

# Project Administration Manual

Project Number: 43405-025  
Loan Number: 3078 (Tranche 3)  
October 2014

Multitranche Financing Facility  
Georgia: Urban Services Improvement Investment  
Program – Project 3

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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 Government and Asian Development Bank (ADB) policies and procedures. The PAM should include references to all available templates and instructions either through linkages to relevant URLs or directly incorporated in the PAM.

The Ministry of Regional Development and Infrastructure (MRDI) and the United Water Supply Company of Georgia LLC (UWSCG) are wholly responsible for the implementation of ADB financed projects, as agreed jointly between the borrower and ADB, and in accordance with Government and ADB's policies and procedures. ADB staff is responsible to support implementation including compliance by the Ministry of Regional Development and Infrastructure (MRDI) and the United Water Supply Company of Georgia LLC (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 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 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 and ADB administrative procedures (including the Project Administration Instructions) and upon such approval they will be subsequently incorporated in the PAM.

### Abbreviations

ADB	=	Asian Development Bank
ADF	=	Asian Development Fund
AFS	=	audited financial statements
CQS	=	consultant qualification selection
DMF	=	design and monitoring framework
EARF	=	environmental assessment and review framework
EIA	=	environmental impact assessment
EMP	=	environmental management plan
ICB	=	international competitive bidding
IEE	=	initial environmental examination
IPMO	=	investment program management office
IPP	=	indigenous people plan
IPPF	=	indigenous people planning framework
LARP	=	land acquisition and resettlement plan
MRDI	=	Ministry of Regional Development and Infrastructure
NCB	=	national competitive bidding
NGOs	=	nongovernment organizations
PAM	=	project administration manual
QBS	=	quality-based selection
QCBS	=	quality and cost based selection
RF	=	resettlement framework
RRP	=	report and recommendation of the President
SBD	=	standard bidding documents
SOE	=	statement of expenditure
SPS	=	Safeguard Policy Statement
SPRSS	=	summary poverty reduction and social strategy
STP	=	sewage treatment plant
TOR	=	terms of reference
UWSCG	=	United Water Supply Company of Georgia LLC
WSS	=	water supply and sanitation

### WEIGHTS AND MEASURES

km	–	kilometer
lpcd	–	liters per capita per day
MLD	–	million liters per day

## I. PROJECT DESCRIPTION

1. Improved urban WSS service is a key priority of the Government, as it is essential to improving the quality of life, attracting investment, and raising productivity and competitiveness. Recognizing the need to overcome current problems and constraints, the Government's urban WSS sector development plan (SDP) for 2011–2020, approved on 31 January 2011, aims to ensure continuous and reliable water supply and safe sanitation services to all urban residents by 2020. The SDP's policy and institutional reform framework has a strong focus on technical sustainability of WSS services, environmental and natural resource protection, public-private partnerships, tariff rationalization, prudent financial management, and improved sector regulation through an enabling legislative and regulatory frameworks for WSS services.

2. The SDP, which sets forth the road map and policy framework for the WSS sector, fits with ADB's approach to the WSS sector development in Georgia. A framework financing agreement (FFA) for the multitranche financing facility (the Facility) MFF 0055: Georgia for the Urban Services Improvement Investment Program (the Investment Program) was signed between the Government of Georgia (the Government) and the Asian Development Bank (ADB) on 1 March 2011. Subsequently, on 30 March 2011, ADB's Board of Directors approved the Facility for financing the Investment Program in an amount of \$500 million. The Investment Program's executing agency is the Ministry of Regional development and Infrastructure (MRDI), and implementing agency is the United Water Supply Company of Georgia LLC (UWSCG).

3. Project 3 is designed in line with the policy and development objectives of the Investment Program and that of Projects 1 and 2, comprising of technical sustainability, environmental protection, and institutional and financial sustainability. Project 3 will improve the water supply and sanitation (WSS) services in Ureki town and augment water supply in Kutaisi town, which are covered by the Investment Program.

### A. Impact and Outcome

4. The impact of Project 3 will be the improved health of residents in the urban centers of Ureki and Kutaisi. The outcome will be the improved water supply and sanitation services in the urban centers of Ureki and improved water supply services in the urban centers of Kutaisi.

### B. Outputs

5. Project 3 includes the following outputs (i) construction of new water supply and sewerage system in Ureki<sup>1</sup>, and improvement in water supply system through rehabilitation, replacement, and expansion of water supply in Kutaisi; (ii) strengthened institutional effectiveness by operationalization of geospatial WSS management system and enhancing management capacity of UWSCG.

#### 1. Component 1: Infrastructure Improvement

6. Under the infrastructure improvement component, the water supply system in Kutaisi town will be augmented through construction of three reservoirs of approximately cumulative 12,000 cum capacity, two pumping stations, and corresponding water transmission mains of approximately 11 km, and distribution network of approximately 158 km. In addition, a new

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<sup>1</sup> Excluding water supply headwork, pumping station and transmission main, which is proposed to be financed under Projects 1 and 2 as explained above.

water supply and sewerage system for Ureki town is proposed comprising of approximately 30 km of water distribution network, approximately 69 km of sewage collection system, and about 3.2 MLD capacity of sewage treatment plant. A sewer cleaning vehicle, and water quality testing laboratory equipment are proposed to be procured under the project. Project 3 will benefit approximately 21,150 households by the end of the project period.

## **2. Component 2: Institutional Effectiveness**

7. The second component will include (i) GIS mapping of water and sewerage network in about 25 towns, (ii) human resource development through WSS management program in Georgian universities, (iii) Creation of sex-disaggregated consumer database to develop targeted marketing campaigns, and (iv) establishing customer care units in the service centers, which are staffed by at least 30% women that informs, educates, and communicates on water, hygiene, and sanitation, (v) engagement of consultants to support IPMO, and (vi) capacity development and training support to staff including IPMO consultants.

## II. IMPLEMENTATION PLANS

### A. Project Readiness Activities

Indicative Activities	2013				2014				Who is responsible
	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	
Advance contracting actions									UWSCG
Retroactive financing actions									UWSCG
ADB Management approval									ADB
Tranche 3 loan signing									MRDI and ADB
Government legal opinion provided									Ministry of Justice
Government budget inclusion									MRDI
Tranche 3 loan effectiveness									MRDI

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

## B. Overall Project Implementation Plan

Activities	2013				2014				2015				2016				2017				2018			
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
<b>A. DMF</b>																								
<b>Output 1 Infrastructure Development</b>																								
1.1 Water supply system in Kutaisi and Ureki constructed																								
1.2 Sewerage systems and STP in Ureki constructed																								
1.3 Sewer cleaning and laboratory equipment procured																								
<b>Output 2 Institutional Effectiveness</b>																								
2.1 GIS Mapping of Water & Sewerage in 25 towns completed																								
2.2 WSS Program in Georgian Universities operationalized																								
2.3 Sex disaggregated consumer database created																								
2.4 Education, Information dissemination and communication																								
2.5 GAP targets implemented																								
<b>B. Management Activities</b>																								
1 Rehabilitation and construction of water system in Kutaisi																								
i. Designing and preparation of bidding documents																								
ii. Selection and hire of contractor for civil works																								
2 Rehabilitation and construction of WSS systems in Ureki																								
i. Designing and preparation of bidding documents																								
ii. Selection and hire of contractor for civil works																								
3 Construction of STP in Ureki																								
i. Prelim design and Stage 1 Design and Build tender																								
ii. Stage 2 Bidding and Selection of contractor																								
4 GIS Mapping of Water & Sewerage Network in 25 towns																								
i. Selection and hire consultants																								
5 Operationalization of WSS Program in Georgian Universities																								
i. Selection and hire consultants																								
6 Construction supervision and oversight																								
7 Implementation of Environmental Management Plan																								
8 Annual and Mid-term Reviews																								
9 Project Completion Report																								



