special attention to women, impact assessment of APs will be gender-disaggregated to pinpoint how many women are likely to be affected by the Project and establish their pre-Project conditions.

72. The UWSCG, through its Environmental Protection Department and revamped IPMO must ensure the overall social safeguards compliance of the project with ADB SPS (2009), and:

- (i) Social screening is conducted in case of design changes,
- (ii) SDDR is updated or LARP is prepared (as necessary) and submitted to ADB for review and clearance prior to LARP implementation;
- (iii) LARP implementation Compliance Report, certifying that all compensation and resettlement assistance has been provided to all APs, in full accordance with the requirements of SPS (2009), is accepted by ADB prior to commencement of civil works;

- (iv) efficient GRM is maintained in place and operational once the project is effective to assist APs and stakeholders to resolve queries and complaints in a timely manner; and
- (v) adequate staff and resources are made available for supervising and monitoring the compliance of social safeguards and implementation of the LARP (if any), and reports are submitted to ADB bi-annually and at the completion of the LARP implementation process.

73. A new social safeguards and resettlement specialist to be recruited in IPMO will be responsible for social safeguards and LARP preparation and implementation. The UWSCG and IPMO will be assisted by the CSC in safeguards compliance monitoring and reporting, including the preparation of LARP compliance report and semiannual social monitoring reports (SSMR) for ADB's review and disclosure.

74. The LARP (if any) preparation services will be financed by the project. The LARP budget, i.e. compensation amounts for APs will be financed from the State Budget, unless financed by the project. The cost for implementing LARP (if any) will be financed by the project. Costs of mitigation measures that may incur during construction will be included in the construction contracts. Cost for social safeguards supervision will be included in the consulting service of the CSC.

C. Indigenous Peoples

75. The project has been classified as category C for indigenous peoples safeguard. There are no indigenous people's communities in the project area or in the country in general, as defined in the ADB SPS (2009) for operational purposes. Accordingly, no indigenous peoples planning documents will be required.

76. **Prohibited investment activities.** Pursuant to ADB's Safeguard Policy Statement (2009), the ADB funds may not be applied to the activities described on the ADB Prohibited Investment Activities List set forth at Appendix 5 of the Safeguard Policy Statement (2009).

VIII. GENDER AND SOCIAL DIMENSIONS

77. The project is categorized as **effective gender mainstreaming**. The program is categorized as **effective gender mainstreaming**. It will address gender issues such as women's time poverty brought about by limited access to quality water supply, women's lack of participation in community discussions and decision making on water supply issues, and women's limited employment in the WSS sector, including their marginalization in technical and management positions in the sector. To address these gender issues, the program will (i) develop a gender sensitive WSS policy, that will address women's limited involvement in community discussions and decision making on water supply issues, as well as increase women's employment and technical participation in the water sector, (ii) ensure women's significant representation in the newly established UWSCG supervisory board, (iii) adopt gender sensitive HR policies that will provide women with opportunities for career advancement, and protect them from gender-based concerns such as sexual harassment, (iv) involve women in management, leadership, technical and financial trainings of UWSCG, and (v) develop gender sensitive communication strategy for the water sector, among others. Specific gender policy actions are in the policy matrix and the gender action plan is attached below. The IPMO will include a gender consultant to oversee the implementation of the gender action plan, and UWSCG will identify a gender focal point staff.

Table 16: Gender Action Plan

Action	Target/Indicator	Responsibility	Timeline
Output 1: Sector and corporate governance and capacity strengthened			
1.1. Adopt a gender sensitive WSS policy	1.1.1. WSS policy that includes gender responsive provisions such as recognition of the need to provide the underserved, poor, vulnerable women with access to water, and ensures that women are included in decision making processes in water supply issues adopted 1.1.2. Action plan to implement the WSS policy developed and implemented	MRDI UWSCG	2020
1.2. Appoint women in the decision-making positions in the sector	1.2.1. Supervisory board of UWSCG established with at least 30% women representatives	MRDI UWSCG	2020
1.3. Develop and implement gender-responsive HR management plans	1.3.1. HR management development plans with provisions to increase the proportion of female staff in technical and management levels issued and staff performance management system implemented	UWSCG MRDI	By Q4 2021
Output 2: Operational efficiency of water supply and sanitation increased			
2.1. Include women in the consultations in Telavi	2.1.1. At least 2 consultations carried out on the planning, design, and O&M of WSS facilities, with at least 30% women participation	UWSCG	2021
2.2. Ensure women's participation in all staff trainings	2.2.1 Training plan for UWSCG based on the results of a training needs assessment that considered the specific needs of women staff developed 2.2.2. At least 500 UWSCG staff (30% women) improved technical, financial, management, and leadership skills 2.2.3. All staff in Telavi service center, including at least 50% women, trained in communication and ICT management 2.2.4. One study/experience-sharing visit of staff from a UWSCG branch organized for Telavi service center employees with at least 30% women's participation 2.2.5. At least one women staff networking event carried out	UWSCG HR	By 2023

Action	Target/Indicator	Responsibility	Timeline
2.3. Conduct gender awareness raising seminars to key officials, and staff of UWSCG	2.3.1 At least 80% of UWSCG officials and staff understand gender and development issues in the sector 2.3.2. At least 80% of staff of Telavi service center trained in gender equality issues	UWSCG By support of gender consultant	2021
2.4. Maintain sex-disaggregated HR database	2.4.1. HR database with gender indicators regularly updated with sex-disaggregated data	UWSCG HR	2020–2024
2.5. Develop and conduct an anti-sexual harassment program	2.5.1. Program on the prevention of and actions to address sexual harassment in the workplace developed and disseminated to staff 2.5.2. Mechanism and procedures to address cases of sexual harassment developed 2.5.3. Awareness of 90% of staff on sexual harassment raised	UWSCG HR By support of gender consultant	2021
2.6. Carry out gender sensitive public outreach campaigns in local community and schools in Telavi	2.6.1. At least 5 campaigns conducted in Telavi on the issues of water use and conservation, sanitation and hygiene, customer rights and related topics with at least 50% female participation 2.6.2. At least 90% of households serviced by UWSCG in Telavi reached through multimedia campaigns on hygiene, sanitation, customer rights, and water conservation	UWSCG PR By support of gender consultant	2021–2023
2.7. Enhance cooperation with higher educational institution and vocational educational institutions with focus on female professionals in the water sector	2.7.1. At least 2 MOUs forged with higher education/technical vocational education institutions on providing internship opportunities to graduates of STEM-related courses, at least 50% women (2019 baseline: 1 MOU with a higher education institution) 2.7.2. At least 50% of the new professionals attracted through educational institutions to be women	UWSCG HR	By 2023

GAP = gender action plan, HR = human resource, ICT = information and communications technology, MOU = memorandum of understanding, MRDI = Ministry of Regional Development and Infrastructure, O&M = operation and maintenance, PR = public relations, STEM = science, technology, engineering, and mathematics, UWSCG = United Water Supply Company of Georgia, WSS = water supply and sanitation.

IX. PERFORMANCE MONITORING, EVALUATION, REPORTING, AND COMMUNICATION

A. Program Design and Monitoring Framework

Impacts the Program is Aligned with Living conditions and public health in Georgia improved (Regional Development Program of Georgia 2018–2021) ^a			
Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting Mechanisms	Risks
Outcome Performance and financial sustainability of WSS services improved	By 2025: a. Average duration of water supply provided to piped network increased to 22 hours/day (2019 baseline: 16.4 hours/day) (OP 4.1.1) b. NRW rate of UWSCG reduced to 47% (2019 baseline: 77%) (OP 4.1.1) c. Operational efficiency improved to an operating ratio ^b of 1 (2019 baseline: 1.45) (OP 6.1)	a.–b. UWSCG and GNERC annual reports c. UWSCG annual audited financial statements	UWSCG delays application and implementation of tariff determined by GNERC because of prolonged economic slowdown associated with COVID-19.
Reform Area WSS governance and institutions strengthened	Key Policy Actions By 2020: 1a. Law on Energy and Water Supply approved (2018 baseline: Law on Electricity and Natural Gas) (OP 4.2.1) 1b. Investment appraisal rules introduced, and WSS tariff methodology amended (2018 baseline: NA) (OP 4.2.1) 1c. WSS committee established with minimum 30% women representatives (2019 baseline: NA) (OP 2.3; OP 6.2.3) 1d. Supervisory board of UWSCG established with at least 30% women representatives (2019 baseline: NA) (OP 2.3; OP 6.2.3) 1e. HR reform and change management committees established (2019 baseline: NA) 1f. UWSCG staff regulations and HR management policy issued (2019 baseline: NA) 1g. Metering program, public communication strategy, and time-bound action plan for outsourcing adopted (2019 baseline: NA) By 2021: 1h. Draft law on water resources management submitted to the Parliament (2019: NA) (OP 4.2.1)	1a. Approved Law on Energy and Water 1b. Approved GNERC resolution 1c. Ministerial order 1d. Ministerial order and an amended UWSCG charter 1e. UWSCG executive order 1f. Staff regulations and HR policy 1g. UWSCG executive order 1h. Draft law on water resources management	Public resistance could hinder policy reforms.

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting Mechanisms	Risks
	1i. WSS policy with gender- and climate-sensitive provisions, and sector development framework 2021–2030 adopted (2019 baseline: NA) (OP 1.3.3; OP 4.2.1)	1i. WSS policy and sector development framework	
	1j. UWSCG charter amended (2019 baseline: NA) 1k. Corporate restructuring plan approved (2019 baseline: NA) 1l. Performance agreements formalized (2019 baseline: NA) 1m. Revenue-enhancement and cost-reduction programs approved (2019 baseline: efficiency rated <i>low</i>) 1n. HR management development plans issued and staff performance management system implemented (2019 baseline: NA) 1o. PSP–PPP road map and pipeline prepared (2019 baseline: NA) 1p. Water safety plan adopted (2019 baseline: NA) (OP 3.2.4)	1j. Amended charter 1k. Approved plan and organogram 1l. Signed performance agreements 1m. Corporate strategies and programs 1n. HR reform progress report 1o. PSP–PPP road map and pipeline 1p. Water safety plan	
Project Output Operational efficiency of WSS services increased	By 2024: 2a. In Telavi: (i) 1.6 km of transmission mains and 59 km of distribution lines rehabilitated and upgraded (2019 baseline: old and nonfunctional network) (OP 4.1.2) (ii) 6 new boreholes constructed, and 5 boreholes rehabilitated (2019 baseline: 5 nonfunctional boreholes) (OP 4.1.2) 2b. NRW baseline and target developed for each UWSCG service center (2019 baseline: NA) 2c. At least 500 UWSCG staff (30% of them women) improved technical, financial, management, and leadership skills (2019 baseline: NA) (OP 6.1) 2d. A rural WSS strategy and investment plan developed and accepted for implementation by the Ministry of Regional Development and Infrastructure, with at least 80% of training plans implemented (2019 baseline: NA) (OP 4.2.1) 2e. At least 90% of households serviced by UWSCG have been reached through multimedia campaigns and report increased awareness of hygiene, sanitation, customer rights, and water conservation (2020 baseline: NA) 2f. Under attached transaction TA: high-tech asset management system for water	2a. Supervision engineer's monthly progress report 2b. O&M improvement progress report 2c. Issued training certificates 2d. Rural WSS strategy and investment plan and quarterly training progress report 2e. Household surveys 2f. Transaction TA progress and	COVID-19 delays mobilization of consultants and contractors. Prices of materials increase beyond projections.

Results Chain	Performance Indicators with Targets and Baselines	Data Sources and Reporting Mechanisms	Risks
	supply implemented in at least one city where UWSCG operates (2020 baseline: no high-tech asset management system operational)	completion report	
Key Activities with Milestones Project output: operational efficiency of WSS services increased 2.1 Issue invitation for bids (September 2020) and award Telavi water supply contract (December 2020). 2.2 Complete rehabilitation and construction of Telavi water supply system (Q4 2022). 2.3 Mobilize O&M consultants (Q1 2021). 2.4 Mobilize consultants to develop rural WSS strategy and investment plan (Q2 2021). 2.5 Complete gender action plan, public awareness campaigns, and communication activities (Q2 2024). Program Management Activities Conduct baseline data surveys (November 2020) and establish a program monitoring and evaluation system, and a program performance management system. Implement periodic gender action plan, conduct public awareness campaigns, and monitor compliance with safeguards.			
Inputs Asian Development Bank: €133.05 million or \$150.00 million equivalent (regular loan) Policy component: €115.31 million or \$130.00 million equivalent (ordinary capital resources) Project component: €17.74 million or \$20.00 million equivalent (ordinary capital resources) High-Level Technology Fund: \$225,000 Government of Georgia: €3.10 million or \$3.5 million			
Assumptions for Partner Financing NA			

COVID-19 = coronavirus disease, GNERC = Georgian National Energy and Water Supply Regulatory Commission, HR = human resource, km = kilometer, NA = not applicable, NRW = nonrevenue water, O&M = operation and maintenance, OP = operational priority, PPP = public-private partnership, PSP = private sector participation, Q = quarter, TA = technical assistance, UWSCG = United Water Supply Company of Georgia, WSS = water supply and sanitation.

^a Government of Georgia. 2018. *Regional Development Program of Georgia 2018–2021*. Tbilisi.

^b Operating ratio means the ratio of UWSCG's operating expenses to its operating revenue. Operating expenses means all expenses of UWSCG on O&M, including staff salaries, cost of energy, chemicals, routine maintenance, spare parts, consumables, taxes, and other items; but excluding capital expenditure, debt service obligations, amortization, and depreciation. Operating revenue means the revenue collected by UWSCG from the sale of water as well as other revenues, excluding grants from the government.

^c The current proportion of women among UWSCG staff is 25.6%.

Contribution to Strategy 2030 Operational Priorities:

- OP 1.3.3 Measures for increased inclusiveness supported (number). Target: 1 (WSS policy)
- OP 2.3 Women represented in decision-making structures and processes (number). Target: 6 (Minimum 30% women representatives on the (i) 8-member WSS committee, and (ii) 10-member supervisory board)
- OP 3.2.4 National and subnational disaster risk reduction and/or management plans supported in implementation (number). Target: 1 (water safety plan)
- OP 4.1.1 Service providers with improved performance (number). Target: 1 (UWSCG)
- OP 4.1.2 Urban infrastructure assets established or improved (number). Target: 13 (transmission mains, distribution network, 6 new boreholes and 5 rehabilitated boreholes)
- OP 4.2.1 Measures to improve regulatory, legal, and institutional environment for better planning supported in implementation (number). Target: 5 (Law on Energy and Water Supply, Investment Appraisal Rules, draft Law on Water Resources Management, WSS policy, Rural WSS strategy and investment plan)
- OP 6.1 Entities with improved management functions and financial stability (number). Target: 1 (UWSCG)
- OP 6.2.3 Measures to strengthen state-owned enterprise governance supported in implementation (number). Target: 2 (WSS committee, supervisory board)

Source: Asian Development Bank.

B. Monitoring

1. Project Performance Monitoring

78. The quarterly progress report of the IPMO and monthly report of Supervision Consultant will be used to monitor the progress of civil works. Disaggregated baseline data for output and outcome indicators gathered during project processing will be updated and reported quarterly through the semiannual progress reports of the IPMO and after each ADB review mission. These semiannual progress reports will provide information necessary to update ADB's project performance reporting system.¹³

79. The IPMO will be responsible for monitoring and reporting on project performance. The basis for performance monitoring will be the project design and monitoring framework, which identifies the performance targets for the impact, outcomes, and outputs of the project. By collecting data from the sources identified in the design and monitoring framework, the IPMO will be able to report on an annual basis the performance of the project. Specific reporting requirements will be set out in the agreement between ADB and MRDI. The IPMO will collect the data, calculate the indicators, analyze the results, and prepare a brief report describing the extent to that the project is generating the intended outputs and outcomes, as well as the overall impact on the project municipalities. The relevance and practicability of data collection for indicators was confirmed with the IPMO and the implementing agencies. Meanwhile, the agreed socio-economic and environmental indicators to be used will be further enhanced to measure project impacts. The IPMO and UWSCG agreed and confirmed that they will (i) refine and integrate the PPMS framework at the start of project implementation; (ii) confirm that targets are achievable; (iii) develop recording, monitoring, and reporting arrangements; and (iv) establish systems and procedures not later than 6 months after project inception.

2. Compliance Monitoring

80. Loan covenants—policy, legal, financial, economic, environmental, and others—will be monitored. The compliance status of loan and project covenants will be reported and assessed through the semiannual progress report. The ADB review missions will verify the status.

3. Safeguards Monitoring

a. Environment

81. **Internal monitoring and reporting by construction supervision consultant.** During construction, the CSC will be responsible for monitoring the implementation of the Environmental Management Plan (EMP). The environmental specialist at the IPMO will be responsible for overall supervision of the EMP to ensure compliance by the Contractor and proper monitoring by the CSC. The status will be reported through the CSC's quarterly and monthly reports to UWSCG and ADB.