### III. PROJECT MANAGEMENT ARRANGEMENTS

#### A. Project Implementation Organizations – Roles and Responsibilities

Project implementation organizations	Management Roles and Responsibilities
<ul style="list-style-type: none"> <li>• Executing agency Ministry of Regional Development and Infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>➤ responsible for Investment Program oversight and administration</li> <li>➤ hold monthly meetings with UWSCG to review progress</li> <li>➤ submit progress reports to the SC for decision making</li> <li>➤ ensure compliance with Investment Program covenants</li> <li>➤ submit Investment Program documents, including audit reports, to ADB on time</li> <li>➤ convene regular meetings in consultation with the SC Chairperson and UWSCG</li> </ul>
<ul style="list-style-type: none"> <li>• Project Steering Committee State Commission on Water Supply and Energy</li> </ul>	<ul style="list-style-type: none"> <li>➤ oversee progress and provide guidance on the Investment Program implementation</li> <li>➤ meet regularly until Investment Program completion</li> </ul>
<ul style="list-style-type: none"> <li>• Implementing agency UWSCG</li> </ul>	<p>For Components 1 and 2:</p> <ul style="list-style-type: none"> <li>➤ prepare the periodic financing request</li> <li>➤ oversee Investment Program implementation and management</li> <li>➤ oversee Investment Program accounting and auditing</li> <li>➤ manage all consultants including GIS mapping and educational consultants for WSS management program in Georgian universities</li> <li>➤ coordinate with all line ministries to ensure smooth and efficient implementation</li> <li>➤ secure technical and environmental approvals for all civil works prior to bidding</li> <li>➤ implement the environmental management plan for each subproject</li> <li>➤ ensure compliance with Investment Program covenants</li> <li>➤ comply with social safeguards requirement detailed in the PAM</li> <li>➤ comply with Gender Action Plan including creation of sex-disaggregated consumer database, establishing customer care units in the service</li> </ul>

- centers, which are staffed by at least 30% women
  - invite bids, evaluate and prepare bid evaluation reports for ADB's approval
  - award contracts
  - prepare quarterly progress reports
- ADB
    - Ensure technical and financial support and oversight according to the framework financing, loan and project agreements
- 

## B. Key Persons Involved in Implementation

### Executing Agency

Ministry of Regional Development and Infrastructure

Officer's Name: Davit Shavliashvili

Position: Minister

Telephone: : + 995-322510700

Email address: [davit.shavliashvili@mrdi.gov.ge](mailto:davit.shavliashvili@mrdi.gov.ge)

Office Address: 12 Al Kazbegi Avenue, Tbilisi, Georgia

### Implementing Agency

United Water Supply Company of Georgia

Officer's Name: Archil Tsubutashvili

Position: Director

Telephone: : + 995-322919060

Email address: [a.tsabutashvili@water.gov.ge](mailto:a.tsabutashvili@water.gov.ge)

Office Address: 76, Vajha Pshavela Avenue, 0186, Tbilisi Georgia

Officer's Name: Levan Tabatadze

Position: Head of Investment Projects Management Department

Telephone: : + 995-322919060

Email address: [l.tabatadze@water.gov.ge](mailto:l.tabatadze@water.gov.ge)

### ADB

Urban Development and Water Division  
Central and West Asia Department

Staff Name: Anand Chiplunkar

Position: Director

Telephone: +63-2-632 6346

Email address: [achiplunkar@adb.org](mailto:achiplunkar@adb.org)

Mission Leader

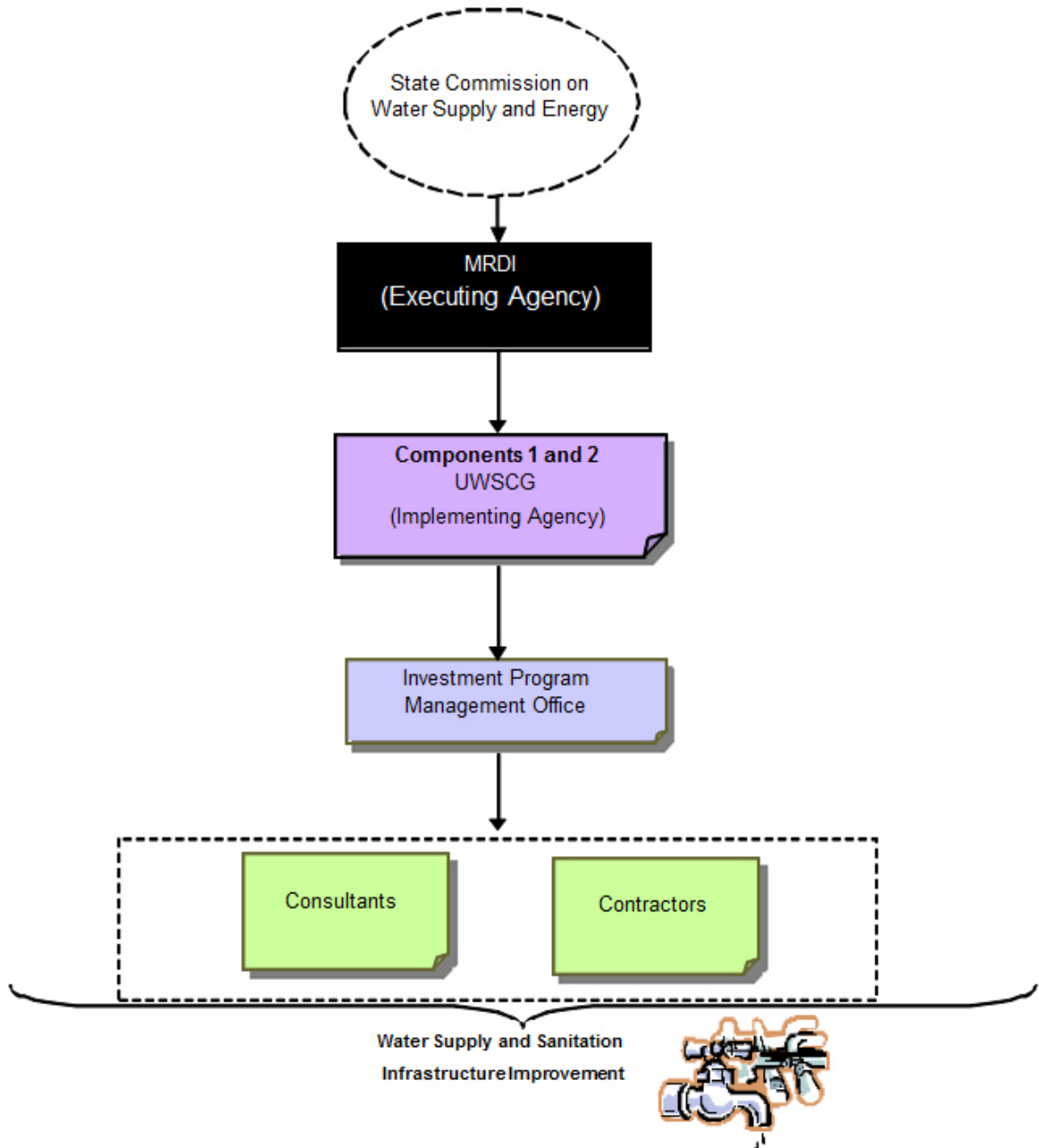
Staff Name: Sanjay Joshi

Position: Senior Urban Development Specialist

Telephone: +63-2-632 4136

Email address: [sjoshi@adb.org](mailto:sjoshi@adb.org)