82. **Environmental impact monitoring by the environmental monitoring stations.** The implementing agencies will contract the local environmental monitoring stations (EMS) to conduct environmental impact monitoring in accordance with the EMP monitoring plan. Monitoring will be conducted during construction and operation until a project completion report is issued.

¹³ ADB's project performance reporting system is available at: <http://www.adb.org/Documents/Slideshows/PPMS/default.asp?p=evaltool>.

83. Environmental management plan implementation monitoring and progress reporting. The environmental officer at CSC will review project progress and compliance with the EMP based on consultation with the Contractor's environmental consultant, field visits, and the review of the environmental impact monitoring. The status of environmental monitoring will be reported to ADB through the semiannual EMP monitoring reports and the project progress reports. The reports will include (i) progress made in the EMP implementation; (ii) overall effectiveness of the EMP implementation (including public and occupational health and safety); (iii) environmental monitoring and compliance; (iv) institutional strengthening and training; (v) public consultation (including GRM); and (vi) any problems encountered during construction and operation, and the relevant corrective actions undertaken. The CSC will help the IPMO prepare the reports and submit the English report to ADB for appraisal and disclosure.

b. Resettlement

84. A detailed plan for the internal monitoring is included in the land acquisition and resettlement framework (LARF). The IPMO will include a summary of internal monitoring in the project progress reports and semiannual social monitoring reports (SSMR) submitted to ADB. The LARF implementation compliance report will be prepared by IPMO and submitted to ADB's review and clearance in case if LARF is prepared and implemented during the project implementation. IPMO will be assisted by the CSC in safeguards compliance monitoring and reporting, including the preparation of draft compliance report and SSMRs.

c. Social and Gender Action Plans Monitoring¹⁴

85. A national gender specialist will be engaged as part of the IPMO and will be responsible for GAP implementation, monitoring and reporting. An international Gender Specialist (consultant) will provide technical guidance and advice in the implementation of the GAP. Progress towards the achievement of gender targets in the design and monitoring framework as well as those reflected in the GAP will be monitored and reported quarterly by IPMO and included in the project monitoring reports, with a distinct section that provides concrete sex-disaggregated data demonstrating the reach of the gender activities implemented as well as describing challenges met and actions taken to overcome the challenges. A mid-term review will be carried out and a project completion report will be undertaken at project end. The cost of implementing the GAP is included in the project's Cost and Financing section.

C. Evaluation

86. After the loan is declared effective, ADB will field an inception mission to discuss the PAM in detail, orient the IPMO on its roles and responsibilities, discuss implementation arrangements, procurement processes, disbursement arrangements, audit, and reporting requirements for the project.

87. ADB will field review missions during the duration of project implementation to review the project progress and address issues, as necessary, to ensure that the project is completed as planned.

¹⁴ ADB's Handbook on Social Analysis: A Working Document. <http://www.adb.org/Documents/Handbooks/social-analysis/default.asp>; Staff Guide to Consultation and Participation. <http://www.adb.org/participation/toolkit-staff-guide.asp>; and CSO Sourcebook: A Staff Guide to Cooperation with Civil Society Organizations. <http://www.adb.org/Documents/Books/CSO-Staff-Guide/default.asp>.

88. A midterm review mission will be fielded by ADB between the second and third year of implementation to assess whether attainment of the project's immediate objective (design and monitoring framework) is still likely to be achieved and if changes in project may be needed.

89. Within 6 months of physical completion of the project, UWSCG will submit the government's project completion report to ADB.

D. Reporting

90. UWSCG 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 the next 12 months; and (iii) a project completion report within 6 months of physical completion of the project. To ensure that projects will continue to be both viable and sustainable, project accounts and the executing agency audited financial statement together with the associated auditor's report, should be adequately reviewed.

E. Stakeholder Communication and Participation

91. The stakeholder communication strategy for the project aims to increase public awareness on project benefits and improve sustainability of water supply and sewerage system improvements and to promote public feedback during the detailed design, construction, and operation phases of the facilities.

92. The communication strategy will also focus on advantages of introducing private sector to water and sanitation O&M. Such message should be conveyed to all target groups. These groups will not only include customers but also policy makers, the general public to increase their understanding in supplying improved water and wastewater services – including with private sector involvement and the need to use water more rationally.

93. Local and national government officials and the Regulator must understand not only the importance of having modern equipment and systems. An effective management of the necessary changes, processes and practices is also vital, and this can be achieved with the involvement of a private operator.

94. Within UWSCG an internal awareness raising campaign should be conducted to inform the staff at the utility on impending changes, their aims and reasons and how the changes are intended to bring about overall improvements for the benefit of everyone involved.

95. The project includes conduct of public awareness through multimedia campaigns in the communities and households to keep the public well-informed about hygiene, sanitation, customer rights, and water conservation. Individual consultants will be recruited under the project for this activity.

96. ADB Public Communications Strategy. Project information will be strategically disseminated through media and regular public consultations at milestones including loan signing, contract awards and project completion and a grievance redress mechanism will be established by the MRDI through IPMO to respond to concerns of affected persons and the public.

X. ANTICORRUPTION POLICY

97. ADB reserves the right to investigate, directly or through its agents, any violations of the Anticorruption Policy relating to the project.¹⁵ 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 project contractors, suppliers, consultants, and other service providers. Individuals and/or entities on ADB's anticorruption debarment list are ineligible to participate in ADB-financed activity and may not be awarded any contracts under the project.¹⁶

98. To support these efforts, relevant provisions are included in the loan agreement and the bidding documents for the Project. In particular, all contracts financed by ADB in connection with the project will include provisions specifying the right of ADB to audit and examine the records and accounts of the executing agency and all contractors, suppliers, consultants, and other service providers as they relate to the project.

99. MRDI and UWSCG has been reminded to familiarize themselves with ADB's Integrity Principles and Guidelines.¹⁷ MRDI and UWSCG will access ADB's Sanction List and check the eligibility of bidders, consultants, their team members, and suppliers¹⁸ and has been made aware on where, how and what to report if there is an integrity concern or allegation of integrity violation on ADB-related activity.¹⁹

XI. ACCOUNTABILITY MECHANISM

100. People who are, or may in the future be, adversely affected by the project may submit complaints to ADB's Accountability Mechanism. The Accountability Mechanism provides an independent forum and process whereby people adversely affected by the ADB-assisted projects can voice, and seek a resolution of their problems, as well as report alleged violations of ADB's operational policies and procedures. Before submitting a complaint to the Accountability Mechanism, affected people should make an effort in good faith to solve their problems by working with the concerned ADB operations department. Only after doing that and if they are still dissatisfied, they should approach the Accountability Mechanism.²⁰

XII. RECORD OF CHANGES TO THE PROJECT ADMINISTRATION MANUAL

101. All revisions and/or updates during implementation should be retained in this section to provide a chronological history of changes to implemented arrangements recorded in the PAM, including revision to the contract award and disbursement S-curves.

¹⁵ ADB's Anticorruption Policy: <https://www.adb.org/sites/default/files/institutional-document/32026/anticorruption.pdf>

¹⁶ ADB's Integrity Office web site: <https://www.adb.org/site/integrity/main>

¹⁷ <https://www.adb.org/documents/integrity-principles-and-guidelines>

¹⁸ <https://lnadbg4.adb.org/oga0009p.nsf/alldocs/AANA-AAFBDE?OpenDocument>

¹⁹ <https://www.adb.org/site/integrity/how-to-report-fraud>

²⁰ Accountability Mechanism. <http://www.adb.org/Accountability-Mechanism/default.asp>.

TERMS OF REFERENCE OF CONSULTANTS

AUDIT OF THE GEO: SUSTAINABLE WATER SUPPLY AND SANITATION PROJECT LOAN AND THE FINANCIAL STATEMENTS OF UNITED WATER SUPPLY COMPANY OF GEORGIA

I. PROJECT DESCRIPTION

1. The proposed sector development program (SDP) will assist the government in its pursuit of a more sustainable sector development approach. The policy actions under the policy-based loan will support the government's reforms of governance and institutions to improve the sector's performance and financial sustainability, while ensuring funding for basic services during a period of severe fiscal constraints. The project will improve the operational efficiency of United Water Supply Company of Georgia (UWSCG),¹ and to enable the government to reach rural populations. The policy actions will enhance sector planning, coordination, and institutions nationwide, while the project will (i) improve a critical and procurement-ready water supply system in Telavi that operates under fiscal constraints because of the coronavirus disease (COVID-19) pandemic,² (ii) strengthen operation and maintenance (O&M) capacity, and (iii) prepare for a national rural water supply and sanitation (WSS) strategy and investment plan, to increase the operational efficiency of both urban and rural WSS. The policy actions will increase the sector efficiency and sustainability of the infrastructure investment under the SDP and the government's existing sector investments, including those under ADB's ongoing \$500 million multitranche financing facility.³

2. The SDP will be aligned with the following impact: environmental and public health conditions in Georgia improved. The SDP will result in the following outcome: WSS sector performance and financial sustainability in Georgia improved. The policy-based loan (PBL) will support output 1 and the project loan will support output 2.

3. **Output 1: Sector governance and institutions strengthened.** The PBL will support the government to institute a cohesive policy and legal basis for urban and rural WSS sector development. The PBL will deliver: (i) a draft law on water resources management to Parliament, (ii) national adoption of the Energy and Water Supply Law—replacing the 1997 Law on Energy and Gas—and related resolutions to strengthen legislative and regulatory framework for WSS, and (iii) an integrated urban and rural WSS policy with gender- and climate change-specific provisions. Higher level of WSS sector coordination will be required for harmonized and balanced urban and rural WSS development. The government will establish a WSS committee, headed by the Ministry of Regional Development and Infrastructure, as a focal point to coordinate sector activities.

4. The PBL will reorganize UWSCG to improve operations. It will enable UWSCG to become a more autonomous, accountable, efficient, and sustainable organization. The key corporate reform areas are: (i) a supervisory board and amended charter; (ii) corporate restructuring; (iii)

¹ The United Water Supply Company of Georgia limited liability company (UWSCG) is a state-owned limited liability company, and the state owns 100% of shares. The company was established on 14 January 2010.

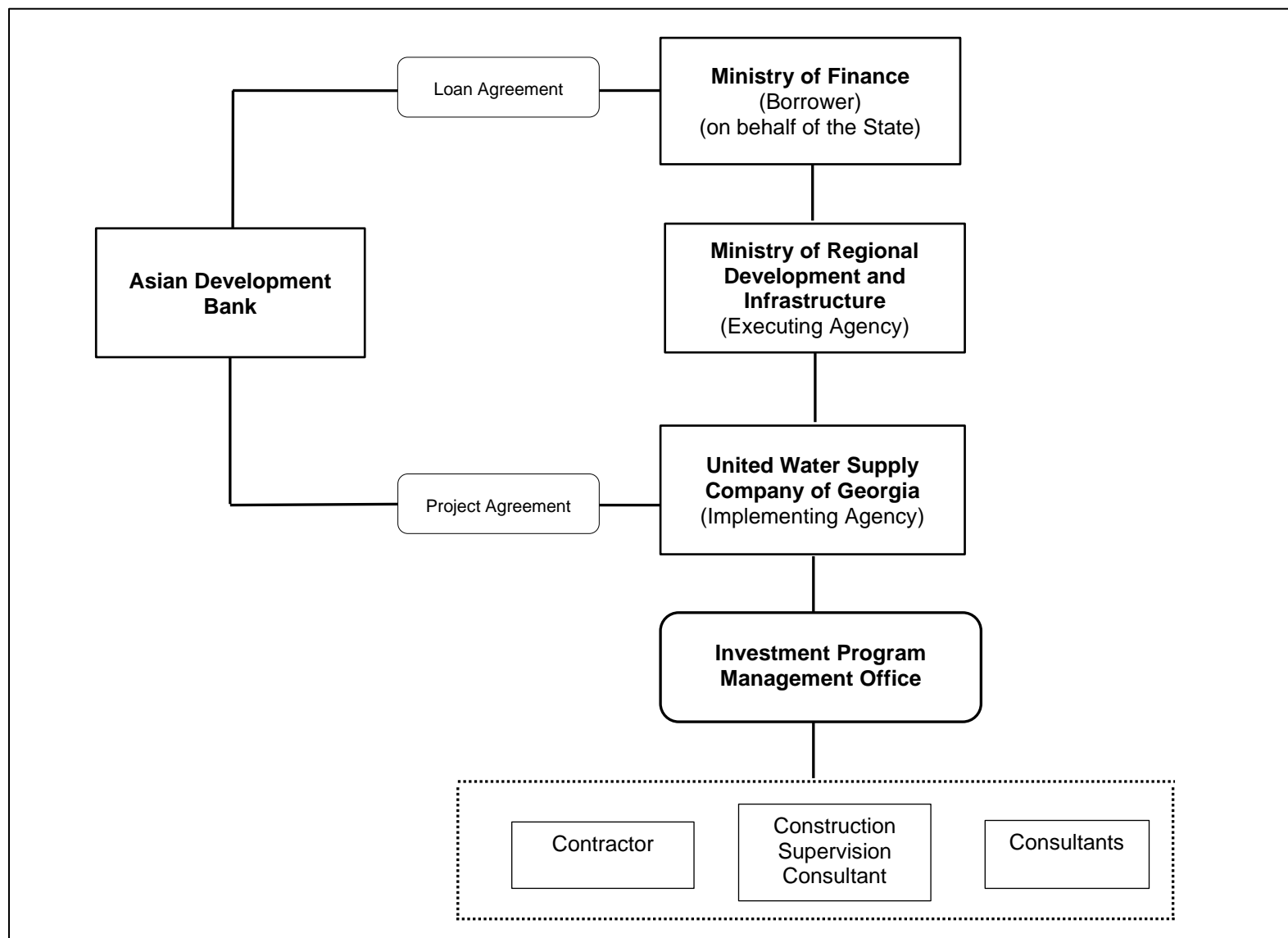
² Telavi is the capital of the Kakheti region, 160 kilometers east of the national capital, Tbilisi, and has a population of about 21,000. Adequate water supply is critical for Telavi's production of wine and agricultural produce, and for tourism. Only 18% of Telavi's inhabitants enjoy 24-hour water supply; 20% receive water for 12 hours a day, and 62% for 2–3 hours a day.

³ ADB. [Georgia: Urban Services Improvement Investment Program](#). ADB financed 22 water and other urban infrastructure and services projects in Georgia from 2007 to 2019 for a total of \$593 million.

human resources reform, including greater involvement of women in the sector; (iv) corporate strategies to increase revenue and lower costs by reducing nonrevenue water (NRW), increasing metering, and adopting a public communications strategy; (v) performance agreements with well-defined key performance indicators and incentives; (vi) an outsourcing plan, PPP road map and pipeline; and (vii) tariff rationalization. The PBL will support UWSCG to develop a water safety plan to improve emergency responses and disaster risk management. To improve human resource management, the PBL will support more balanced skills-mix and resource allocations based on updated job descriptions, human resource policy and development programs, salary and compensation review, and performance-based evaluations and incentives. Human resource reforms and change management committees will prepare UWSCG for institutional transformation, and set standard and best practices for the sector. The PBL will support environmental protection and resilience to climate change to address the potential effects of pollution and climate change on water quality and quantity.

5. **Output 2: Operational efficiency of water supply and sanitation increased.** The project will (i) rehabilitate critical infrastructure in Telavi to increase the provision of 24-hour water supply, reduce NRW, and improve supply pressure and energy efficiency; (ii) improve UWSCG's O&M capacity across approximately 57 cities and towns in nine regions; (iii) develop a strategy, investment plan, and related local capacity for rural WSS; (iv) strengthen project management, monitoring, and evaluation to support UWSCG's corporate restructuring; and (v) increase public awareness of the importance of health, hygiene, sanitation, and water conservation. In Telavi, the project will rehabilitate transmission mains and distribution network; repair water intakes, pumps, valves, and treatment units; and provide new reservoirs and wells.⁴

⁴ Advance procurement actions are carried out for the procurement of Telavi water supply systems. Invitation for bidding is planned to be advertised in July 2020.

PROJECT ORGANIZATION STRUCTURE

II. AUDITED PROJECT FINANCIAL STATEMENTS (APFS)

A. Management Responsibility for Preparing Project Financial Statements

6. Management is responsible for preparing and fairly presenting the project financial statements, and for maintaining sufficient internal controls to ensure that the financial statements are free from material misstatement, whether due to fraud or error. In addition, management is responsible for ensuring that funds were used only for the purpose(s) of the project, for compliance with financial covenants (where applicable), and for ensuring that effective internal controls, including over the procurement process, are maintained. In this regard, management must:

- (i) prepare and sign the Audited Project Financial Statements.
- (ii) prepare and sign a Statement of Compliance.

7. Management must include the following in the Statement of Compliance:

- (i) that project financial statements are free from material misstatements including omissions and errors, and are fairly presented;
- (ii) that the borrower or executing agency has utilized the proceeds of the loan only for the purpose(s) of the project;
- (iii) that the borrower or executing agency was in compliance with the financial covenants of the legal agreement(s) (where applicable);
- (iv) that the advance account procedure, where applicable, has been operated in accordance with the Asian Development Bank's (ADB) Loan Disbursement Handbook;
- (v) that adequate supporting documentation has been maintained to authenticate claims stated on the statement of expenditures (SOE), where applicable, for reimbursement of eligible expenditures incurred and liquidation of advances provided to the imprest account; and
- (vi) that effective internal control, including over the procurement process, was maintained.

B. Objectives

8. The objectives of the audit of the project financial statements is to enable the auditor to (i) express an independent and objective opinion as to whether the project financial statements present fairly, in all material respects, or give a true and fair view of the project's financial position, its financial performance and cash flows, and (ii) provide a reasonable assurance opinion over certain specific representations made in the Statement of Compliance.

C. Auditing Standards

9. The audit is required to be conducted in accordance with International Standards on Auditing (ISA). These standards require that the auditor comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the project financial statements are free from material misstatement. An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the project financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the project financial statements whether due to fraud or error. In making those risk assessments, the auditor considers the internal control relevant to the entity's preparation and fair presentation of the project financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an

opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the project financial statements.

10. In complying with ISA, the auditor will pay particular attention to the following standards:
- ISA 800/ISSAI 1800 – Special Considerations – Audits of Financial Statements Prepared in Accordance with Special Purpose Frameworks.
 - ISA 240/ISSAI 1240 – The Auditor's Responsibilities Relating to Fraud in an Audit of Financial Statements.
 - ISA 250/ISSAI 1250 – Consideration of Laws and Regulations in an Audit of Financial Statements.
 - ISA 260/ISSAI 1260 – Communication with Those Charged with Governance.
 - ISA 265/ISSAI 1265 – Communicating Deficiencies in Internal Control to Those Charged with Governance and Management.
 - ISA 330/ISSAI 1330 – The Auditor's Responses to Assessed Risks.

D. Project Financial Reporting Framework

11. The auditor will verify that the project financial statements have been prepared in accordance with the *International Financial Reporting Standards (IFRS)* issued by the *International Accounting Standards Board (IASB)*. The executing agency and/or implementing agency are responsible for preparing the project financial statements, not the auditor.

E. Audit Deliverables

1. Audited Project Financial Statements

12. An auditor's opinion providing reasonable assurance over the project financial statements, and project financial statements comprising the following:

Table 1: Content of the Project Financial Statements

For Cash-Based Financial Statements	For Accrual-Based Financial Statements
A statement of cash receipts and payments	A statement of financial position (balance sheet)
A statement of budgeted versus actual expenditures	A statement of financial performance (income statement)
A statement of imprest account (where applicable)	A statement of cash flows
A summary statement of expenditures (where applicable)	A statement of changes in net assets/equity (where applicable)
Significant accounting policies and explanatory notes	A statement of imprest account (where applicable)
Any additional schedules agreed (e.g., a summary of assets)	Significant accounting policies and explanatory notes
	Statement of budgeted versus actual expenditures
	Summary statement of expenditures (where applicable)
	Any additional schedules agreed

2. Reasonable Assurance Opinion Over the Use of Loan Proceeds and Compliance With Financial Covenants

13. The auditor will provide a reasonable assurance opinion for the following confirmations provided by Management in the Statement of Compliance:

- (i) That the proceeds of the loan were used only for the purpose(s) of the project; and

- (ii) That the borrower or executing agency was in compliance with the financial covenants of the legal agreement(s), where applicable.

14. The auditor will outline the degree of compliance for each of the financial covenants in the loan agreement.

3. Management Letter

15. The auditor will provide a management letter containing, at a minimum, the following:
- (i) any weaknesses in the accounting and internal control systems that were identified during the audit, including any irregularity in the use of the advance account and statement of expenditures (SOE) procedures (where applicable);
 - (ii) any identified internal control weaknesses related to the procurement process such as, over the bidding, evaluation and contract management domains;
 - (iii) recommendations to rectify identified weaknesses;
 - (iv) management's comments on the audit recommendations along with the timeframe for implementation;
 - (v) the status of significant matters raised in previous management letters;
 - (vi) any other matters that the auditor considers should be brought to the attention of the project's management; and
 - (vii) details of any ineligible expenditure²⁵ identified during the audit. Expenditure is considered ineligible if it refers to (i) expenditures incurred for purposes other than the ones intended under the legal agreement(s); (ii) expenditures not allowed under the terms of the legal/financing agreements; and (iii) expenditures incurred in violation of applicable government regulations.

4. Specific Considerations

16. The auditor will, during the course of the audit, pay particular attention to the following:
- (i) the use of external funds in accordance with the relevant legal and financing agreements;
 - (ii) the provision of counterpart funds in accordance with the relevant agreements and their use only for the purposes intended;
 - (iii) the maintenance of proper books and records;
 - (iv) the existence of project fixed assets and internal controls related thereto;
 - (v) where the audit report has been issued under ISA 800 or ISSAI 1800, it shall include the mandatory Emphasis of Matter paragraph alerting users of the audit report that the project financial statements are prepared in accordance with a special purpose framework and that, as a result, the project financial statements may not be suitable for another purpose. The auditor shall include this paragraph under an appropriate heading;
 - (vi) on the imprest fund procedure (where applicable), audit procedures are planned and performed to ensure (a) the imprest account (and any sub-accounts) has been managed in accordance with ADB's Loan Disbursement Handbook, (b) the cash balance of the imprest account (and any sub-accounts) is supported by evidence, (c) the expenditures paid from the imprest account (and any sub-accounts) comply with the approved project purpose and cost categories stipulated in the loan agreement, and (d) the amount of expenditures paid from the imprest account (and

²⁵ If the auditor reports any ineligible expenditure in the management letter, the details of the findings should include the funding source to which the observation relates.

- any sub-accounts) comply with disbursement percentages stipulated in the loan agreement;
- (vii) adequate supporting documentation has been maintained to authenticate claims stated in the SOE for reimbursement of eligible expenditures incurred and liquidation of advances provided to the imprest account (where applicable);
- (viii) on the SOE procedure (where applicable), audit procedures are planned and performed to ensure that (a) the SOEs have been prepared in accordance with ADB's Loan Disbursement Handbook, (b) the individual payments for expenditures stated in the SOE are supported by evidence, (c) the expenditures stated in the SOEs comply with the approved project purpose and cost categories stipulated in loan agreement, and (d) the amount of expenditures stated in the SOEs comply with disbursement percentages stipulated in the loan agreement; and
- (ix) any weaknesses in internal controls over the procurement process.

17. All reports must be presented in the English language within 6 months following the end of the fiscal year.

18. Public disclosure of the project financial statements, including the auditor's opinion on the audited project financial statements, will be guided by ADB's Public Communications Policy (2011). After review, ADB will disclose the audited project financial statements and the opinion of the auditor on the audited project financial statements no later than 14 calendar days of ADB's confirmation of their acceptability by posting them on ADB's website. The management letter and the additional auditor's opinions will not be disclosed.²⁶

F. Other Matters

1. Statement of Access

19. The auditor will have full and complete access, at all reasonable times, to all records and documents including books of account, legal agreement(s), bank records, invoices and any other information associated with the project and deemed necessary by the auditor.

20. The auditor will be provided with full cooperation by IPMO staff and all employees of UWSCG, whose activities involve, or may be reflected in, the annual project financial statements. The auditor will be assured rights of access to banks and depositories, consultants, contractors and other persons or firms hired by the employer.

2. Independence

21. The auditor will be impartial and independent from any aspects of management or financial interest in the entity or project under audit. In particular, the auditor should be independent of the control of the entity. The auditor should not, during the period covered by the audit, be employed by, or serve as director for, or have any financial or close business relationship with the entity. The auditor should not have any close personal relationships with any senior participant in the management of the entity. The auditor must disclose any issues or relationships that might compromise their independence.

²⁶ This type of information would generally fall under public communications policy exceptions to disclosure. ADB. 2011. *Public Communications Policy*. Paragraph 97(iv) and/or 97(v).

3. Auditor Experience

22. The auditor must be authorized to practice in the country and be capable of applying the agreed auditing standards. The auditor should have adequate staff, with appropriate professional qualifications and suitable experience, including experience in auditing the accounts of projects or entities comparable in nature, size and complexity to the project or entity whose audit they are to undertake. To this end, the auditor is required to provide curriculum vitae (CV) of the personnel who will provide the opinions and reports, together with the CVs of managers, supervisors and key personnel likely to be involved in the audit work. These CVs should include details of audits carried out by these staff, including ongoing assignments.

III. AUDIT OF UWSCG FINANCIAL STATEMENTS

A. Objective

23. The objective of the audit is to enable the auditor to express an opinion on whether the financial statements of present fairly, in all material respects, or give a true and fair view of, the entity's financial position, its financial performance and cash flows in accordance with the International Financial Reporting Standards (IFRS) as published by the International Accounting Standards Board (IASB). UWSCGs' accounting records provide the basis for preparation of the financial statements and are established to reflect its financial transactions.

B. Responsibility for preparation of financial statements

24. The UWSCG's accounting and reporting departments are responsible for the preparation of financial statements, including the maintenance of adequate accounting records and internal controls, the selection and application of accounting policies, the safeguarding of the assets of the UWSCG, and adequate disclosure. As part of the audit process, the auditor will request from management of UWSCG written confirmation concerning representations made in connection with the audit.

C. Scope

25. The audit will be conducted in accordance with International Standards on Auditing (ISA). ISA requires that the auditor plans and performs the audit to obtain reasonable assurance about whether the financial statements are free of material misstatements. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

26. In complying with International Standards on Auditing, the auditor is expected to pay attention to the following matters, among other, including special considerations for public sector entities:

- (i) In planning and performing the audit to reduce audit risk to an acceptably low level, the auditor should consider the risks of material misstatements in the financial statements due to fraud, as required by International Standard on Auditing 240: The Auditor's Responsibilities Relating to Fraud in an Audit of Financial Statements.
- (ii) When designing and performing audit procedures and in evaluating and reporting the results thereof, the auditor should recognize that noncompliance by the entity with laws and regulations may materially affect the financial statements, as required by International Standard on Auditing 250: Consideration of Laws and Regulations in an Audit of Financial Statements.
- (iii) The auditor should communicate audit matters of governance interest arising from the audit of financial statements to those charged with governance of an entity, as required by International Standard on Auditing 260: Communication with those Charged with Governance.
- (iv) The auditor should appropriately communicate to those charged with governance and to management any deficiencies in internal control that the auditor has identified in an audit of financial statements, as required by International Standard on Auditing 265: Communicating Deficiencies in Internal Control to Those Charged with Governance and Management.

- (v) To reduce audit risk to an acceptably low level, the auditor should determine overall responses to assessed risks at the financial statement level, and should design and perform further audit procedures to respond to assessed risks at the assertion level, as required by International Standard on Auditing 330: The Auditor's Responses to Assessed Risks.
- (vi) When certain aspects of an entity's operations are performed by a third-party service provider, the auditor is expected to include an understanding and assessment of the internal control environment of the service provider during the audit process, as required by International Standard on Auditing 402: Audit Considerations Relating to an Entity Using a Service Organization.
- (vii) As part of the audit process, the auditor is expected to obtain written representations from management and, where appropriate, those charged with governance, as required by International Standard on Auditing 580: Written Representations.
- (viii) When the external auditor decides to use the work of an entity's internal audit function to modify the nature or timing, or reduce the extent, of audit procedures to be performed directly by the external auditor, the determination shall be in accordance with International Standard on Auditing 610: Using the Work of Internal Auditors.
- (ix) In determining whether to use the work of an auditor's expert or the extent to which the work of an auditor's expert is adequate for audit purposes, the determination shall be made in accordance with International Standard on Auditing 620: Using the Work of an Auditor's Expert.

D. Entity financial statements

27. The auditor should verify that the BKVs' financial statements have been prepared in accordance with IFRS. It defines a complete set of financial statements as comprising the following components:

- (i) a statement of financial position as at the end of the period;
- (ii) a statement of comprehensive income for the period;
- (iii) a statement of changes in equity for the period;
- (iv) a statement of cash flows for the period;
- (v) notes, comprising a summary of significant accounting policies and other explanatory information; and
- (vi) a statement of financial position as at the beginning of the earliest comparative period when an entity applies an accounting policy retrospectively or makes a retrospective restatement of items in its financial statements, or when it reclassifies items in its financial statements.

E. Audit Reports

1. Audit opinion

28. The auditor will issue an audit opinion on the entity financial statements. The auditor's opinion shall be based on an evaluation of the conclusions drawn from the audit evidence obtained and shall be expressed clearly through a written report that also describes the basis for that opinion. The audit report shall be prepared in accordance with International Standard on Auditing 700: Forming an Opinion and Reporting on Financial Statements.

29. A modified audit opinion shall be rendered in the financial statements when the auditor concludes, on the basis of the audit evidence obtained, that the financial statements as a whole are not free from material misstatement; or the auditor is unable to obtain sufficient appropriate audit evidence to conclude that the financial statements as a whole are free from material misstatement. Modified audit opinions shall be in accordance with International Standard on Auditing 705: Modifications to the Opinion in the Independent Auditor's Report.

30. The auditor will include emphasis of matter paragraphs or other matter paragraphs in the audit opinion where the auditor, having formed an opinion on the financial statements, seeks to draw users' attention, when in the auditor's judgment it is necessary to do so, by way of clear additional communication in the auditor's report. The paragraphs will refer to either a matter that, although appropriately presented or disclosed in the financial statements, is of such importance that it is fundamental to users' understanding of the financial statements; or as appropriate, any other matter that is relevant to users' understanding of the audit, the auditor's responsibilities, or the auditor's report. This form of opinion will be presented in accordance with International Standard on Auditing 706: Emphasis of Matter Paragraphs or Other Matter Paragraphs in the Independent Auditor's Report.

2. Other audit reports

31. In addition to the audit opinion(s), the auditor will also, in the letter to management:

- (i) provide comments and observations 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 instances of noncompliance with the terms of the financial agreement(s);
- (iv) draw to the borrower's attention any other matters that the auditor considers pertinent; and
- (v) responses from management, including implemented and proposed remedial actions.

32. If, during the audit nothing has come to the attention that the auditor considers pertinent to be brought to the attention of the borrower, and a management letter is therefore not prepared, the auditor will issue a letter stating this.

33. The auditor's opinion on the financial statements and management letter should be received by the BKVs no later than three months after the end of audit for each year during project implementation.

3. General

34. The auditor is entitled to unlimited access to all information and explanations considered necessary to facilitate the audit, including legal documents, reports of reviews and investigations, correspondences, and credit account information. The auditor may also seek written confirmation of amounts disbursed and outstanding in the Bank records.

35. The auditor is encouraged to meet and discuss audit-related matters, including input to the audit plan, with the project task team.

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

TERMS OF REFERENCE FOR RURAL WATER SUPPLY SECTOR DEVELOPMENT

A. Introduction and Background

1. The Government of Georgia is improving and expanding the Water and Supply and Sanitation (WSS) services beyond the urban centres by leveraging donor and private sector funds. While the situation improves in the urban areas, MRDI has started to focus on the suburban and rural areas. In this respect, a long-term planning for the rural WSS sector is to be prepared.

2. The rural population lacks access to safe water supply and sanitation, which results in substantial health and economic costs and can further create gender and other societal inequalities. Scattered settlements in the rural environment, especially when water resources are stressed, give rise to challenges for infrastructure provision. Most of the existing rural water infrastructure is decentralized and many of these infrastructure systems have also fallen into disrepair due to technical, financial, and managerial limitations. In addition, the rural population depends on local water sources, which are not always safe.

3. The WSS sector in Georgia is to some extent fragmented and knows mainly three water and wastewater companies serving the urban sector – Georgian Water and Power (GWP), United Water Supply Company of Georgia (UWSCG) and Batumi Tskali. While GWP works in Tbilisi, Rustavi and Mzkheta and has been completely privatized in 2009, Batumi is municipally owned and well supported by KfW.

4. UWSCG is a government company being responsible for the urban WSS for all the cities and municipalities in Georgia except those in Adjara, Tbilisi, Rustavi, and Mzkheta. UWSCG has been corporatized, meaning publicly owned and by its statutes profit-oriented.