**C. Project Organization Structure**



Component 1 = Infrastructure Improvement, Component 2 = Institutional Effectiveness, MRDI = Ministry of Regional Development and Infrastructure, UWSCG = United Water Supply Company of Georgia

#### IV. COSTS AND FINANCING

8. ADB will part finance the cost of all the civil works and consultancy costs, which will be inclusive of the taxes and duties. The Government will part finance the cost of all the civil works and consultancy costs, which will be inclusive of the taxes and duties. The Government will finance the cost of land acquisition and resettlement costs, whereas ADB will finance the interest during implementation period of the Project.

##### A. Detailed Cost Estimates by Expenditure Category<sup>a</sup>

(\$ million)				
Item	Foreign Exchange	Local Currency	Total Cost	% of Base Cost
<b>A. Investment Costs</b>				
1. Civil Works	89.62	16.13	105.75	96.18
2. Mechanical and Equipment	1.28	0.23	1.51	1.37
3. Consultants				
a. Project management	1.60	0.29	1.89	1.72
b. Capacity Development	0.13	0.02	0.15	0.14
<b>Subtotal (A)</b>	<b>92.63</b>	<b>16.67</b>	<b>109.30</b>	<b>99.41</b>
<b>B. Recurrent Costs</b>				
1. IPMO consultants salaries	0.55	0.10	0.65	0.59
<b>Subtotal (B)</b>	<b>0.55</b>	<b>0.10</b>	<b>0.65</b>	<b>0.59</b>
<b>Total Base Cost</b>	<b>93.18</b>	<b>16.77</b>	<b>109.95</b>	<b>100.00</b>
<b>C. Contingencies</b>				
1. Physical	-	-	-	
2. Price	1.99	0.36	2.35	
<b>Subtotal (C)</b>	<b>1.99</b>	<b>0.36</b>	<b>2.35</b>	
<b>D. Financing Charges During Implementation</b>				
1. Interest During Construction	3.70	0.00	3.70	
<b>Subtotal (D)</b>	<b>3.70</b>	<b>0.00</b>	<b>3.70</b>	
<b>Total Project Cost (A+B+C+D)</b>	<b>98.87</b>	<b>17.13</b>	<b>116.00</b>	

- a Preparation notes
1. The total cost includes taxes and duties of \$17.13 million to be financed from government resources.
  2. Environment and Social Mitigation costs including the costs associated with implementing relevant safeguards, gender and social dimension action plans are included in the cost of the civil works.

**B. Allocation of Withdrawal of Tranche 3 Loan Proceeds**

<b>Number</b>	<b>Category</b>	<b>Total Amount Allocated for ADB financing (\$)</b>	<b>ADB Financing Percentage and Basis for Withdrawal from the Loan Account</b>
1	Works	89,622,000	84.75% of total expenditure claimed
2	Goods	1,279,000	84.75% of total expenditure claimed
3	Consulting Services	2,279,000	84.75% of total expenditure claimed
4	Interest charge	3,700,000	100.00% of total expenditure claimed
5	Unallocated	1,120,000	
	<b>Total</b>	<b>98,000,000</b>	

Note: No withdrawals may be made for the Project until a relending agreement, in form and substance satisfactory to ADB, has been entered into by the Government and UWSCG.

**C. Detailed Cost Estimates by Financier<sup>a</sup>**

(\$ million)

Item	ADB		Government		Total Cost
	Amount	% of Cost Category	Amount	% of Cost Category	
<b>A. Investment Costs</b>					
1. Civil Works	89.62	84.75	16.13	15.25	105.75
2. Mechanical and Equipment	1.28	84.75	0.23	15.25	1.51
3. Consultants					
a. Project management	1.60	84.75	0.29	15.25	1.89
b. Capacity Development	0.13	84.75	0.02	15.25	0.15
<b>Subtotal (A)</b>	<b>92.63</b>	<b>84.75</b>	<b>16.67</b>	<b>15.25</b>	<b>109.30</b>
<b>B. Recurrent Costs</b>					
1. IPMO consultants salaries	0.55	84.75	0.10	15.25	0.65
<b>Subtotal (B)</b>	<b>0.55</b>	<b>84.75</b>	<b>0.10</b>	<b>15.25</b>	<b>0.65</b>
<b>Total Base Cost</b>	<b>93.18</b>	<b>84.75</b>	<b>16.77</b>	<b>15.25</b>	<b>109.95</b>
<b>C. Contingencies</b>	<b>1.12</b>	<b>47.66</b>	<b>1.23</b>	<b>52.34</b>	<b>2.35</b>
<b>D. Financing Charges During Implementation</b>	<b>3.70</b>	<b>100.00</b>	<b>0.00</b>	<b>0.00</b>	<b>3.70</b>
<b>Total Project Cost (A+B+C+D)</b>	<b>98.00</b>	<b>84.49</b>	<b>18.00</b>	<b>15.51</b>	<b>116.00</b>
<b>% of Total Project Cost</b>	<b>84.49%</b>		<b>15.51%</b>		<b>100.00%</b>

- a Preparation notes
1. The total cost includes taxes and duties of \$17.13 million to be financed from government resources.
  2. Environment and Social Mitigation costs including the costs associated with implementing relevant safeguards, gender and social dimension action plans are included in the cost of the civil works.

**D. Detailed Cost Estimates by Outputs/Components<sup>a</sup>**

(\$ million)

Item	Total Cost	Water		Sewerage	
		Amount	% of Cost Category	Amount	% of Cost Category
<b>A. Investment Costs<sup>b</sup></b>					
1. Civil Works	105.75	85.42	91.99	20.33	87.86
2. Mechanical and Equipment	1.51	0.92	0.99	0.59	2.55
3. Environment and Social Mitigation	-	-	-	-	-
4. Consultants					
a. Project management	1.89	1.18	1.27	0.71	3.07
b. Capacity Development	0.15	0.08	0.09	0.07	0.30
<b>Subtotal (A)</b>	<b>109.30</b>	<b>87.60</b>	<b>94.34</b>	<b>21.70</b>	<b>93.78</b>
<b>B. Recurrent Costs</b>					
1. IPMO consultants salaries	0.65	0.32	0.34	0.33	1.43
2. System Operation and Maintenance	-	-	-	-	-
<b>Subtotal (B)</b>	<b>0.65</b>	<b>0.32</b>	<b>0.34</b>	<b>0.33</b>	<b>1.43</b>
<b>Total Base Cost</b>	<b>109.95</b>	<b>87.92</b>	<b>94.68</b>	<b>22.03</b>	<b>95.20</b>
<b>C. Contingencies</b>					
1. Physical <sup>c</sup>	-	-	-	-	-
2. Price <sup>d</sup>	2.35	1.94	2.09	0.41	1.77
<b>Subtotal (C)</b>	<b>2.35</b>	<b>1.94</b>	<b>2.09</b>	<b>0.41</b>	<b>1.77</b>
<b>D. Financing Charges During Implementation<sup>e</sup></b>					
1. Interest During Construction	3.70	3.00	3.23	0.7	3.03
2. Commitment Charges	-	-	-	-	-
<b>Subtotal (D)</b>	<b>3.70</b>	<b>3.00</b>	<b>3.23</b>	<b>0.70</b>	<b>3.03</b>
<b>Total Project Cost (A+B+C+D)</b>	<b>116.00</b>	<b>92.86</b>		<b>23.14</b>	