5. According to Georgian legislation the municipalities are responsible for the development and provision of WSS services unless one of the afore mentioned licensees are in charge. In absence of financial means as well as technical and operational know-how, the municipalities normally seek for support from the Ministry of Regional Development and Infrastructure (MRDI). This is how UWSCG has also got involved in the rural WSS sector and had to take over the additional burden of developing and running some of the rural WSS schemes by request of MRDI as no alternative is currently available. Out of about 3300 villages, UWSCG takes care of 304, out of which 162 are connected to a centralized system and 142 work in an independent mode.

6. WSS in the rural areas is challenging due to poor economic condition, and associated cost recovery challenges. Basic services are provided via a user-groups when utilities and municipalities are not able to cover the small agglomerations. It is common that the drinking water quality fails to comply with the required standards, leading to water-borne diseases. Untreated wastewater is directly discharged into the ground or receiving waters. This causes environmental damage and potential contamination of the drinking water abstracted downstream.

7. Decentralized water supply and sanitation as well as new alternative sanitation systems (NASS) need to be improved or implemented (such as improved water abstraction and disinfection or basic sanitation infrastructure via septic tanks, urine-diverting toilets etc.) in these areas.

8. In general, rural people lack access to appropriate, low-cost, and locally produced technology for water, sanitation and hygiene needs and the advanced and urban focused technologies will not fit for the rural case. Such centralized systems have much higher specific costs when implemented in rural areas and at the same time the semi-urban and rural population has a lower income and ability to pay (some 20% of the rural population are below the poverty line). The technologies for the rural sector should take into account the use of natural treatment systems, being robust and low cost.

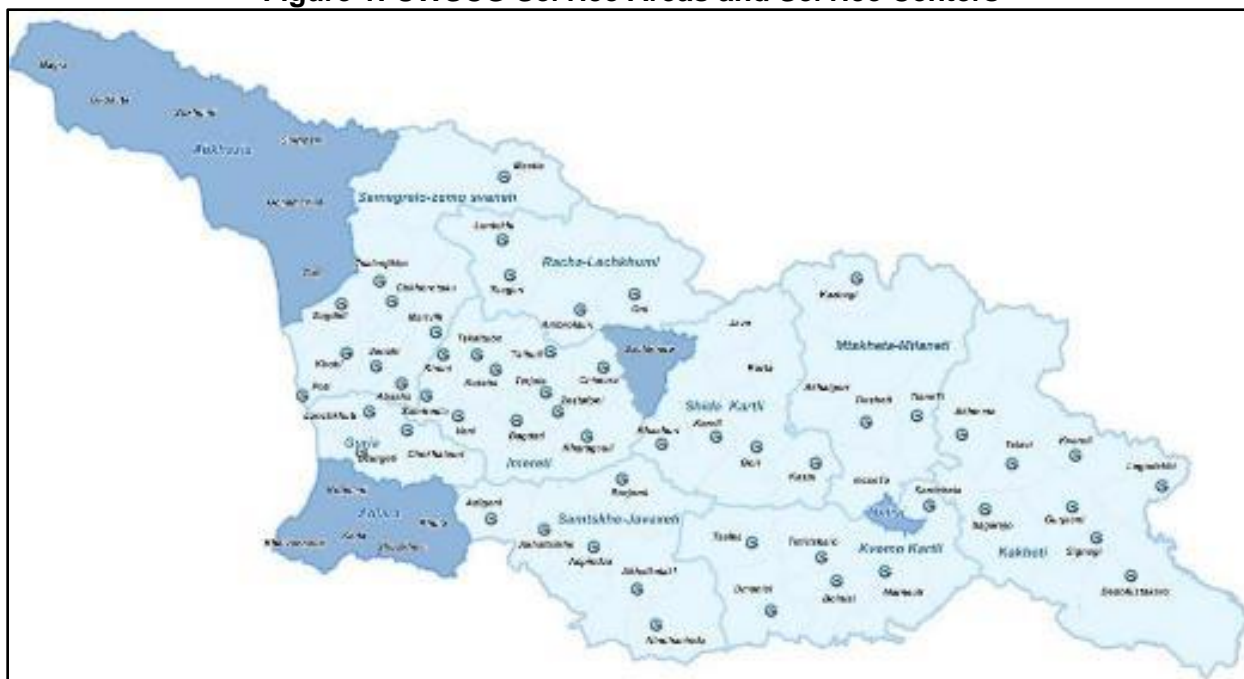
9. In addition, it might be necessary in quite some cases to rehabilitate and extent the centralised water and wastewater infrastructure of the sub-urban districts operated by the respective municipalities or licensees.

10. Several efforts have been undertaken proposing different options for the rural WSS like a recent study on the regions of Guria and Mzkheta-Mtianeti financed by USAID.

B. Project Area

11. The project will be implemented in all rural parts of Georgia. Most of them being in region where main cities are under UWSCG management as mentioned in the newt map.

Figure 1: UWSCG Service Areas and Service Centers



UWSCG service area is shown in light blue color.

Source: Georgian Urban Services Improvement Investment Programme. 2013. *Consultant's Services for Management Contractor*. Sachsen Wasser & AHT Group.

C. Impact of the project

12. **The rural and sub-urban WSS sector has developed clear-cut organizational arrangement and will be managed and developed in a transparent and sustainable way.**

D. Outcome

13. The outcome of this consultancy is **a strategic plan including timebound actions (plan)** how to improve access to WSS in rural Georgia by proposing and justifying a sustainable solution for rural and semi-urban WSS services on an organizational, institutional, financial, technological and operational scale—and preparation of a detailed **priority investment program** supported by a feasibility study to cover the most important and urgent needs in the sector.

E. Outputs

14. Determination of the future role of the municipalities, user-groups, MRDI and UWSCG in the rural WSS sector and **development of an institutional framework** that can address the issues of sub-urban and rural areas. Identification of enabling institutional and governance structures.

15. **Rural and sub-urban WSS Plan** with a detailed **business model** for infrastructure development and investment for the rural and sub-urban areas that ensures the sustainable **infrastructure development and operation.**

16. **Development of public participation approaches** and outreach programs to mobilize communities to support decision making, participatory planning for assuring long-term impact of measures and to enhance and promote WSS and health education to improve quality of life and economic development.

17. Development of a **capacity building program** and trainings for municipalities, villages and user-groups involved in WSS development and operations.

18. Establishment of a **priority investment program** to cover the most important and urgent short comings in the suburban and rural environment ensuring sufficient water supply in quantity, guaranteeing safe drinking water, and avoiding environmental damages and health threats by improper disposal of wastewater.

F. Activities

1. Phase 1

19. For Phase 1, the Consultant is expected to spend significant inputs in the field and especially in the rural areas. In this respect, the Consultant shall consider the following to be the minimum:

- (i) 80% of key international experts' inputs shall be spent in Georgia and more than 50% in the rural areas,
- (ii) 70% of key national experts' inputs shall be spent in the rural areas.

20. The Consultant is expected to meet with stakeholders and assess existing conditions in at least 75 rural areas.

a. Definition of rural and suburban WSS

21. Inventory and assessment of existing reports, studies, projects, and programs on the rural and sub-urban WSS sector including current activities of IFIs and bi-lateral donors. Benchmarking and evaluation of proposed solutions (institutional and organizational set-up, technologies, finance, capacity building).
22. Assessment of legal and institutional framework of the WSS sector, Mapping of players, drivers in the WSS sector with focus on the rural and suburban areas, roles of MRDI, municipalities, user-groups. Review of relevant policies, responsibilities, and current institutional set-up.
23. Mapping of stakeholders and target groups; target group analysis including relevant socio-economic data (ability to pay, affordability, gender issues, etc.)
24. Financial sustainability of the rural and suburban WSS sector, screening of willingness and ability to pay.
25. Definition of rural and sub-urban WSS (what is urban, what is sub-urban? How to define rural WSS?) from a legal, socio-economic, administrative, and demographical view.

b. Mapping of rural and suburban areas and definition of priority areas

26. Inventory and assessment of available data on water resources (quantity and quality of ground and surface water, availability, etc.); existing and potential future constraints including potential user conflicts.
27. Assessment of current water consumption and water demand projection of sub-urban and rural areas with a 5- and 10-years perspective.
28. Inventory and assessment of current WSS infrastructure assets (production capacity, storage, transmission, and distribution), implemented technologies, O&M practices, related environmental impact and financial sustainability in the selected regions. Water quality control and monitoring. Gap and weak point analysis.
29. Definition and mapping of areas with the most urgent and important needs. Mapping of rural and semi-urban areas for which solutions will have to be provided in future. Selection of specific areas in cooperation with MRDI for which detailed feasibility studies will be carried out.

c. Rural and suburban WSS Plan

30. Screening and analysis of appropriate WSS technologies for sub-urban and rural applications. Some areas might require innovation especially with regard to new alternative water treatment and sanitation systems (NASS) with simple and robust but effective technologies and low operation cost.
31. Preparation of a rural and sub-urban **WSS Plan** that will have to include:
 - (i) WSS development plan with development priorities, planning policies and design criteria
 - (ii) a proposal of the **organizational and institutional structure** coping with the sector,

- (iii) selection of appropriate technologies with related purchase costs, O&M- and repair-costs, (iv) facility plan and estimation of **investment needs** (3 and 10-years perspective and broken down by regions)
- (iv) description of water quality, water quality control and monitoring schemes to fulfil the respective legal requirements,
- (v) description of a **business model** assuring financial sustainability with corresponding financial model for selected regions,
- (vi) list/definition of priority SMART actions and **action roadmap** for a 5-years period for the selected regions.

32. Training and Capacity Building; elaboration of a capacity building program ensuring the operational, economic, and financial sustainability of the potential investments as well as environmental-, health- and gender-specific issues. A dedicated know-how and coordination entity (selected or established, either at the regional or national level) to guide and manage the capacity building

2. Phase 2

Preparation of Feasibility Studies related to priority actions and action roadmap

33. At this stage in the planning, the intent is to confirm the feasibility of the proposed priority projects, which were selected in the context of the long-term development program of WSS systems. The purpose of the Feasibility Study is to verify that the proposed priority projects are technically, economically, financially, and environmentally feasible. The scope of the feasibility study (FS) Report is to prepare the preliminary engineering designs for the prioritized water supply and wastewater collection and treatment systems, and to undertake feasibility studies thereon to verify that the projects are reasonable and feasible for implementation.

34. The Consultant will produce feasibility studies in 3 priority areas (to be defined in the 1st Phase) for about 3 typical cases in each of the priority areas. Furthermore, the Consultant will produce tender designs for about 3 to 5 projects (one sub-urban, 3 to 4 typical rural cases). Phase 2 can be carried out in parallel of phase 1 finalization.

Baseline data for the feasibility studies

- (i) Design population in 5-years, 10-years, 20-years
- (ii) Demand projections
- (iii) Water and wastewater quantities related to the selected projects, including average daily and maximum daily flows, as well as maximum hourly flows
- (iv) Topography of project area
- (v) Hydrology and hydrogeology of the project area
- (vi) Geology and soil parameters
- (vii) Inventory, measurement, and documentation of existing facilities
- (viii) Availability of land for proposed asset implementation (treatment, reservoirs, networks, etc.)
- (ix) Accessibility of the project site and availability of services related to the project: electricity, water, construction material, human resources, etc. as well as construction material
- (x) Legal feasibility. Determination of legal requirements for the installation of facilities, right of ways, land tenure and acquisition, compensation, resettlement, compliance with norms and standards. Approval of the concerned institutions for license.

Plan for rehabilitation and improvement of existing systems

- (i) Description of proposed works
- (ii) Technical report with hydraulic calculations

Development of new/proposed facilities – facility design

- (i) Design flows
- (ii) Input/ output qualities
- (iii) Design process
- (iv) Hydraulics, hydraulic profiles
- (v) Description of facilities, plants, plant components with design capacities and quantities
- (vi) Description of alternatives and justification of selected option
- (vii) Layout plans, drawings

Operations and maintenance plans with description of equipment and staff requirements

Institutional capacity building

- (i) Proposed organization
- (ii) Capacity building measures
- (iii) Capacity building program

Cost estimations and implementation plans

- (i) Capital cost estimations with an accuracy of +/- [10%]
- (ii) Cost of operation and maintenance
- (iii) Costs for capacity development

Project evaluation

- (i) Costs and benefits of the projects
- (ii) Economic analysis of the selected projects
- (iii) Financial analysis of the selected projects
- (iv) Evaluation of customers' satisfaction

Environmental and social impact of the projects

Risk analysis

- (i) Technical risks
- (ii) Contractual risks
- (iii) Economic and financial risks
- (iv) Capacity risks

Conclusions and recommendations

G. Participatory approach

35. An important prerequisite for the success of any project in the sub-urban and rural context might be the early and comprehensive involvement of the municipalities in all essential decision-making steps. This is of relevance, as permits and the provision of the land must be granted by the municipalities and the subsequent ownership and operations will also take place at municipal level in a lot of cases.

1. Stakeholders

36. **Communities:** The municipalities are the bodies of local self-government. In absence of a licensed utility the responsibility for the infrastructure and provision of WSS services lies with the municipalities. The municipalities are the owners of the public infrastructure and provide the services themselves as part of the administration or have them provided by municipally owned water companies. Municipalities may charge users for these services, but the fees have to be approved by the national regulatory authority (GNERC). The financial and technical capacities of local authorities are very limited.

37. **Municipal water utilities:** Some water supply and wastewater disposal services are provided by the municipalities in the form of municipal utilities or as part of the municipal administration itself. In smaller towns and villages, public infrastructure is hardly or not available at all. The financial and technical resources as well as operational and technical expertise of the municipal water companies and their expertise are very limited. In such cases, MRDI comes in and supports the municipalities.

38. **User-groups and population:** In order to overcome deficient water supply and wastewater disposal infrastructure, citizens have also established user-groups and started to implement and operate their own basic infrastructure, partly with support from the municipalities. In general, the installed infrastructure does not meet the technical and health requirements. The user-groups do not have formal structures and are not legal persona. Nevertheless, they are rather important. It has been estimated that in Adjara the user-groups represent more than 55% of the total population. A participatory approach that actively involves users and user-groups is therefore indispensable, but has to be studied and decided on a case-by-case approach.

H. Implementation Arrangements

39. The Consultant shall include in his proposal budget for office rent and associated costs, transportation, workshops taking into account the widespread area of intervention.

40. Considering the very broad geographical scope of work, the Consultant shall clearly describe, in his methodology, the implementation arrangement taken (logistic, staffing, coordination) to ensure smooth project implementation and timely deliverable submission.

I. Staffing Requirement

41. Indications of the professional staffing which will be required to fulfil the assignment as well as indicative time inputs are shown in the following tables.

Table 1: Proposed Key Experts for Phase 1+2

	Key Experts	Inputs (Person-Months)
K1	Team Leader (WSS expert with experience in rural WSS) - international	15
K2	Deputy Team Leader 1 (economist, institutional expert) - national	15
K3	Deputy Team Leader 2 (Rural WSS Expert, civil engineer) - national	15

Table 2: Proposed Key Experts for Phase 1

	Key Experts	Inputs (Person-Months)
K4	Demand Management Expert - international	3
K5	Appropriate WSS technology expert - international	3
K6	Institutional and organizational expert – international	4
K7	Institutional and organizational – national	5
K8	Economist and business developer – international	5
K9	Financial expert - national	6
K10	Legal expert – national	3
K11	Environmental and social expert - international	3
K12	Environmental Expert - national	3
K13	Social and gender expert - national	3
K14	Training and capacity building expert - national	3
K15	Public communication expert - national	3

Table 3: Proposed Key experts for Phase 2

	Key Experts	Inputs (Person-Months)
K16	Water Resources Expert - international	4
K17	Water Resources Expert - national	3
K18	Water Supply engineer – international	7
K19	Water Supply engineer – national	8
K20	Wastewater treatment – international	4
K21	Wastewater and sanitation engineer – national	6
K22	Environmental and social expert - international	4
K23	Environmental Expert - national	4
K24	Social and gender expert - national	3

42. It must be emphasized that the content of this table is indicative only.

43. The consultants, in preparing their proposals, must make their own estimates of staffing, team structure, work plan, resources etc. which they consider they will need to complete the assignment satisfactorily. Close adherence to the staffing shown here may not necessarily be advantageous to the Consultant during technical evaluation. CVs shall be provided for Key and Non-Key staffs, with following page limitation:

- (i) Key experts: maximum 5 pages,
- (ii) Non-Key experts: maximum 3 pages.

44. The Consultant is expected to provide such additional professional staff (GIS Expert etc.), support staff, engineering technicians, CAD technicians, and ancillary staff (office manager, translators, accountant, etc.) as they consider are required to carry out the tasks described. As a minimum, following skills should be included in the team:

- (i) Civil Engineering,
- (ii) Territorial development,
- (iii) Institutional,
- (iv) Financial / Economic,

- (v) Hydraulic,
- (vi) GIS,
- (vii) Geotechnical and topography,
- (viii) Draftsmen,
- (ix) Office support,
- (x) Translator.

45. In the proposal the Consultant will detail breakdown of home and fields inputs. To ensure proper coordination with the Client and project management, field inputs may be favored especially for the Team Leader and other Key Experts. As the assignment involves capacity building, the proposed staff should adequately demonstrate that they have done similar on-site trainings.

46. Following table give indications of the required minimum levels of academic qualifications and working experience for those key experts to be evaluated as well as suggested duties for the key experts. The information is provided for guidance only and the Consultant shall make his own assessment of the needs of the assignment.

Table 2: Responsibilities and Required Qualifications and Experience of Key Experts

Position	Minimum Qualifications and Experience	Responsibilities
K1: Team Leader (Water) - international	<p>Education: Master's degree in Water Management, Environment, or other relevant discipline.</p> <p>General experience: Minimum of 15 years working experience</p> <p>Specific experience: 10 years' international experience in the management of water resources and preparation of sector development plans in several countries. Experience as Project Manager or Team Leader on not less than 2 previous projects similar in scale and content to this one. Extensive experience with IFIs Experience in both water resources management and rural water supply planning would be an advantage Previous experience in similar contexts being required and in Central Asia being an advantage.</p> <p>Language: Fluent in oral and written English Knowledge of Georgian and / or Russian being an advantage</p>	The Team Leader will be responsible for the successful achievement of the Consultant's tasks. She/he will manage, organize, and coordinate the work of the whole project team and will be responsible for reporting and liaison with the Client and other organisations of Georgian Government.
K2: Deputy Team Leader 1 – Economist and Institutional Expert - National	<p>Education: Bachelor's degree in Economy and Business Development</p> <p>General experience: Minimum of 15 years working experience</p> <p>Specific experience: 10 year's specific experience in water resources management and associated environmental issues Experience in institutional and organizational development as well as business development.</p>	The Deputy Team Leader 1 – Economist and Institutional Expert will report to the International Team Leader in preparation and coordination of the RWSP and the water quality

Position	Minimum Qualifications and Experience	Responsibilities
	<p>Shall present good communication skills and previous experience on complex projects with multiple stakeholders would be an advantage Experience as Team Leader or Deputy Team Leader on not less than 2 previous projects Good knowledge of the region. 3 years' experience working on major donor-funded infrastructure projects.</p> <p>Language: Fluent in oral and written English.</p>	<p>monitoring. She/he will lead the institutional and financial issues and will be responsible for liaison and communication with stakeholders.</p>
K-3: Deputy Team Leader 2 – rural water supply expert - National	<p>Education: Bachelor's degree in Civil Engineering or other relevant discipline General experience: Minimum of 15 years working experience Specific experience: 10 year's specific experience in water supply management and associated issues Shall present good communication skills and previous experience on complex projects with multiple stakeholders would be an advantage Experience as Team Leader or Deputy Team Leader on not less than 2 previous projects. Good knowledge of the region. 3 years' experience working on major donor-funded infrastructure projects.</p> <p>Language: Fluent in oral and written English</p>	<p>The Deputy Team Leader 1 – Rural Water Supply Expert will report to the International Team Leader in preparation and coordination of the RWSP. She/he will lead the technical studies and will be responsible for liaison and communication with stakeholders.</p>
K4 1 K16: Water Demand Management (phase 1) and Resources Management Expert – international (phase 2)	<p>Education: Master's degree in Water Management, Environment, or other relevant discipline. General experience: Minimum of 10 years working experience Specific experience: 10 years' experience in preparation of water demand management planning in several countries Experience as Water Resources Management Expert on not less than 2 previous projects similar in scale and content to this one. Previous experience on drinking water supply resources management and option analysis. Previous experience in similar contexts being required and in Central Asia being an advantage.</p> <p>Language: Fluent in oral and written English</p>	<p>The Expert will be in charge of ensuring the quality of the WRMP and to provide inputs for water resources assessment (use, water balance,...) and management options (option analysis and preparation of investment plan).</p>
K5: Appropriate WSS technology expert - international	<p>Education: Master's degree in Civil Engineering or other relevant discipline. General experience: Minimum of 10 years working experience</p>	<p>The expert will be responsible for technical inputs in the framework of RWSP preparation. She/he</p>

Position	Minimum Qualifications and Experience	Responsibilities
	<p>Specific experience: 10 years' experience in sector development and design of rural water supply and sanitation systems in several countries. Shall have acted as water supply and sanitation expert on not less than 2 previous water supply sector development similar in scale and content to this one. Shall have experience with water supply in rural areas. Previous experience in similar contexts being required and in Central Asia being an advantage.</p> <p>Language: Fluent in oral and written English.</p>	will more specifically guide the diagnosis of existing infrastructures.
K6: Institutional and organizational expert international	<p>Education: Master's degree in public management or other relevant discipline.</p> <p>General experience: Minimum of 10 years working experience</p> <p>Specific experience: 10 years' experience in institutional analysis and organizational improvement of public institutions. Shall have acted as Institutional and organizational expert on not less than 5 previous projects similar in scale and content to this one. Shall have experience with in public infrastructure in rural areas. Experience in water supply and sanitation field being considered as an advantage. Previous experience in similar contexts being required and in Central Asia being an advantage.</p> <p>Language: Fluent in oral and written English.</p>	The expert will be responsible for institutional and organizational analysis and recommendations in the framework of RWSP preparation.
K7: Institutional and organizational expert national	<p>Education: Bachelor's degree in public management or other relevant discipline.</p> <p>General experience: Minimum of 10 years working experience</p> <p>Specific experience: 5 years' experience in institutional analysis and organizational improvement of public institutions. Shall have acted as Institutional and organizational expert on not less than 2 previous studies similar in scale and content to this one. Shall have experience with in public infrastructure in rural areas. Previous experience in similar contexts.</p> <p>Language: Fluent in oral and written English.</p>	The expert will support the international expert on institutional and organizational issues.
K8: Economist and business	<p>Education: Master's degree in economy or other relevant discipline.</p>	The expert will be responsible for economic analysis

Position	Minimum Qualifications and Experience	Responsibilities
developer - international	<p>General experience: Minimum of 10 years working experience</p> <p>Specific experience: 10 years' experience in economic analysis and preparation of business plan of public institutions. Shall have acted as economist / business developer expert on not less than 5 previous projects similar in scale and content to this one. Shall have experience with public infrastructure in rural areas. Experience in water supply and sanitation field being considered as an advantage. Previous experience in similar contexts being required and in Central Asia being an advantage.</p> <p>Language: Fluent in oral and written English.</p>	and business development plan in the framework of RWSP preparation.
K9: Financial Expert - national	<p>Education: Bachelor's degree in economy and finance or other relevant discipline.</p> <p>General experience: Minimum of 10 years working experience</p> <p>Specific experience: 5 years' experience in economic/financial analysis of public institutions. Shall have acted as financial expert on not less than 2 previous projects similar in scale and content to this one. Shall have experience with public infrastructure. Experience in water supply and sanitation field being considered as an advantage.</p> <p>Language: Fluent in oral and written English.</p>	The expert will be responsible for financial analysis under supervision of the K8, in the framework of RWSP preparation.
K10: Legal Expert - national	<p>Education: Bachelor's degree in legal or other relevant discipline.</p> <p>General experience: Minimum of 10 years working experience</p> <p>Specific experience: 5 years' experience in legal analysis. Shall have acted as financial expert on not less than 2 previous projects similar in scale and content to this one. Shall have experience with public infrastructure. Experience in water supply and sanitation field being considered as an advantage.</p> <p>Language: Fluent in oral and written English.</p>	The expert will be responsible for legal analysis and recommendation under supervision of the K6, in the framework of RWSP preparation.
K11 (Phase 1) & K22 (Phase 2): Environmental	<p>Education: Master's degree in environment or other relevant discipline.</p> <p>General experience:</p>	The environmental and social expert - international will be in charge of preparation

Position	Minimum Qualifications and Experience	Responsibilities
and Social expert - international	<p>Minimum of 10 years working experience</p> <p>Specific experience: 10 years working experience in environmental and social studies. Experience as environmental and social expert on not less than 5 previous projects 5 years' experience working on major donor-funded infrastructure projects. Previous experience on ADB projects being an advantage. Previous experience in similar contexts being required being an advantage.</p> <p>Language: Fluent in oral and written English Knowledge of Georgian and / or Russian being an advantage</p>	of all environmental and social safeguards documents.
K12 (Phase 1) K23 (Phase 2): Environmental expert - national	<p>Education: Bachelor's degree in environment or other relevant discipline.</p> <p>General experience: Minimum of 10 years working experience</p> <p>Specific experience: 10 years working experience in environmental studies. Experience as environmental expert on not less than 2 previous projects 5 years' experience working on major donor-funded infrastructure projects.</p> <p>Language: Fluent in oral and written English</p>	The environmental expert will support the team to define (i) environmental condition in the project area and (ii) environmental impacts of proposed projects. He will also be in charge of environmental assessments.
K13 (Phase 1) and K24 (Phase 2): Social and gender expert	<p>Education: Bachelor's degree in sociology or other relevant discipline.</p> <p>General experience: Minimum of 10 years working experience</p> <p>Specific experience: 10 years working experience in social and gender studies. Experience as social and gender expert on not less than 2 previous projects 5 years' experience working on major donor-funded infrastructure projects.</p> <p>Language: Fluent in oral and written English</p>	The social and gender expert will (i) take active role during participatory consultations with communities, water utilities in the municipalities, water users, and rural dwellers to ensure that recommendations and project design are gender-inclusive; (ii) support the team to define social condition in the project area and social impacts of proposed projects; (iii) clearly interpret the needs in rural communities,

Position	Minimum Qualifications and Experience	Responsibilities
		particularly of women and more vulnerable groups; (iv) propose recommendations and create targets for the gender action plan, and (v) develop the Social Impact Assessment (SIA) and Resettlement Action Plan (RAP).
K14 Training and capacity building expert	<p>Education: Bachelor's degree in public management, HR, or other relevant discipline.</p> <p>General experience: Minimum of 10 years working experience</p> <p>Specific experience: 5 years working experience in training and capacity building for public institutions. Experience as training and capacity building expert on not less than 2 previous projects 5 years' experience working on major donor-funded infrastructure projects.</p> <p>Language: Fluent in oral and written English</p>	The Training and capacity building expert will support the team to estimate needs for training and capacity building plan. He/she will also perform some trainings as per requirements.
K15 Public communication expert	<p>Education: Bachelor's degree in communication or other relevant discipline.</p> <p>General experience: Minimum of 10 years working experience</p> <p>Specific experience: 5 years working experience in preparing and implementing communication plan. Experience as communication expert on not less than 2 previous projects 5 years' experience working on major donor-funded infrastructure projects.</p> <p>Language: Fluent in oral and written English</p>	The Public communication expert will support the team to design and implement a communication plan for the project and for rural WSS in general. He/she will also perform some trainings as per requirements.
K17: Water Resources Management Expert - national	<p>Education: Bachelor's degree in Water Management, Environment, or other relevant discipline.</p> <p>General experience: Minimum of 10 years working experience</p> <p>Specific experience: 5 years' experience in preparation of water resources sector development Experience as Water Resources Management Expert on not less than 2 previous projects.</p>	The Water Resources Management Expert – national will assist the international expert to undertake his tasks.

Position	Minimum Qualifications and Experience	Responsibilities
	<p>Previous experience on drinking water supply resources management.</p> <p>Language: Fluent in oral and written English</p>	
K18: Water Supply expert - international	<p>Education: Master's degree in Civil Engineering or other relevant discipline.</p> <p>General experience: Minimum of 10 years working experience</p> <p>Specific experience: 10 years' experience in sector development and design of rural water supply systems in several countries. Shall have acted as water supply expert on not less than 2 previous water supply sector development similar in scale and content to this one. Shall have experience with water supply in rural areas. Previous experience in similar contexts.</p> <p>Language: Fluent in oral and written English</p>	<p>The rural water supply expert will be responsible for technical inputs in the framework of RWSP preparation. She/he will guide the diagnosis of existing infrastructures as well as definition of orientations and investment plan.</p>
K19: Water Supply expert - national	<p>Education: Bachelor's degree in Civil Engineering or other relevant discipline.</p> <p>General experience: Minimum of 10 years working experience</p> <p>Specific experience: 5 years' experience in sector development and design of rural water supply systems. Shall have acted as water supply expert on not less than 2 previous water supply projects. Shall have experience with water supply in rural areas. Previous experience in similar contexts.</p> <p>Language: Fluent in oral and written English</p>	<p>The rural water supply expert - national will assist the international expert to undertake his tasks.</p>
K20: Wastewater treatment expert - international	<p>Education: Master's degree in water treatment / process engineering or other relevant discipline.</p> <p>General experience: Minimum of 10 years working experience</p> <p>Specific experience: 10 years' experience in Feasibility Studies and design of wastewater treatment systems in several countries. Shall have acted as Wastewater treatment expert on not less than 5 previous Feasibility Studies similar in scale and content to this one.</p>	<p>The wastewater treatment expert will be responsible for technical inputs in the framework of RWSP preparation. She/he will guide the diagnosis of existing infrastructures as well as definition of orientations and investment plan and Feasibility Study.</p>

Position	Minimum Qualifications and Experience	Responsibilities
	Shall have experience with wastewater treatment in rural areas. Previous experience in similar contexts. Language: Fluent in oral and written English	
K21: – Wastewater and sanitation national	Education: Bachelor's degree in Civil Engineering or other relevant discipline. General experience: Minimum of 10 years working experience Specific experience: 5 years' experience in design of wastewater network, pumping stations, water treatment plants and E&M installations. Shall have acted as wastewater expert on not less than 2 previous projects. Previous experience in similar contexts. Language: Fluent in oral and written English	The wastewater and sanitation expert - national will assist the international expert to undertake his tasks.

J. Reports

47. The Consultant will submit the following reports:

Table 3: Required Reports

Types of Reports	Timeline (from project start)	Number of Copies to be sent to MRDI	Number of Copies to be sent to ADB
Inception Report	Week 6	3	1
Interim report – Analysis of existing situation	Week 38	3	1
Rural Sector Development report	Week 52	3	1
Feasibility Studies report	Week 65	3	1
Final Report	Week 72	3	1
Monthly progress report	Before 10th of the month	Soft copy only	

48. All reports must be provided in English and Georgian and be accompanied by soft copies (prepared in agreed software and submitted by e-mail and CD).

**TERMS OF REFERENCE
CONSTRUCTION SUPERVISION CONSULTANT
FOR
REHABILITATION AND IMPROVEMENT OF WATER SUPPLY SYSTEM IN TELAVI**

A. Introduction and Background

The Government of Georgia has requested assistance from the Asian Development Bank (ADB) for the Sustainable Water Supply and Sanitation Sector Development Program. The sector development program (SDP) comprises (i) a policy-based loan to support the government's ongoing reforms of governance and institutions to strengthen the sector's performance and financial sustainability; and (ii) a project loan to improve the operational efficiency of the United Water Supply Company of Georgia (UWSCG),²⁷ and to enable the government to reach rural populations.

The project loan includes rehabilitation and improvement of the water supply system in Telavi. The city of Telavi is located in the eastern part of the country, in the Georgian historical province of Kakheti, approximately 158 km west of Tbilisi, the capital of Georgia. Being the thirteenth largest city in Georgia, Telavi is located on North-East Slope of Gombori Mountains and on the Alazani Valley. The total population of the city amounts to 19,629 (2014). The total area of City of Telavi is 16.85 km² and the altitude of the territory is approximately 520 – 800 meters above the sea level.

B. Existing Infrastructure

1. Water Sources and Transmission System

Telavi water supply system was initially developed in the 1930s. The city water supply system was expanded during some decades, although fundamental reconstruction was undertaken in 1966. No major measures and/or old pipe replacement was conducted since 2000. In 2000-2002, some works were implemented: three new water supply sources with a yield of 2 l/s were developed. Water losses in the transmission mains were removed and in 2006-2008, a partial rehabilitation of the network of the central part of the city was undertaken. In 2014-2017, another partial rehabilitation of the network was undertaken (about 30 km).

Currently, in Telavi water supply is provided with underground water fed by the rivers "Turdos Khevi") and "Jvari Patiosani", it is pumped from headworks of "Turdos Khevi" and conveyed into the Water Treatment Plant (WTP), clean water from the WTP is then delivered the "central" reservoir №1 (2000 m³). The water from reservoir №1 is delivered to the reservoirs №2 (1000 m³) and №3 (2000 m³), located in the southern part of the city. Water from the reservoir №2 is delivered to the reservoirs №4 (350 m³) and №5 (400 m³) located in the central part of the city.

2. Reservoirs

The total volume of the existing reservoirs to serve the city of Telavi is 5,000 m³.