- a. Preparation Notes
1. The total cost includes taxes and duties of \$17.13 million to be financed from government resources.
  2. Environment and Social Mitigation costs including the costs associated with implementing relevant safeguards, gender and social dimension action plans are included in the cost of the civil works.
- b. In mid-2013 prices.
- c. Computed at 5% for civil works built in the civil works cost estimates, and therefore not separately considered.
- d. Price contingencies computed at 1.8% on foreign exchange costs and 4% on local currency costs; includes provision for potential exchange rate fluctuation under the assumption of a purchasing power parity exchange rate.
- e. Includes interest and no commitment charges. Interest during construction has been computed at 2% per annum.
- Source: United Water Supply Company of Georgia and Asian Development Bank estimates.

E. Detailed Cost Estimates by Year<sup>a</sup>

		(\$ million)					
	Item	Total Cost	Year 1	Year 2	Year 3	Year 4	Year 5
<b>A.</b>	<b>Investment Costs</b>						
	1. Civil Works	89.62	0.00	12.42	28.93	35.85	12.42
	2. Mechanical and Equipment	1.28	0.00	0.00	0.00	0.13	1.15
	3. Environment and Social Mitigation	-	-	-	-	-	-
	4. Consultants						
	a. Project management	1.60	0.00	0.22	0.38	0.63	0.37
	b. Capacity Development	0.13	0.00	0.00	0.03	0.08	0.03
	<b>Subtotal (A)</b>	<b>92.63</b>	<b>0.00</b>	<b>12.64</b>	<b>29.34</b>	<b>36.68</b>	<b>13.97</b>
<b>B.</b>	<b>Recurrent Costs</b>						
	1. IPMO consultants salaries	0.55	0.00	0.06	0.22	0.22	0.06
	2. System Operation and Maintenance	-	-	-	-	-	-
	<b>Subtotal (B)</b>	<b>0.55</b>	<b>0.00</b>	<b>0.06</b>	<b>0.22</b>	<b>0.22</b>	<b>0.06</b>
	<b>Total Base Cost</b>	<b>93.18</b>	<b>0.00</b>	<b>12.70</b>	<b>29.56</b>	<b>36.90</b>	<b>14.02</b>
<b>C.</b>	<b>Contingencies</b>	<b>1.12</b>	<b>0.00</b>	<b>0.15</b>	<b>0.36</b>	<b>0.44</b>	<b>0.17</b>
<b>D.</b>	<b>Financing Charges During Implementation</b>	<b>3.70</b>	<b>0.00</b>	<b>0.21</b>	<b>0.69</b>	<b>1.29</b>	<b>1.52</b>
	<b>Total Project Cost (A+B+C+D)</b>	<b>98.00</b>	<b>0.00</b>	<b>13.05</b>	<b>30.60</b>	<b>38.64</b>	<b>15.71</b>
	<b>% of Total Project Cost</b>	<b>100.00%</b>	<b>0.00%</b>	<b>13.32%</b>	<b>31.23%</b>	<b>39.42%</b>	<b>16.03%</b>

a. Preparation Notes

1. The total cost includes taxes and duties of \$17.13 million to be financed from government resources.

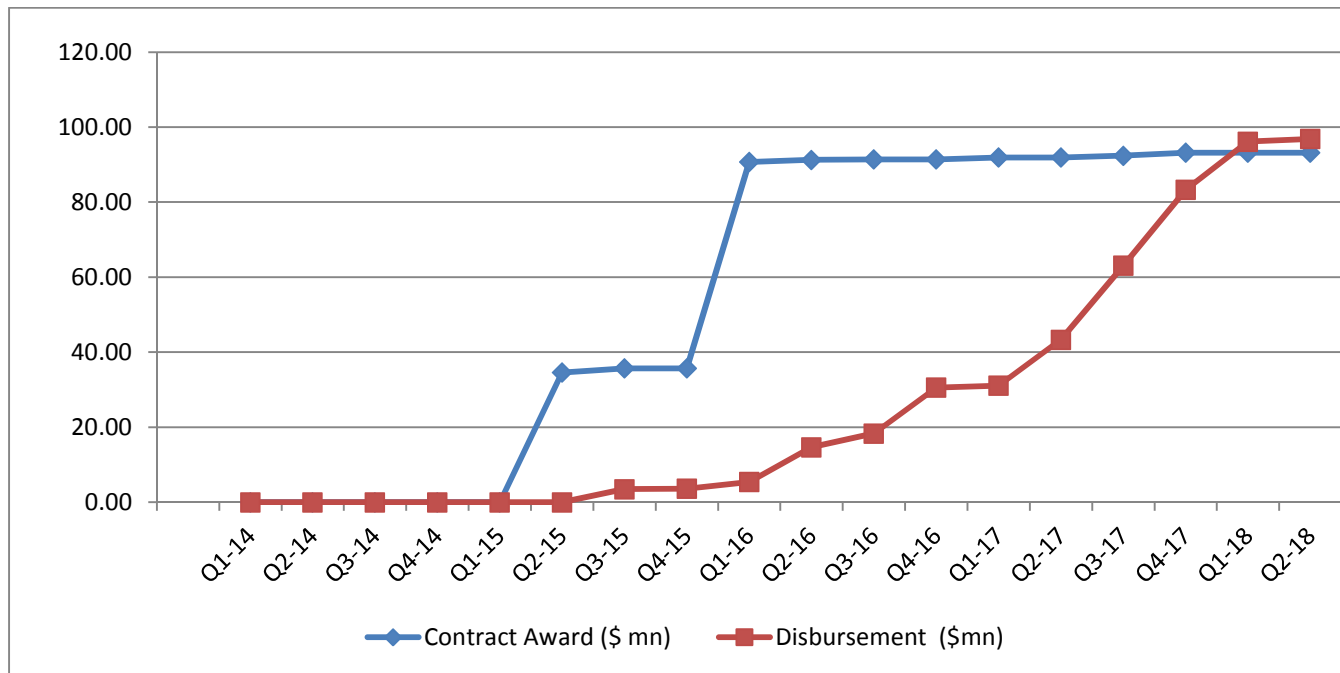
2. Environment and Social Mitigation includes all costs associated with implementing relevant safeguards, gender and social dimension action plans.