- (i) "Central" reservoir (№1), V=2,000 m³, located on the southern outskirts of the city at masl. ~855m and is considered as the central city reservoir. Water from headworks is discharged into the central city reservoir and delivered to the city's other reservoirs.

²⁷ UWSCG is a limited liability company established on 14 January 2010, and the state owns 100% of the shares.

- (ii) “Reservoir (№3), $V=1,000 \text{ m}^3$, located at masl $\sim 818\text{m}$ in the southern part of the city. Water is supplied from the #1 reservoir. It is in poor condition and is not subject to rehabilitation.
- (iii) “Gigosgora”-Reservoir (№4), $V=2,000 \text{ m}^3$, also located in the southern part of the city at masl. $\sim 748\text{m}$. Water is supplied from #1 and #2 reservoirs. It is in good condition and does not require rehabilitation.

3. Distribution Network

Currently, only 18% of the population of Telavi connected to the network has 24 hours of water supply service, 20% has 12 hours of service and 62% has only 2-3 hours per day.

As has been mentioned above, a certain part of the distribution network (about 30%) undertook rehabilitation last years. The remaining part is composed of steel pipes and huge losses are observed.

The city’s whole network is supplied from all existing reservoirs. The difference between the maximum and minimum geodesic level is about 300 m, consequently, static water pressure in the lowest points of the city is about 300 m, regardless of an established normative level of 60-80 m.

C. Scope of the Supervision Services

The city water supply will be provided by the existing headworks, from where the water will be conveyed to the water treatment plant and then to the urban reservoirs.

From the urban reservoirs, sited at 6 different locations, the water will be delivered to the distribution network. Considering the city topography and differences in elevations, the distribution network is divided into seven zones, according to pressure.

The works to supervise includes measures for the improvement of the water supply system in Telavi with the construction and rehabilitation of:

- (i) **Wells:** It is envisaged the construction of 3 new wells and the rehabilitation of 8 existing wells.
- (ii) **The transmission main:** It is planned a new transmission main from the headworks to the Water Treatment Plant (length about 1,450 m).
- (iii) **Reservoirs:** It is planned for the construction of 5 new reservoirs with a total volume of $7,000 \text{ m}^3$.
- (iv) **Distribution network:** It is planned for the rehabilitation of the water supply network with a total length of about 59 km and 6,950 household connections. The works include the replacement of the old pipes, as well as the extension of the network to all residential areas of Telavi.
- (v) **SCADA System** – It is planned to include existing and design components into a SCADA system to be implemented in this project.

It is envisaged a construction period of 450 days or 15 months.

D. Objective of the Assignment

A Consultant Team will be engaged to perform the duties of the Engineer (as defined by FIDIC), to supervise the works described in the paragraphs above and assist UWSCG in managing the contract. The Consultant will administer the construction contract and ensure that the works are constructed in accordance with the contract, as detailed in the Technical Specifications of the

Bidding Document. The Contract will be governed by FIDIC MDB Harmonized Edition Conditions of Contract for the construction of water supply and sewage systems.

The Supervising Engineer is responsible for checking whether the work is executed in accordance with the design so that good quality and correct functioning of the constructed works is assured. To this end, the Supervising Engineer should guide the Contractor during the execution of the works.

Prior to the commencement of the work the consultant will carry out a critical review of the detailed design to identify defects or omissions that compromise on the consistency of the design and completeness of works. These reviews will be carried out immediately after the consultant's services are commenced 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 task of the Consultant will include but not be limited to:

- (i) execute and deliver Commencement Notices in accordance with the terms of the contracts
- (ii) coordinate with the Employer to ensure that all permits required by the Employer are obtained
- (iii) approve the Design Documents prepared by the Contractor and the specified consents in accordance with the contract and in particular the warranties given in the contract
- (iv) at all times ensure that the Design Documents are commented upon and returned to the Contractor within the times stipulated in the Conditions of Contract
- (v) report to the Employer on any non-compliance of the design likely to cause material delay or other adverse consequences
- (vi) ensure that the construction methods - proposed by the contractor for carrying out the works, are satisfactory in accordance with international best practices.
- (vii) checking of Contractor's setting out of the Works.
- (viii) Inspection of the Contractor's construction equipment and materials.
- (ix) Monitor the safety of the works, property, personnel, and the general public.
- (x) Monitoring the schedule of mitigation measures for adverse environmental impacts.
- (xi) Establish efficient procedures for verifying contractors' 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.
- (xii) Agree on the measurements for works completed and in progress with the Contractor.
- (xiii) checking the Contractor's interim and final evaluations and preparing the payment certificates.
- (xiv) Develop and implement the procedures for timely payments to the Contractors by the Employer and monitoring its compliance.
- (xv) Regularly monitor physical and financial progress against the milestones as per the Contract so as to ensure completion of the contract on time; maintain a daily diary of site activities including plant and labor records; hold the weekly progress meetings with the Contractors in order to discuss progress and problems on the Contracts and creating Minutes of such Meetings;

- (xvi) 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 the scope of the service, but associated expenses will be reimbursed at cost);
- (xvii) Assess Contractors' claims for a time extension, variations, additional compensation etc. and recommend appropriate decisions.
- (xviii) Check Contractors' design and drawings for Design and Build Contracts and check shop drawings for other types of contracts.
- (xix) 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.
- (xx) 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.
- (xxi) Prepare and issue a monthly progress report for each Contract.
- (xxii) Prepare a detailed quarterly report giving physical and financial progress against approved Contract Programmes and a detailed Project Completion Report.
- (xxiii) Undertake all site testing of the Works and commissioning tests prior to issuance of a Taking Over certificate.
- (xxiv) Review Contractors' submitted Operation Manuals monitor the preparation and approve the "as built" drawings before submission to the Employer.
- (xxv) Review and approve the Contractors' Environmental Management Plans (EMP), supervise and monitor the implementation of environmental mitigation measures required, in the event of the 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;
- (xxvi) Monitor performance of the Contractor during the Defects Notification Period (and O&M period, if applicable);
- (xxvii) Prepare and submit a draft Project Completion Report two months before the end of Defects Liability Period (DLP)
- (xxviii) Prepare and submit final Project Completion Report on completion of DLP or alternative date as agreed with the Employer.
- (xxix) Provide on the job training for any counterpart staff seconded to the project by the UWSCG for strengthening their capacity in the supervision of construction and managing and monitoring social and environmental safeguards.
- (xxx) Prepare, monitor, and submit Land Acquisition and Resettlement Plan and Safeguard Documents during the construction phase if necessary; and
- (xxxi) Prepare post-construction environmental audits according to ADB requirements.

To ensure observance of quality control, the Consultant shall submit reports or other relevant documents which include but are not limited to:

- (i) completed plan-schedules.
- (ii) measurement sheets supporting interim valuations.
- (iii) completed and signed Forms (Form N2).
- (iv) materials quality certificates.
- (v) certificates for pipe testing.
- (vi) laboratory certificates for external concrete testing.

If so required by the Employer, the Supervision 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.

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.

Wherever appropriate and not in conflict with the Contract, the Consultant shall exercise every reasonable care to protect the interests of the Employer.

The Consultant will note that the Employer is under obligation to seek the ADB's concurrence before agreeing to or implementing any modification to the terms and conditions of any Contract, if so required in the Loan Agreement between GoG and ADB. The Consultant will assist the Employer to comply with the procedures agreed with ADB.

The Consultant will follow the procedures and conditions stipulated within the FIDIC Conditions of Contract during implementation of the works contract.

E. Staffing Requirement

A Consultant Team will be engaged to perform as the Engineer to carry out the tasks and services of the contract as described in the previous chapters. The Consultant's Team will be headed by a Team Leader/Chief Resident Engineer and composed of international and domestic experts. The Consultant's representatives will be full-time professional engineers in the Project area and will make all necessary arrangements for quality control and implementation of the works.

The Consultant shall provide services for 19 months period. The staff requirement is detailed in Table 1 below.

Table 4 : Staff Requirement for Construction Supervision Consultants

	Professional	Person/Months during Construction	Person/Months (During DNP)	Total person/month
I	International Staff			
1	Team Leader / Chief Resident Engineer	10	1	11
2	Contracts Engineer/QS	3		3
3	Hydraulic Engineer	3		3
4	Structural Geotechnical Engineer	3		3
5	Hydro Geologist	1		1
	Subtotal -- International Staff			22
II	National Staff			
1	Deputy TL\ Assistant Resident Engineer	15	4	19
2	Hydraulic\ Mechanical Engineer	10		10
3	Electrical/ICA Engineer	3		3
4	Social Safeguards and Community Consultation Specialist	2		2
5	Environmental Specialist	10		10
6	Topographer	4		4
	Subtotal -- National Professional Staff			48
III	Support Staff			

	Professional	Person/Months during Construction	Person/Months (During DNP)	Total person/ month
1	Document Controller/Secretary Translator	15		15
2	Accountant	10		10
3	Driver for Team Leader	11		11
	Total Support Staff			36
TOTAL				106

F. Detailed Tasks and Qualifications

All staffs shall be based in Telavi to ensure works supervision activities.

The Consultant should have similar experience in the water and wastewater sector, preferably in Georgia and/or Central and West Asia in the previous five years and with international financial institutions. The Consultant shall be responsible for mobilisation of qualified engineers, technicians and other professional staff with the proven experience in the administrative management, procurement, design and supervision of similar construction works and acquiring the equipment for the projects in comparable climatic and geological conditions.

Team Leader/Chief Resident Engineer (International)

The Team Leader will be responsible for the overall supervision of all construction activities as described in the chapter (D- Objective of the Assignment) with a degree in Civil Engineering, or similar qualification, and accreditation or membership to a relevant professional institution. He/she will have preferably 20-year experience in planning and implementation of large-scale water supply projects, preferably construction of water transmission mains, distribution networks, and reservoirs. Previous experience on SCADA systems would be considered an advantage. Preferably 5 years of this experience will have been as Team Leader and a minimum of 10-year's experience will have been in developing countries, some preferably in Central and West Asia. Skills in human resource management, previous experience on ADB projects, and familiarity with ADB Guidelines would be advantageous. A postgraduate 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 Telavi (with frequent missions in Tbilisi with UWSCG) and will report regularly to the UWSCG project management unit. Knowledge of Georgian and / or Russian language would be considered as an advantage.

Contracts Engineer/QS (International)

The Contracts Engineer will assist the team in the contract management of all construction activities, review claims related to price adjustments for civil works. He/she should have a Degree in Engineering or Quantity Surveying, or similar qualification, and preferably 10-year experience in the implementation of large-scale construction projects, preferably including water projects. He/she preferably have 5-year experience in developing countries, preferably in Central and West Asia. Previous experience on ADB projects and familiarity with ADB Guidelines would be advantageous. He/she should have experience in the use of FIDIC; particularly the MDB harmonized edition and in assessing and evaluating the Contractor's claims.

Hydraulic / Water and Sanitation Engineer (International)

Hydraulic Engineer will assist the team for support in reviewing the Contractor's detailed design, including hydraulic calculations, models and drawings, specifications, and civil works during the pre-construction stage. He/she will make review contractor's final designs evaluating compliance in terms of drawings, BoQ, Schedules of prices. -

He/she will assist Resident Engineer for hydraulic review of shop drawings for the above works and to deal with possible hydraulic problems that may show up during the progress of the work. He/she should have a Degree in Hydraulic Engineering\Water and Sanitation or similar qualification, and preferably 5-year experience in the implementation of large-scale construction projects, preferably including water projects. He/she should have some experience in developing

countries, preferably in Central and West Asia. Previous experience on ADB projects and familiarity with ADB Guidelines would be advantageous.

Structural / Geotechnical Engineer (International)

Structural Engineer will assist the team leader for support in reviewing the Contractor's detailed design, including structural calculations, models and drawings, specifications, and civil works during the pre-construction stage. He/she will make review contractor's final designs evaluating compliance in terms of ERQ, drawings, BoQ, Schedules of prices. He/she will make a comparative analysis of BoQ items for concrete and reinforcement works, costs analysis against contract lump-sum. Review and comments on construction method statement from Contractor.

He/she will assist Resident Engineer in reviewing shop drawings for the above works and to deal with possible structural and geotechnical problems that may show up during the progress of the work. He/she should have a Degree in Structural Engineering\Geotechnical Engineering or similar qualification, and preferably 5-year experience in the implementation of large-scale construction projects, preferably including water projects. He/she should have some experience in developing countries, preferably in Central and West Asia. Previous experience on ADB projects and familiarity with ADB Guidelines would be advantageous.

Hydro Geologist (International)

The Hydro Geologist will assist the team leader to check hydrogeology reports submitted by the contractors. He/she will be responsible for the adequacy of implemented civil works. The experts will be involved in the well field works to guide the contractor and to check that the works are carried out according to the design. The expert should ensure that the well field parameters are acceptable.

He/She should have a bachelor's degree in a relevant discipline (Hydraulic\Hydro Geology) from a recognized university with a minimum of a 10-year experience. 8-year experience in the implementation of large-scale water projects, preferably construction of well field, headworks, water networks, and reservoirs. He/she should have some experience in developing countries, preferably in Central and West Asia. Previous experience on ADB projects and familiarity with ADB Guidelines would be advantageous.

Resident Engineer / Deputy Team Leader (National)

The Assistant Resident Engineer will assist the Team Leader in supervising construction activities. He/she should preferably have a Degree in Civil Engineering and/or similar qualification, and preferably 10-year experience in the implementation of large-scale water projects, preferable construction of water networks and reservoirs. Previous experience in the implementation of SCADA systems and NRW reduction would be considered as an advantage. Fluency in the English language and experience with international organizations shall be an advantage.

Hydraulic / Mechanical Engineer (National)

The Hydraulic\Mechanical Engineer will assist the team in supervising the construction activities on the field. He/she should preferably have a Degree in Hydraulic\Mechanical Engineering or similar qualification, and preferably 10-year experience in the implementation of large-scale water projects, preferably including the construction of: well fields, headworks, water pumping stations,

water production, reservoirs, and water supply networks. Fluency in the English language and experience with international organizations shall be an advantage.

Electrical / ICA Engineer (National)

The Electrical Engineer will assist the team in supervising construction activities. He/she should preferably have a Degree in Electrical Engineering, or similar qualification, and preferably 10-year experience in the implementation of large-scale water projects, preferably water pumping stations and water production, and associated SCADA. He/she will be familiar with the latest European standards for electrical safety. Fluency in the English language and experience with international organizations shall be an advantage

Resettlement and Social Safeguards and Community Consultation Specialist (National)

The Social Safeguards and Community Consultation Specialist will be responsible for the status of any unanticipated involuntary settlement impacts and monitoring of any complaints thereof. He/she will also be responsible for informing stakeholders of the activities of the contractors. He/she should preferably have a Degree in a relevant discipline and some experience in the implementation of large-scale construction projects, preferably construction of distribution networks and reservoirs. Experience with international organizations shall be an advantage.

Environmental Specialist (National)

The Environmental Specialist will be responsible for monitoring compliance with the contractors' environmental management plan. He/she will be responsible for preparation of post-construction environmental audit according to ADB requirements; Monitor implementation of mitigation measures by Contractor; identify remedial Actions for unanticipated impacts, and participate in grievance redress; Conduct environmental quality monitoring surveys (including post-construction monitoring of sites) as per the Environmental Monitoring Plan and Site Specific Environmental Plan; conduct all activities, during the construction of infrastructure, in compliance with the EARF, ADB Safeguard Policy Statement, 2009 and National Legislation; Prepare monthly monitoring reports on the implementation of EMP and its Effectiveness

He/she should preferably have a BSc or MSc Degree in Environmental Engineering or Environmental Sciences and experience in monitoring compliance with ADB safeguard policies in the implementation of large-scale construction projects, preferably in water sector. Fluency in the English language and experience with international organizations shall be an advantage.

Topographer (National)

Topographer will assist the Team leader and will be responsible to check the design geodesic data and to define the exact coordinates. He/she should have a degree in Topography or similar qualification, and preferably 5-year experience in the implementation of large-scale water projects, the expert should be self-equipped with GPI electro-Tachometer and with all relevant tools for topographer, and work in databases like CAD and GIS. Fluency in the English language and experience with international organizations shall be an advantage.

G. Deliverables

The Consultant will submit the following reports according to the deadlines specified in the table below.

Table 5 - Required Reports and Deliverables

Types of Reports	N° of Hard copies for UWSCG	N° of Soft Copies for ADB
Inception Report (month 1) English and Georgian versions	2 Georgian + 1 English	1 English + 1 Georgian
Report assessing Detailed Design (month 1), English and Georgian	3 Georgian + 3 English	1 English + 1 Georgian
Progress Reports (monthly) English and Georgian versions	2 Georgian + 1 English	1 English + 1 Georgian
Progress Reports (quarterly) English and Georgian versions	2 Georgian + 1 English	1 English + 1 Georgian
Draft Contract Completion Report. English and Georgian versions	2 Georgian + 1 English	1 English + 1 Georgian
Final Contract Completion Report. English and Georgian versions	2 Georgian + 1 English	1 English + 1 Georgian

The Consultant shall prepare hard copies of all reports in Georgian language and in English language which shall be delivered to the Employer and to ADB Georgia Resident Mission. In addition to the hard copies, the deliverables shall be provided electronically in Microsoft Word and Excel or PDF formats to all parties.

Inception Report

Not later than one month upon commencement of the services the Consultant will prepare and submit the Inception Report. This report will include the information about the status of the project preparation and implementation. The expected project implementation schedule corrected in accordance with the realistic status will be attached to the report, as well as the Consultant's work schedule for the next quarter.

4. Monthly Reports

Throughout the entire period of rendering the services the Consultant shall submit the Monthly Reports by the tenth day of the following month. Each report will describe and show events and progress for the Consultant's activities of each of the main tasks.

5. Quarterly Reports

Throughout the entire period of rendering the services the Consultant shall submit the Quarterly Reports by the fifteenth day of the following quarter. Each report will show events and progress for the Consultant's activities of each of the main tasks.

During the works execution and supply administration stage the report shall show events and progress of the works for the previous quarter. The format of quarterly reports shall be agreed by the Employer and ABD and shall include, but not be limited to, the following:

- (i) Chart and description of work and goods of each stage: production, transportation, construction, installation, testing, commissioning, guarantee test and acceptance.
- (ii) Cash flow forecast and actual progress.

- (iii) Comparisons of actual and planned progress including percentage completion achieved for each activity, and overall physical progress in percentage.
- (iv) Detailed description of issues which may cause delays in construction, and recommendations to overcome such delays.
- (v) Copies of the assurance documents, test results and certificates of materials.
- (vi) Safety statistics, including details of any hazardous incidents and activities relating to environmental and social aspects and public relations.
- (vii) Update on implementation status of ESAP, SEP and environmental and social monitoring plan.
- (viii) Other information relevant to the project that can be requested by the Employer or by ADB.

6. Final Report

The Consultant will prepare a draft of the Final Report one month prior to the end of the Contract and deliver it over to the Employer. The Final Report will be a review of all the Consultant's tasks, the level to which they were fulfilled and will include all necessary conclusions. Upon receipt of the Company's comments and suggestions the Consultant shall prepare the finalized version of the report.

All available project information, reports and documents will be made available for the Consultant by the Employer and ADB.

All documentation related to the works is and will remain the property of the Employer after completion of the assignment. The Consultant shall not publish, use, or dispose of this documentation without written consent of the Employer and ADB.

H. Logistics and Facilities

Contractors will provide vehicles, including operation & maintenance, for Consultants' International and National Staff during Construction activities. Also, Contractors will provide office space, including utilities costs to Resident Engineers and Consultant staff.

The Consultant will supply all necessary computer hardware and software required to deliver the services, together with the necessary office equipment. The Consultant is expected to finance the costs of standard office operations.

I. Duration of the Assignment

It is currently envisaged that the assignment will commence on XX 2020 and be completed in XX 20xx.

J. Budget

Estimated Budget for the assignment includes remuneration for international and national staff, support staff, out of pocket expenses, such as, international air travel, per-diem for international staff and contingencies.

TERMS OF REFERENCE FOR SUPPORT TO UWSCG O&M

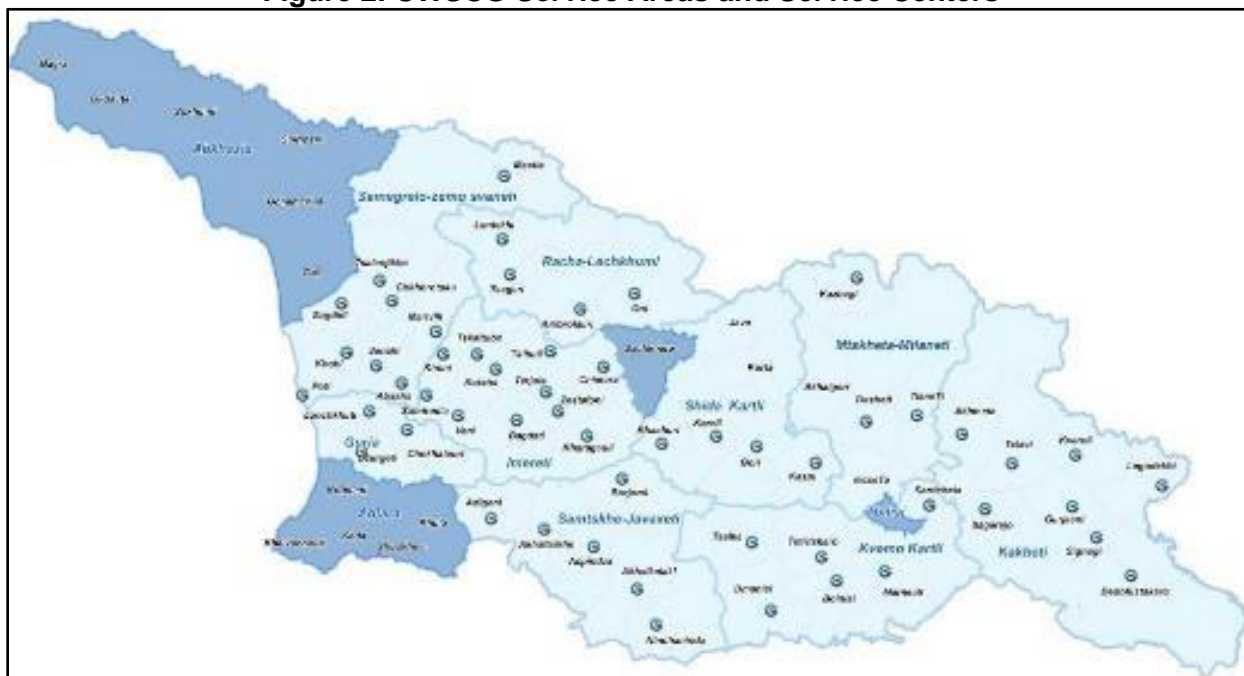
A. Introduction and background

The Government of Georgia is improving and expanding the Water and Supply and Sanitation (WSS) services across urban centres by leveraging donor and private sector funds. This project will build upon the USIIP project. In this respect, UWSCG will have to operate several new assets (water supply and wastewater). As UWSCG capacity is quite limited on some specific issues, as full analysis of UWSCG capacity and a roadmap for O&M improvement is now required.

B. Project area

The project will be developed for UWSCG. It will then cover the whole UWSCG area, as shown in the next figure.

Figure 2: UWSCG Service Areas and Service Centers



UWSCG service area is shown in light blue color.

Source: Georgian Urban Services Improvement Investment Programme. 2013. *Consultant's Services for Management Contractor*. Sachsen Wasser & AHT Group.

UWSCG has more than 50 service centers (exact number changing on a regular basis). The Consultant will have to work with each of these service center in order to propose a comprehensive of existing issues and proposed roadmap.

C. Objective of the work

The main objective of this assignment is to support UWSCG in improving O&M of water supply and sanitation assets.

The specific objectives of this assignment are as follows:

- (i) To prepare a baseline report aiming at identifying the needs in terms of O&M and improvement of water and sanitation services in UWSCG service centers,
- (ii) To prepare a gap analysis and roadmap for improvement of O&M services (including services centre who needs additional resources, need for external support...),
- (iii) To support UWSCG in identifying equipment dedicated to improvement of water and sanitation services,
- (iv) To provide technical assistance, trainings, and capacity building in specific issues (wastewater treatment in particular).

D. Scope of Work

Activity 1 – Preparation of O&M roadmap

Task 1.1. Baseline Survey and Gap Analysis

The Consultant will firstly undertake a baseline survey in order to identify the main assistance needs in terms of water and sanitation in UWSCG service center. This baseline survey will be performed through to the following steps:

- (i) Extensive data collection, by visiting each service center and reviewing the following (not limited to):
 - a. Existing assets in service centres and condition,
 - b. Nonrevenue water-related issues (leakages, billing),
 - c. Energy efficiency,
 - d. Asset Management system,
 - e. Available main equipment per service centre,
 - f. Staffing and capacity in service centres – with a specific focus on wastewater treatment issues,
 - g. Staffing and capacity in headquarter - with a specific focus on wastewater treatment issues,
 - h. Field surveys (site visit of main infrastructures / assets – at least 50 visits shall be conducted).
- (ii) Meetings with UWSCG and the main stakeholders (including on-going consultants working for UWSCG and MRDI)
- (iii) Diagnosis of the present situation within UWSCG service area in terms of O&M and asset management

In order to perform the assessment, the Consultant will have to perform some measurement and field surveys. In this respect, the Consultant will be able to use some of existing UWSCG equipment and staff. A provisional sum is also included in order to ensure that the Consultant can buy required equipment if this is not available at UWSCG.

The baseline study will present a detailed description of wastewater treatment issue, by including:

- (i) A detailed list of assets commissioned or to be commissioned under USIIP,
- (ii) The WWTP processes and capacities,
- (iii) Existing skills related to wastewater treatment within UWSCG,

- (iv) Existing university diploma and internal UWSCG training.

The Consultant will also present a detailed nonrevenue water situation. This will include, for the main 30 urban areas, the following tasks:

- (i) Assessment of the initial water balance according to IWA standard – this includes support to UWSCG in installing flow meters and equipment at key locations in these areas and implementing required measurement for performing the water balance,
- (ii) Assessment of performance indicators in present situation,
- (iii) Critical review of previous NRW activities,
- (iv) Analysis of financial, commercial, operational, and technical capacity of UWSCG,
- (v) Assessment of existing systems and tools developed and used by UWSCG.

Based on the analysis, the Consultant will first prepare a gap analysis in order to highlight main gap and requirement. Such gap analysis should be done considering technical, organizational, financial issues and also geographical approach as some service centers might require a more urgent and / or specific focus.

A baseline survey report and gap analysis will be prepared by the Consultant in order to present the results of the diagnosis. This report should be submitted to the working group for No Objection.

Task 1.2. O&M action plan

Based on the gap analysis, the Consultant will propose a roadmap to improve water and sanitation in these UWSCG service area. In this respect, the Consultant will consider:

- (i) Existing assets and assets to be built in the near future,
- (ii) Existing skills and organization vs required skills and organization,
- (iii) Existing equipment vs required equipment,
- (iv) Financial resources.

Then, an action plan will be prepared considering following horizons:

- (i) Priority: To be implemented as soon as possible and then to be included in the scope of this contract – this should especially include wastewater treatment issues,
- (ii) Short term – to be implemented within the next 2 years,
- (iii) Medium term – to be implemented within the next 5 years.

The action plan will be split into several tasks. For each Task, the Consultant will define:

- (i) The initial challenge, based on the baseline survey,
- (ii) The final target and the KPIs which could be used to monitor the progress,
- (iii) The means and methods that will be applied to enhance the situation (internal, external, geographical scope...),
- (iv) The assessment of the expected impact of the task, through cost-benefit and multi-criteria analysis, and the priority of the task based on this assessed impact,
- (v) Required work force and skills from UWSCG,
- (vi) The list of deliverables,
- (vii) An implementation schedule and requested inputs / costs.

The Action Plan will include training sessions. It shall be done considering that more than 100 staffs shall be trained every year. Certificates will have to be provided to trained staff.

While preparing the Action Plan, the Consultant will give a specific focus on

- (i) Wastewater treatment / process issues. Indeed, UWSCG did not operate efficiently any WWTP over the last years. With USIIP project coming into operation, several

- WWTP will be commissioned. It is then of a main importance that UWSCG has sufficient skills and adapted organization to ensure proper operation.
- (ii) Nonrevenue water, based on the results of the baseline survey, a detailed action plan will be developed according to IWA approach. In at least 10 cities where the network was rehabilitated and under UWSCG management, NRW shall be reduced and maintained below 30%.
 - (iii) Energy efficiency as this remains a main issue for UWSCG and as significant savings can be expected.

The action plan will need to be developed in close coordination with the PSP/PPP road map under preparation given that some of the service centers/specific assets or assets classes could be outsourced to the private sector.

Based on the Action Plan, the Consultant will prepare, in close collaboration with UWSCG and MRDI, ToR for a capacity building and training program package.

7. Activity 2 – Identification of required equipment

The Consultant, based on previous phases, will work with UWSCG to define a full list of equipment to be purchased by UWSCG in order to ensure proper operation of assets.

Based on the list, a procurement plan will be prepared in order to define a strategy for equipment purchase. Specifications of these equipment will also be provided by the Consultant. Required staffing and skills for proper equipment use will also be considered. Potential outsourcing will also have to be covered here.

8. Activity 2 – Capacity building

During the course of the assignment, the Consultant will provide capacity building and training sessions to various stakeholders, in particular to the following:

- (i) Cities staffs,
- (ii) UWSCG – headquarters and service centers,
- (iii) MRDI,
- (iv) MoEPA.

The exact number and subjects of these trainings will be defined with UWSCG, based on the proposed roadmap. Some training may be conducted at the MRDI / UWSCG office. Trainings will be performed by the Consultant team. In his proposal, the Consultant shall include costs (room, venue, meal for participants) for:

- (i) 5 trainings session (1 day each) at UWSCG premises – this will be for UWSCG headquarter staffs and for some technicians from services centers who may join at this occasion (15 staffs per session).
- (ii) 5 workshops to be held outside of UWSCG: 1 day each - 20 participants per workshop shall be considered by the Consultant in his financial proposal.
- (iii) 5 training sessions (2 days each) at some service centres to provide technical training on specific issues – 10 participants per session. This may include equipment training / field training.
- (iv) 5 training session (3 days each) which would include class session and field – 10 participants per session. This should be especially considered for wastewater treatment.

Certificates will be delivered to trainee after the session.

F. Implementation Arrangements

The Consultant team shall mainly work from Tbilisi, with frequent visit to UWSCG service centers. The Consultant shall include in his proposal, budget for office rent and associated costs, transportation, workshops.

Considering the very broad geographical scope of work, the Consultant shall clearly describe, in his methodology, the implementation arrangement taken (logistic, staffing, coordination) to ensure smooth project implementation and timely deliverable submission.

G. Staffing Requirement

Indications of the professional staffing which may be required to fulfil the assignment as well as indicative time inputs are shown in the following tables.

Table 1: Proposed inputs for Key Experts

Experts	Inputs (Person Months)
K.1 Team Leader (international)	16
K.2 Deputy Team Leader (national)	20
K.3 NRW Expert (international)	9
K.4 GIS Expert (international)	4
K.5 Operation and Maintenance Expert (international)	5
K.6 Process / Wastewater Expert (international)	5
K.7 Commercial Expert (international)	3
K.8 Human resources expert (international)	6
K.10 SCADA / Measurement Expert (international)	5
K.11 Energy efficiency expert	5

It must be emphasized that the contents of this table are indicative only.

The consultants, in preparing their proposals, must make their own estimates of staffing, team structure, work plan, resources etc. which they consider they will need to complete the assignment satisfactorily. Close adherence to the staffing shown here may not necessarily be advantageous to the Consultant during technical evaluation. CVs shall be provided for Key and Non-Key staffs, with following page limitation:

- (i) Key experts: maximum 5 pages,
- (ii) Non-Key experts: maximum 3 pages.

The Consultant is expected to provide such additional professional staff (water / wastewater engineer, hydraulic experts, GIS Expert etc.), support staff, engineering technicians, CAD technicians, and ancillary staff (office manager, translators, accountant, etc.) as they consider are required to carry out the tasks described. Considering that key experts are mainly international expert, presence of national non keys experts is required, especially to carry out the task 1.1 - Baseline survey.

In his proposal, the Consultant will detail breakdown of home and fields inputs. To ensure proper coordination with the Client and project management, field inputs may be favored especially for the Team Leader and other Key Experts. As the assignment involves capacity building, the proposed staff should adequately demonstrate that they have done similar on-site trainings.

Following table give indications of the required minimum levels of academic qualifications and working experience for those key experts to be evaluated as well as suggested duties for the key experts. The information is provided for guidance only and the Consultant shall make his own assessment of the needs of the assignment.