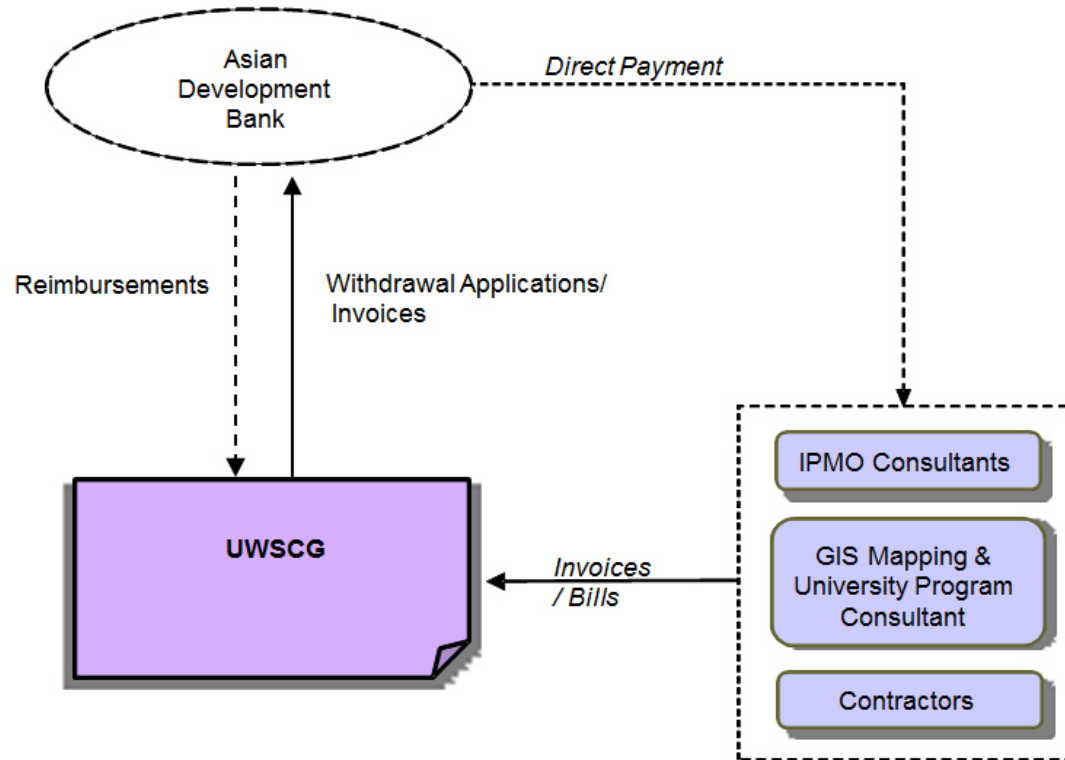
**F. Contract and Disbursement S-curve**

Year	Contract Award (in \$ million)					Disbursement (in \$ million)					
	Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total	
2014	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2015	0.00	34.58	1.10	0.00	35.68	0.00	0.00	3.48	0.14	3.62	
2016	55.05	0.55	0.13	0.00	55.72	1.77	9.30	3.65	12.24	26.95	
2017	0.50	0.00	0.50	0.78	1.78	0.51	12.23	19.78	20.23	52.75	
2018	0.00	0.00	0.00	0.00	0.00	12.84	0.72	0.00	0.00	13.56	
	<b>Total Contract Awards</b>					<b>93.18</b>	<b>Total Disbursement</b>				<b>96.88</b>

(\$ million)



**G. Fund Flow Diagram**



Component 1 = Infrastructure Improvement, Component 2 = Institutional Effectiveness, IPMO = investment program management office, MRDI = Ministry of Regional Development and Infrastructure, UWSCG = United Water Supply Company of Georgia

## V. FINANCIAL MANAGEMENT

9. Financial Management Assessment (FMA) was undertaken at the implementing agency level for the United Water Supply Company of Georgia LLC (UWSCG) to determine the capacity of the implementing agency in managing its financial resources effectively and efficiently. Such a capacity is critical to the success of the Investment Program. The assessment determines the adequacy of systems and controls including accounting and financial reporting, auditing, internal control, funds disbursement and flows, information systems, and personnel complement, among others. The findings were updated and incorporated by obtaining detailed information on financial operations at agency and project levels from the project accountant/financial consultant at IPMO and auditors for ongoing ADB loan projects.

### A. Financial Management Assessment

10. The FMA for UWSCG indicated that the implementing agency have gained sufficient experience with international lending institutions and currently meets ADB minimum financial management requirements. UWSCG has the financial management capability to satisfactorily record all transactions and balances, support the preparation of regular and reliable financial statements and financial monitoring reports, safeguard the assets, and subject these to auditing arrangements acceptable to ADB.

11. The FMA rates the UWSCG financial management, reporting and monitoring systems practices as satisfactory, with low to moderate risk to the ADB. UWSCG project units are adequately staffed with efficient and experienced personnel. Project staff is trained in procedural requirements of the ADB and the national accounting standards. The financial management systems at UWSCG applied in the agency's project operations are found to provide a reasonable and sufficient basis for determining the state of finances at agency and project levels. The external financial audit reports indicate that the funds flows from ongoing projects and local sources are satisfactory and there are no significant qualifications in the auditor's reports. The funds flow procedures are established for each project to facilitate monitoring and control. Projects do not experience delays in release of local counterpart funds and financial performance monitoring systems ensures efficient execution of projects.

12. Risk assessment was performed for agency financial management capacity. Table 1 summarizes the results.

**Table 1 – Risk Assessment**

<b>Particulars of Risk</b>	<b>Rating</b>	<b>Mitigation</b>
A. Implementing Agency	Negligible	UWSCG has experience managing and implementing water supply projects of the scale and scope as in the proposed ADB project.
B. Funds Flow Arrangements	Negligible	UWSCG is experienced in ADB funding arrangements, as well as those in other international lending agencies. UWSCG coordinates with MOF and designated banks for all local and foreign project transactions.
C. Staffing	Negligible	UWSCG is sufficiently staffed with experienced personnel, sufficiently complemented by trained financial consultants. Project accountants in ongoing ADB project have been trained on ADB procedures.

**Table 1 – Risk Assessment**

<b>Particulars of Risk</b>	<b>Rating</b>	<b>Mitigation</b>
D. Accounting Policies and Procedures	Negligible	UWSCG has procedures to follow the Georgian NAS. Manual on systems and procedures to effect policies is available to accounting and finance staff. Project financial management manual satisfies MOF and ADB requirements. Guideline manuals are updated as new accounting policies are formulated at national level. Local/in-house policies, all within purview of national accounting law, are formulated and locally approved.
E. Internal Audit	High	Utilities are not required to have internal audit functions by GNEWRC. ADB will work with UWSCG to develop the terms of reference for an internal audit function. The internal audit functions will be structured to improve internal control and the possibility of engaging a chartered accounting firm will be assessed by UWSCG, while UWSCG recruits staff and get them trained to take over the function of internal audit.
F. External Audit	Negligible	UWSCG are audited annually by an external auditor and are provided with unqualified opinions. Projects are subject to external audit annually by private audit group using IAS/IFRS in compliance with accounting law requirements. The opinions are being reviewed and analyzed by CWOD - Financial Management Specialist and corrective actions, if any are proposed to the EAs. Baker Tilly conducted the audit of UWSCG. The creation of asset inventory for WSS assets was a major issue highlighted in the audit report for which the Company has proposed GIS mapping of all the WSS utilities.
G. Reporting and Monitoring	Moderate	UWSCG comply with reporting needs of MOF and other agencies as well as ADB project periodic reporting. The monitoring and reporting is being improved further as the construction supervision consultants and management contractor are already appointed.
H. Information Systems	Negligible	UWSCG uses the <i>ORIS</i> accounting software for internal and project operations. UWSCG is now implementing new software, FINA, which allows the department of procurement, accounting and logistics to work in one system. Linking those systems in one network will sophisticate working efficiency and maximize information exchange between central and project units, which in its case will decrease delays in reporting.