Table 2: Responsibilities and Required Qualifications and Experience of Key Experts

Position	Minimum qualifications and experience
K.1 Team Leader (international)	<p>Master's Degree in Civil Engineering or other relevant discipline. Minimum of 15 years working experience including a minimum 10 years' experience in O&M for water and sanitation services. Some of this experience must have been acquired in developing countries, preferably in Western Asia.</p> <p>Shall have acted as Project Manager or Team Leader on not less than 2 previous Technical Assistance financed by IFIs, similar in scale and content to this one.</p> <p>Shall be fluent in English. Knowledge of Russian / Georgian being considered as an advantage.</p> <p>Having participated to trainings on NRW/wastewater treatment issues will be considered as an advantage.</p>
K.2 Deputy Team Leader (national)	<p>Bachelor's Degree in Water / Civil Engineering or other relevant discipline. Minimum of 10 years working experience in the water / wastewater sector, including at least 5 years on O&M / Non-Revenue Water issues.</p> <p>Shall be fluent in English.</p> <p>Previous experience on IFIs projects would be an advantage.</p>
K.3 NRW Expert (international)	<p>Master's Degree in Civil Engineering or other relevant discipline. Minimum of 15 years working experience including a minimum 10 years' experience in preparation and implementation of nonrevenue water projects with field experience in conducting NRW reduction program.</p> <p>Experience on field training for NRW reduction (leak detection, DMA implementation...).</p> <p>Some of this experience must have been acquired in developing countries, preferably in Western Asia.</p> <p>Shall have acted as NRW expert on not less than 3 previous Technical Assistance financed by IFIs, similar in scale and content to this one.</p> <p>Shall be fluent in English.</p>
K.4 GIS Expert (international)	<p>Master's Degree in Information systems or other relevant discipline. Minimum of 10 years working experience in GIS including a minimum 5 years' experience in GIS mapping of water supply infrastructure.</p> <p>Some of this experience must have been acquired in developing countries, preferably in Western Asia.</p> <p>Shall have acted as GIS expert on not less than 2 previous Technical Assistance financed by IFIs, similar in scale and content to this one.</p> <p>Shall be fluent in English. Knowledge of Russian / Georgian being considered as an advantage.</p>
K.5 Operation and Maintenance Expert (international)	<p>Master's Degree in hydraulics or other relevant discipline. Minimum of 15 years working experience in the water field including a minimum 10 years' experience in O&M of water supply infrastructure.</p> <p>Some of this experience must have been acquired in developing countries, preferably in Western Asia.</p> <p>Shall have acted as O&M expert on not less than 2 previous Technical Assistance financed by IFIs, similar in scale and content to this one.</p> <p>Shall be fluent in English. Knowledge of Russian / Georgian being considered as an advantage.</p>
K.6 Process Expert (international)	<p>Master's Degree in civil engineering or other relevant discipline. Minimum of 15 years working experience including a minimum 10 years' experience in process and more specifically in wastewater process.</p>

Position	Minimum qualifications and experience
	<p>Some of this experience must have been acquired in developing countries, preferably in Western Asia.</p> <p>Shall have acted as procurement expert on not less than 2 previous Technical Assistance financed by IFIs, similar in scale and content to this one.</p> <p>Shall have been involved on O&M of water or wastewater treatment plants.</p> <p>Shall be fluent in English.</p>
K.7 Commercial Expert (international)	<p>Master's Degree in business management or other relevant discipline.</p> <p>Minimum of 15 years working experience including a minimum 10 years' experience in commercial activities for urban related projects.</p> <p>Some of this experience must have been acquired in developing countries, preferably in Western Asia.</p> <p>Shall have been involved on not less than 2 previous Technical Assistance financed by IFIs, similar in scale and content to this one.</p> <p>Shall be fluent in English.</p>
K.8 Human resources expert (international)	<p>Master's Degree in HR management or other relevant discipline.</p> <p>Minimum of 15 years working experience including a minimum 10 years' experience in HR management for urban related projects.</p> <p>Some of this experience must have been acquired in developing countries, preferably in Western Asia.</p> <p>Shall have been involved on not less than 2 previous Technical Assistance financed by IFIs, similar in scale and content to this one.</p> <p>Shall be fluent in English.</p>
K.10 SCADA / Measurement Expert (international)	<p>Master's Degree in hydraulics / electro-mechanical or other relevant discipline.</p> <p>Minimum of 10 years working experience including a minimum 5 years' experience in SCADA systems and measurement for water supply projects.</p> <p>Some of this experience must have been acquired in developing countries, preferably in Western Asia.</p> <p>Shall have been involved on not less than 2 previous Technical Assistance financed by IFIs, similar in scale and content to this one.</p> <p>Shall be fluent in English.</p>
K.1 Energy Efficiency Expert (international)	<p>Master's Degree in hydraulics / energy management or other relevant discipline.</p> <p>Minimum of 10 years working experience including a minimum 5 years' experience in improvement of water system energy efficiency.</p> <p>Some of this experience must have been acquired in developing countries, preferably in Western Asia.</p> <p>Shall have been involved on not less than 2 previous Technical Assistance financed by IFIs, similar in scale and content to this one.</p> <p>Shall be fluent in English.</p>

H. Reports

The Consultant will submit the following reports:

Table 3: Required Reports

Types of Reports	Timeline (from project start)	Number of Copies to be sent to MRDI	Number of Copies to be sent to ADB
Inception Report	Week 6	3	1
Interim report – Baseline survey and gap analysis	Week 52	3	1
O&M Action Plan and ToR for capacity building	Week 60	3	1
List of equipment and specifications	Week 62	3	1
Final Report, including training material and findings	Week 104	3	1
Quarterly progress report	Before 10th of the month	Soft copy only	

All reports must be provided in English and Georgian and be accompanied by soft copies (prepared in agreed software and submitted by e-mail and CD).

Implementation Schedule

Activities	Quarter							
	1	2	3	4	5	6	7	8
Baseline Surveys (incl. Site visits, measurements)								
Gap Analysis								
O&M Action Plan								
Identification of required equipment								
Training								
Staffs	Inputs (person months)							
K.1 Team Leader (international)	3	3	2	3	2	1	1	1
K.2 Deputy Team Leader (national)	3	3	3	3	3	2	2	1
K.3 NRW Expert (international)	1	2	2	2	1	1		
K.4 GIS Expert (international)		1	1		1	1		
K.5 Operation and Maintenance Expert (international)	1	1		1	1	1		
K.6 Process Expert (international)		1	1	0.5	1	1	0.5	
K.7 Commercial Expert (international)			1	1	0.5	0.5		
K.8 Human resources expert (international)		1	2	1	1	0.5	0.5	
K.10 SCADA / Measurement Expert (international)	1	1		1	1	1		
K.11 Energy efficiency expert		1	1	1	1	1		
NKE senior international	6	6	6	6	6			
NKE senior national (hydraulic, HR, civil engineering...)	9	12	12	12	6	3	3	3
NKE junior national (water supply, coordination...)	12	15	15	15	12	3	3	3

Environmental Monitoring Report Template

Semi-annual Environmental Monitoring Report

Project Number: {XXXXXX}
 {Reporting period: Month Year}

{Full Country Name}: {Project Title}
 {(Financed by the <source of funding>)}

Prepared by {author(s)}

{Firm name}

{City, country}

For {Executing agency}
 {Implementing agency}

Endorsed by: (staff name of IA/PIU) and signature, submission date

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Annexes:
Photographs (with date printed)
Monitoring data
Etc..

Abbreviations

Include list of abbreviations used in the report

1 introduction

1.1 Preamble

1. This report represents the Semi - Annual Environmental Monitoring Review (SAEMR) for INSERT PROJECT NAME.
2. This report is the (insert number of report, i.e. 1st, 2nd etc) EMR for the project.

1.2 Headline Information

3. Include a brief summary of significant outcomes of the project construction process and any specific areas of concern of which ADB should be informed.

2 project description and current activities

2.1 Project Description

4. Provide a brief description of the project. – this should not vary from one report to the next.

2.2 Project Contracts and Management

5. Provide a list or table of main organisations involved in the project and relating to Environmental Safeguards. This should include lender, borrower, PIU, Main Contractor/s and significant sub-contractors, environmental staff of various organisations should be named, and contact details provided.
6. Provide a description of how the contracts are being managed and names of key personnel.

2.3 Project Activities During Current Reporting Period

7. Provide an outline of major activities which have been carried out during the current reporting period. Provide adequate information so the reader can understand what has been taking place on site. Include photographs (with date stamp) of activities where possible and relevant. Place bulk photographs into an annex to the main report or a separate photographic record.
8. Where multiple work sites are involved provide information on which work sites have been active during the current reporting period. Provide map of work site areas if relevant.
9. Provide details (chart) of worker numbers (maximum, Minimum) in the current reporting period and anticipated changes in staff in following period
10. Highlight any significant new activities commenced during the current reporting period.
11. For the above make maximum use of charts, images and tables.

2.4 Description of Any Changes to Project Design

12. Describe any changes to the project design from that which was assessed in the Impact Assessment phase of the project and is set out in the Initial Environmental Examination/Environmental Impact Assessment. If none have taken place, please state – No changes.
13. Note if significant changes have occurred the PIU should have already informed ADB of this and made a decision on the need for updates to the EIA/IEE and/or Environmental Management Plans

2.5 Description of Any Changes to Agreed Construction methods

14. Provide a description and reason for changes to any construction processes, for example, blasting of rock rather than excavation, open channel rather than thrust boring at road crossings.

3 Environmental Safeguard activities

3.1 General Description of Environmental Safeguard Activities

15. Please provide a summary of the routine activities undertaken by environmental safeguard staff during the current reporting period. This should include the work undertaken by the contractor's environmental manager, the Environmental Supervisor and any informal visits by the PIU environmental staff.

3.2 Site Audits

16. Please provide details (table form preferred) of any **formal** audits undertaken by environmental safeguard process staff during the current reporting period. This would include Contractors Environmental Manager, Environmental Supervisor, PIU Staff and ADB staff during review missions.
17. Information required includes:
 - Date of Visit
 - Auditors Name
 - Purpose of Audit
 - Summary of any Significant Findings
 - Cross reference to Audit Report which should be included as an annex.
18. Summarise Findings of Audits under taken in the current period, compare with previous periods and identify any trends or common issues.

3.3 Issues Tracking (Based on Non-Conformance Notices)

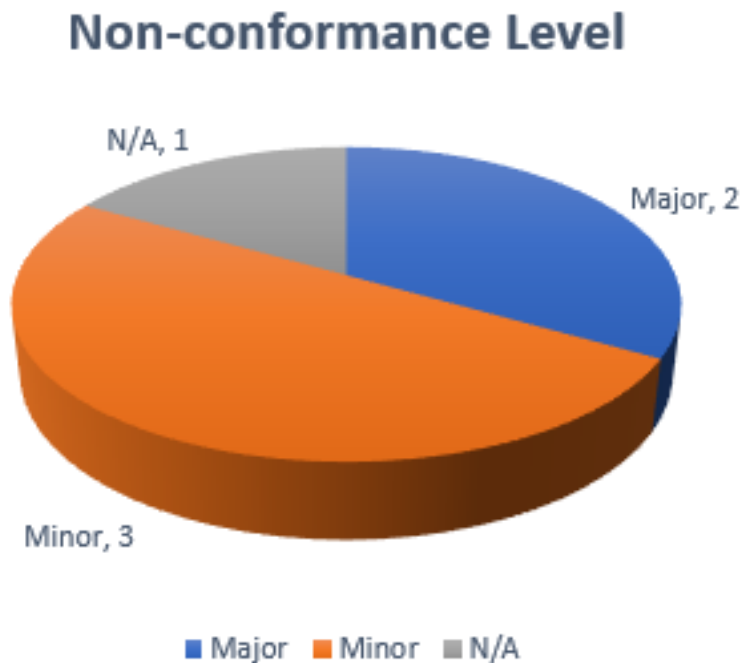
19. Provide an overview and description of issues tracked during the current period.
20. Provide commentary on key statistics based on graphs and tables which can be copied from the Environmental Safeguards Issues Tracing Workbook. For example

Table 3-1 Summary of Issues Tracking Activity for Current Period

Summary Table

Total Number of Issues for Project	6
Number of Open Issues	1
Number of Closed Issues	5
Percentage Closed	17%
Issues Opened This Reporting Period	5
Issues Closed This Reporting Period	4

Figure 3-1 - Summary of Issues by Non-Conformance



21. Use data from workbook as required.

3.4 Trends

22. Use information from previous period reports and the current period information to identify trends in issues. For example -

Quarterly Report No	Total No of Issues	% issues Closed	% issues closed late
1	5	87	0
2	18	56	15
3	59	23	26

23. Provide a commentary on the trends, explain why they may be occurring and in the case of negative trends explain what steps have been taken to make corrections.
24. Provide a copy of all NCN's for all major Non-Conformances in an annex. If none state this.

3.5 Unanticipated Environmental Impacts or Risks

25. Document any unanticipated environmental impacts and risks which have been identified in the current period (as a reminder, these are impacts or risks which were not identified in the Impact Assessment process). State what actions were taken to mitigate the impacts and risks, were these successful.

4 results of environmental monitoring

4.1 Overview of Monitoring Conducted during Current Period

26. Provide a commentary on what environmental measurements have been undertaken during the current reporting period. Highlight any areas where agreed monitoring has not taken place.
27. Include sub sections for the report on those environmental media which have been measured, for example
 - Noise
 - Air Quality
 - Water Quality
28. The sections should present highlights of the outcomes of the monitoring focussing on a comparison of the results with the agreed standards as set out in the Specific Environmental Management Plan and/or Monitoring Plan.
29. In particular make clear where exceedances in the standards have occurred and provide reasons and actions which have been implemented to correct – refer to relevant NCN as appropriate.
30. Detailed monitoring results should be presented as an annex.

4.2 Trends

31. Based on the current and past periods of monitoring identify and discuss any trends which may be developing.

4.3 Summary of Monitoring Outcomes

32. Provide any recommendations on the need for additional monitoring, or requests for ceasing/altering monitoring if activities have been completed or monitoring is showing no significant effects over long period.

4.4 Material Resources Utilisation

4.4.1 Current Period

33. Provide values (tables, graphs etc) for current reporting period of utilisation of electricity, water and any other materials which have been include in the SEMP for monitoring.

4.4.2 Cumulative Resource Utilisation

34. Provide values (tables, graphs etc) for cumulative resource utilisation of power water etc, for whole project life. Identify trends or significant changes and provide reasons for any such changes.

4.5 Waste Management

35. Provide summary of waste management activities during the current period. Provide waste contractors/s names and location of waste sites.
-

4.5.1 Current Period

36. Provide breakdown using graphs, table etc, of waste streams during current reporting period. This information should include
- Type of Waste (description and classification – e.g. hazardous – non-hazardous;
 - Waste Source – what activity generated the waste and where;
 - Quantity of waste generated;
 - Treatment/disposal route – provide information on quantities of waste reused, recycled and sent to landfill or incineration; and
 - Final disposal sites for waste.
37. Provide commentary on results.

4.5.2 Cumulative Waste Generation

38. Using the above bullet points for waste develop cumulative waste generation results.
39. Discuss trends and provide suggestions for waste reduction, increase in reuse and recycling if possible.
- **Health and Safety**

4.5.3 Community Health and Safety

40. Provide information on any incidents which have occurred during the reporting period which resulted in or could have resulted in Community Health and Safety issues. Include within this section traffic accidents.

4.5.4 Worker Safety and Health

41. Provide detailed statistics on accident rates, including Lost Time Incidents, Accidents and near misses.
42. Provide information on safety campaigns conducted during the reporting period.

4.6 Training

43. Provide information on all environmental safeguard related training activities undertaken in this period and cumulatively for project life to date. These may include specific training of environmental staff, HSE inductions of site workers etc.
44. Discuss the need for additional training and what training is planned for coming quarter.

5 functioning of the SEMP

5.1 SEMP Review

45. Provide a commentary on the SEMP in terms of the ability of the contractor to implement fully the requirements set out. Highlight any areas where the contractor has not been able to implement mitigation or monitoring measures.
46. Is the SEMP effective, are mitigation measures set out still appropriate and are they working as intended – do they need changing?

47. Are there better alternative mitigation measures?
48. Can some mitigation measures be reduced or removed as the specific risk identified in the IEE/EIA and/or SEMP has not materialised?
49. Provide a table of requests for changes to the current mitigation measures for consideration by ADB. Note you can send these at any time during the project, there is no need to wait until the quarterly reporting period to be completed. If PIU has supplied requests to ADB, these should be listed along with ADB response. Where changes (additions/deletions and modifications) of mitigation or monitoring measures have been approved, the PIU shall ensure that the SEMP is updated to reflect these changes.

6 good practice and opportunity for improvement

6.1 Good Practice

50. Provide an overview with charts, images etc of examples of continuing good practice for the project. State why these have been implemented and how they are reducing environmental impacts or risks.

6.2 Opportunities for Improvement

51. Identify any areas which may be outside of the formal NCN process, but which changes to construction techniques, mitigation etc would result in an improvement in environmental, health and safety performance of the project.

7 summary and recommendations

7.1 Summary

52. Provide a summary of the effective implementation of Environmental Safeguards during the reporting period and for the overall project construction period to date.

7.2 Recommendations

53. Provide any recommendations for consideration by the ADB for changes to the Environmental Safeguarding process for the project.
-