GNEWRC = Georgia National Energy and Water Supply Regulatory Commission; IAS = international accounting standards; IFRS = international financial reporting standards; NAS = national accounting standards; MOF = Ministry of Finance, UWCSG = United Water Supply Company of Georgia Limited Liability Company, WSS = water supply and sanitation.

## **B. Disbursement**

13. The loan proceeds for financing goods, works, and consulting services shall be disbursed in accordance with ADB's Loan Disbursement Handbook (2012, as amended from time to time)<sup>2</sup>, and detailed arrangements agreed upon between the Government and ADB.

14. Pursuant to ADB's Safeguard Policy Statement (2009) (SPS),<sup>3</sup> ADB funds may not be applied to the activities described on the ADB Prohibited Investment Activities List set forth at Appendix 5 of the SPS. All financial institutions will ensure that their investments are in compliance with applicable national laws and regulations and will apply the prohibited investment activities list (Appendix 5) to subprojects financed by ADB.

15. The statement of expenditure (SOE) procedure may be used for reimbursement of eligible expenditures incurred under the Project, in accordance with the Loan Disbursement

<sup>2</sup> Available at: <http://www.adb.org/documents/loan-disbursement-handbook>

<sup>3</sup> Available at: <http://www.adb.org/documents/safeguard-policy-statement>

Handbook. Any individual payment to be reimbursed or liquidated under the SOE procedure shall not exceed the equivalent of \$100,000. 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 of individual payments in excess of the SOE ceiling should be supported by full documentation when submitting the withdrawal application to ADB.

16. Before the submission of the first withdrawal application, MOF should submit to ADB sufficient evidence of the authority of the two persons who will sign the withdrawal applications on behalf of the borrower, together with the authenticated specimen signatures of each authorized person. The minimum value per withdrawal application is \$100,000, unless otherwise approved by ADB. Withdrawal applications and supporting documents will demonstrate, among other things that the goods, and/or services were produced in or from ADB members, and are eligible for ADB financing. Withdrawal applications and other loan disbursement information are available at ADB Controller's Department's website, <http://fis.adb.org>.

### **C. Accounting**

17. UWSCG will maintain, or cause to be maintained, separate books and records by funding source for all expenditures incurred on the project. UWSCG will prepare consolidated project financial statements in accordance with the government's accounting laws and regulations which are consistent with international accounting principles and practices.

### **D. Auditing and Public Disclosure**

18. UWSCG will cause the detailed consolidated project financial statements to be audited in accordance with International Standards on Auditing and with the Government's audit regulations, by an independent auditor acceptable to ADB. The audited project financial statements will be submitted in the English language to ADB within six months of the end of the fiscal year by UWSCG.

19. UWSCG will also cause the entity-level financial statements to be audited in accordance with International Standards on Auditing and with the Government's audit regulations, by an independent auditor acceptable to ADB. The audited entity-level financial statements, together with the auditors' report and management letter, will be submitted in the English language to ADB within one month after their approval by the competent authority.

20. The annual audit report for the project accounts will include an audit management letter and audit opinions which cover (i) whether the project financial statements present a true and fair view or are presented fairly, in all material respects, in accordance with the applicable financial reporting framework; (ii) whether loan and grant proceeds were used only for the purposes of the project or not; (iii) the level of compliance for each financial covenant contained in the legal agreements for the project; and (iv) the use of the statement of expenditure procedure certifying to the eligibility of those expenditures claimed under SOE procedures in accordance with ADB's Loan Disbursement Handbook and the project documents.

21. 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.

22. The Government and UWSCG have been made aware of ADB's policy on delayed submission, and the requirements for satisfactory and acceptable quality of the audited project financial statements.<sup>4</sup> 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.

23. Public disclosure of the project financial statements, including the audit report on the project financial statements, will be guided by ADB's Public Communications Policy (2011)<sup>5</sup>. After review, ADB will disclose the project financial statements for the project and the opinion of the auditors on the financial statements within 30 days of the date of their receipt by posting them on ADB's website. The Audit Management Letter will not be disclosed.

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<sup>4</sup> ADB Policy on delayed submission of audited project financial statements:

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

<sup>5</sup> Available from <http://www.adb.org/documents/pcp-2011?ref=site/disclosure/publications>

## VI. PROCUREMENT AND CONSULTING SERVICES

### A. Advance Contracting and Retroactive Financing

24. All advance contracting and retroactive financing will be undertaken in conformity with ADB's *Procurement Guidelines* (2013, as amended from time to time) (ADB's *Procurement Guidelines*)<sup>6</sup> and ADB's *Guidelines on the Use of Consultants* (2013, as amended from time to time) (ADB's *Guidelines on the Use of Consultants*).<sup>7</sup> The issuance of invitations to bid under advance contracting and retroactive financing will be subject to ADB approval. The borrower, executing and implementing agencies have been advised that approval of advance contracting and retroactive financing does not commit ADB to finance the Investment Program.

25. **Advance contracting.** The government has requested ADB's approval of advance contracting for civil works construction of: (i) water supply and sewerage systems in Ureki including construction of sewage treatment plant (STP) in Ureki; (ii) rehabilitation and expansion of water supply system in Kutaisi; (iii) procurement of goods; and (iv) recruitment of consultants..

26. **Retroactive financing** For tranche 3, ADB will finance a maximum amount of eligible expenditures up to the equivalent of 20% of the loan for tranche 3 (approximately \$19,600,000) incurred before tranche 3 loan effectiveness but not earlier than 12 months before the signing of the Loan Agreement for tranche 3. Retroactive financing shall apply to civil works, procurement of goods, civil works and consulting services under tranche 3 loan.

### B. Procurement of Goods, Works and Consulting Services

27. All procurement of goods and works will be undertaken in accordance with ADB's *Procurement Guidelines*.

28. The Investment Program will follow ADB's *Procurement Guidelines* (2013, as amended time to time) and tranche 3 loan includes: (i) one international competitive bid (ICB) for procurement of civil works for water supply system rehabilitation in Kutaisi; (ii) one ICB for procurement of works for water and sanitation system in Ureki, and (iii) one ICB for design and build contract for construction sewage treatment plant in Ureki. An 18-month procurement plan indicating threshold and review procedures, goods, works, and consulting service contract packages and national competitive bidding guidelines is listed in Section C.

29. Bidders eligibility will be determined in accordance with ADB's *Procurement Guidelines* (2013, as amended from time to time). Accordingly, no bidder or potential bidder shall be declared ineligible for ADB financed contracts for any reason other than those set out in ADB's *Procurement Guidelines*. For goods or services funded by loans from ADB's Special Fund resources, payments are limited to goods produced in, and services supplied by, developed member countries that have contributed to such resources and all developing member countries.

30. Before the start of any procurement ADB and the Government will review the public procurement laws of the government to ensure consistency with ADB's *Procurement Guidelines*.

<sup>6</sup> Available at: <http://www.adb.org/Documents/Guidelines/Procurement/Guidelines-Procurement.pdf>

<sup>7</sup> Available at: <http://www.adb.org/Documents/Guidelines/Consulting/Guidelines-Consultants.pdf>

31. An 18-month procurement plan indicating threshold and review procedures, goods, works, and consulting service contract packages and national competitive bidding guidelines is in Section C.

32. All consultants will be recruited according to ADB's Guidelines on the Use of Consultants.<sup>8</sup> The terms of reference for all consulting services are detailed in Section D.

33. There are 2 consulting contracts; (i) for GIS mapping of water supply and sewerage network in about 25 towns, with estimated 216 person-months input. Taking into account the larger scope of GIS mapping of water and sewerage network in about 25 towns and the budget of \$1.3 million, it is proposed to use Quality and Cost Based selection (QCBS) method for selection of the consultant with a standard quality:cost ratio of 80:20 ; and (ii) for developing education program for water and sanitation engineers in Georgian University, with estimated 12 person-months input. The selection method for this assignment is not yet finalized as the Government is considering various options and refining the terms of reference for this assignment. IPMO consultants will be appointed as individual consultants and a budgetary provision is made for capacity development and external training for the IPMO staff.

### C. Procurement Plan for Tranche 3

#### PROCUREMENT PLAN

##### Basic Data

<b>Project Name:</b> Urban Services Improvement Investment Program - Tranche 3	
<b>Project Number:</b> 43405-025	<b>Approval Number:</b> 3078
<b>Country:</b> Georgia	<b>Executing Agency:</b> Ministry of Regional Development and Infrastructure of Georgia
<b>Project Financing Amount:</b> US\$ 116,000,000 <b>ADB Financing:</b> US\$ 98,000,000 <b>Cofinancing (ADB Administered):</b> <b>Non-ADB Financing:</b> US\$ 18,000,000	<b>Implementing Agency:</b> United Water Supply Company of Georgia LLC
<b>Date of First Procurement Plan:</b> 18 November 2013	<b>Date of this Procurement Plan:</b> 18 November 2013

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

#### 1. Procurement and Consulting Methods and Thresholds

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

Procurement of Goods and Works		
Method	Threshold	Comments
International Competitive Bidding for Goods	US\$ 500,000 and Above	Prior, ADB SBD
National Competitive Bidding for Goods	Between US\$ 100,000 and US\$ 499,999	The first NCB is subject to prior review, thereafter post review.

<sup>8</sup> Checklists for actions required to contract consultants by method available in e-Handbook on Project Implementation at: <http://www.adb.org/documents/handbooks/project-implementation/>



		Prior and Post, ADB SBD (prior followed by post)
Shopping for Goods	Up to US\$ 99,999	Post, ADB SBD
International Competitive Bidding for Works	US\$ 1,000,000 and Above	Prior, ADB SBD
National Competitive Bidding for Works	Between US\$ 100,000 and US\$ 999,999	The first NCB is subject to prior review, thereafter post review. Prior and Post, ADB SBD (prior followed by post)
Shopping for Works	Up to US\$ 99,999	Post, ADB SBD

Consulting Services	
Method	Comments
Consultant's Qualification Selection for Consulting Firm	Prior, RFP
Fixed Budget Selection for Consulting Firm	Prior, RFP
Least-Cost Selection for Consulting Firm	Prior, RFP
Quality- and Cost-Based Selection for Consulting Firm	Prior, RFP
Quality-Based Selection for Consulting Firm	Prior, RFP
Single Source Selection for Consulting Firm	Prior, RFP
Individual Consultants Selection for Individual Consultant	Prior, ToR
Single Source Selection for Individual Consultant	Prior, ToR

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

35. 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)	Bidding Procedure	Advertisement Date (quarter/year)	Comments
CW1	Procurement of civil works for Kutaisi Water Supply System Rehabilitation	Contract value was deemed confidential according to exception (v) of paragraph 97 of ADB's Public Communication Policy 2011.	ICB	PRIOR	1S1E	Q4 / 2014	Prequalification of Bidders: N  Domestic Preference Applicable: N  Bidding Document: Large Works  Comments: ICB - Works, 1 package.
CW2	Procurement of civil works for Ureki Water and Sanitation System Construction	Contract value was deemed confidential according to exception (v) of paragraph 97 of ADB's Public Communication Policy 2011.	ICB	PRIOR	1S1E	Q2 / 2014	Prequalification of Bidders: N  Domestic Preference Applicable: N  Bidding Document:

							Large Works  Comments: ICB - Works, 1 package.
CW3	Procurement of works for sewage treatment plant in Ureki	Contract value was deemed confidential according to exception (v) of paragraph 97 of ADB's Public Communication Policy 2011.	ICB	PRIOR	2SE	Q3 / 2014	Prequalification of Bidders: N  Domestic Preference Applicable: N  Bidding Document: Large Works  Comments: ICB - Design, Supply and Install, 1 package.

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

36. 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
Cons_1	Educational Program for Water and Sanitation Engineer	Contract value was deemed confidential according to exception (v) of paragraph 97 of ADB's Public Communication Policy 2011.	QCBS	PRIOR	Q3 / 2014	BTP	Assignment: International  Quality-Cost Ratio: 80:20  Comments: Procurement method & Assignment: To be decided.
Cons_2	GIS Mapping of water and sewerage network in about 25 towns	Contract value was deemed confidential according to exception (v) of paragraph 97 of ADB's Public Communication Policy 2011.	QCBS	PRIOR	Q3 / 2014	FTP	Assignment: International  Quality-Cost Ratio: 80:20  Comments: Assignment: To be decided.

Cons_3	IPMO Consultants (current and future, if any)	Contract value was deemed confidential according to exception (v) of paragraph 97 of ADB's Public Communication Policy 2011.	ICS	PRIOR	Q2 / 2015		Assignment: National  Expertise: various
Cons_4	Capacity development and training (including IPMO consultants)	Contract value was deemed confidential according to exception (v) of paragraph 97 of ADB's Public Communication Policy 2011.	CQS	PRIOR	Q3 / 2014	BTP	Assignment: International  Comments: Recruitment Method and Assignment: To be decided.

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

37. 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)	Bidding Procedure	Advertisement Date (quarter/year)	Comments
G1	Procurement of Sewer Cleaner Vehicle (1 Unit)	Contract value was deemed confidential according to exception (v) of paragraph 97 of ADB's Public Communication Policy 2011.	1	ICB	PRIOR	1S1E	Q4 / 2014	Prequalification of Bidders: N  Domestic Preference Applicable: N  Bidding Document: Goods  Comments: 1 package.
G2	Procurement of Laboratory Equipment for UWSCG	Contract value was deemed confidential according to exception (v) of paragraph 97 of ADB's Public Communication Policy 2011.	1	ICB	PRIOR	1S1E	Q4 / 2014	Prequalification of Bidders: N  Domestic Preference Applicable: N  Bidding Document: Goods  Comments: 1 package.

Consulting Services								
Package Number	General Description	Estimated Value	Number of Contracts	Recruitment Method	Review (Prior/Post)	Advertisement Date (quarter/year)	Type of Proposal	Comments
None								

## B. Indicative List of Packages Required Under the Project

38. 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).

Consulting Services								
Package Number	General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Recruitment Method	Review (Prior/Post)	Type of Proposal	Comments	
None								

Goods and Works							
Package Number	General Description	Estimated Value (cumulative)	Estimated Number of Contracts	Procurement Method	Review (Prior/Post)	Bidding Procedure	Comments
None							

## National Competitive Bidding

### General

39. The procedures to be followed for national competitive bidding shall be those set forth in the Law of Georgia on State Procurement January 1, 2006 with the clarifications and modifications described in the following paragraphs required for compliance with the provisions of the ADB's Procurement Guidelines (2013, as amended from time to time).

### Eligibility

40. The eligibility of bidders shall be as defined under section I of ADB's *Procurement Guidelines*, published by ADB (2013, as amended from time to time); accordingly, no bidder or potential bidder should be declared ineligible to ADB-financed contracts for other reasons than the ones provided by section I of ADB's *Procurement Guidelines*. Bidders must be nationals of member countries of ADB, and offered goods and services must be produced in and supplied from member countries of ADB. For loan from Special Funds resources, refer to eligibility defined in clauses 1.2 (a) and 2.11 (a) of ADB's *Procurement Guidelines*.

### Prequalification

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

### **Registration and Licensing**

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

### **Bidding Period**

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

### **Bidding Documents**

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

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

### **Preferences**

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

### **Advertising**

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

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

### **Bid Security**

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

### **Bid Opening and Bid Evaluation**

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

### **Rejection of All Bids and Rebidding**

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

### **Participation by Government-owned enterprises**

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

### **Right to Inspect/Audit**

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

### **Fraud and corruption**

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

52. For purposes of the provisions in (a) and (b) above, the definitions of the terms “fraudulent practice”, “corrupt practice”, “collusive practice”, and “coercive practice” are the definitions given in ADB’s Procurement Guidelines.

#### **Conflict of Interest**

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

#### **Disclosure of Decision on Contract Awards**

54. At the same time that notification on award of contract is given to the successful bidder, the results of bid evaluation shall be published in a local newspaper, or a well-known freely accessible website identifying the bid and lot numbers and providing information on (i) name of each Bidder who submitted a Bid, (ii) bid prices as read out at bid opening; (iii) name of bidders whose bids were rejected and the reasons for their rejection, and (iv) name of the winning Bidder, and the price it offered, as well as duration and summary scope of the contract awarded. The executing agency/implementing agency/contracting authority shall respond in writing to unsuccessful bidders who seek explanations on the grounds on which their bids are not selected.

#### **Review of Contract Modifications**

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

#### **D. Consultant's Terms of Reference**

56. The terms of reference for procurement of consultants for various activities as per the procurement plan are attached as per details given below:

- GIS mapping Consultants (Annex 1) and
- Consultants for education program for water and sanitation engineers (Annex 2).

## VII. SAFEGUARDS

### A. Social Safeguards

57. In order to ensure compliance with ADB Safeguard Policy Statement (2009), MRDI as Executing Agency and UWSCG as Implementing Agency will ensure social safeguards compliance under the Investment Program. MRDI has endorsed the Resettlement Framework (RF) that has been prepared for the Investment Program and updated based on the SPS. The involuntary resettlement process as required under the RF will be followed during implementation and necessary resettlement plans will be prepared. UWSCG has a resettlement specialist under IPMO to manage land acquisition and resettlement. The LARP will be implemented with the support of the IPMO, the safeguard specialist in construction supervision consultant's team, the local UWSCG office, and the local government agencies responsible for land acquisition.

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

59. An involuntary resettlement due diligence was conducted to determine the impacts and consequently Project 3 is classified B. A land acquisition and resettlement plan (LARP) was prepared for the Ureki subproject in consultation with the displaced persons to deal with temporary impacts during construction in all subprojects. In particular, the Project will address issues related to compensation for affected persons, public participation, and grievance management. The final draft LARP was uploaded on ADB's website on 2 October 2013.

60. **Compensation for Affected Persons:** Project 3 includes construction of WSS network in Ureki and water network in Kutaisi along existing roads and within the right of way. There is no land acquisition involved in Kutaisi for the construction of new reservoirs, as they are being constructed on the existing old reservoir sites owned by the government. But in Ureki town, 19 privately owned land parcels, owned by 13 owners admeasuring 44,869 sqm, will be acquired for sewage pumping station, and sewage treatment plant. The land will be acquired from 12 households and one legal entity, and a total of 40 persons (17 male and 23 female) of 12 households will be resettled. Two agriculture land parcels (8,069 sqm) to be acquired are owned by a legal entity for future use and currently do not host any activities, and therefore has no impact on loss of business revenue or loss of wages/salaries to the workers. In addition, there are three government owned plots, two of which are being sometime in informal use (3,255 sqm), and one (1,330 sqm) being regularly used for agriculture activity. These users will also be compensated as per the provisions of the LARF.

61. The following table provides summarized costs related to implementation of the LARP for Project 3.



<b>Description</b>	<b>Cash Compensation (GEL)</b>
Compensation for land	375,822
Compensation for Crops	47,675
Allowances to Vulnerable Households	1,440
Allowances for Severe Impact	15,683
<b>Sub-total of Compensation Package</b>	<b>440,621</b>
Registration fees and other expenses	1,851
<b>Total LARP Implementation Budget</b>	<b>442,472</b>
Contingencies (10 %)	44,247
<b>Grand Total LARP Budget</b>	<b>486,719</b>

62. **Public Participation.** During the feasibility design stage, the Consultant held public consultation in Ureki with all relevant stakeholders in December 2012. These meetings were attended by subproject APs, local residents, representatives of Ozurgeti Municipality, Manager of Ozurgeti Service Centre of UWSCG and consultants from the Kocks/BT.

63. All attendees were made aware about the subproject features and ADB SPS 2009. At the meeting the impacts and compensation entitlements were reviewed and discussed. APs were informed that they would be assisted in registration of their land parcels under private ownership. Specifically, they will be provided free of charge with any and all necessary consultancy and technical assistance, including transaction registration duties and fees (notary service, fees for registration cadastral survey maps). In addition, the UWSCG will provide support with the state authorities and local municipality during conduct of all mandatory legal procedures.

64. **Disclosure.** The English version of this LARP is posted on ADB's website, and the Georgian version on the website of the MRDI. The hard copy of the LARP will be available for public at the office of Ozurgeti Municipality. Each AP would receive the information pamphlet in Georgian summarizing their rights, compensation rates, and the LARP implementation schedule

65. **Redress of Grievances and Complaints.** The grievance resolution mechanism will be established allowing each AP to appeal any unacceptable decision, practice or activity arising during LARP implementation process. The APs will be fully informed about their rights, established procedures and consultation opportunities relevant to addressing the complaints whether verbally or in writing, as well as on the timing of compensation payments. All appropriate measures shall be taken to prevent grievances rather than going through the redress process. This can be achieved through careful design and implementation of the LARP, ensuring active engagement of the APs by encouraging their full-fledged involvement and providing the appropriate consultation, as well as efficient communication and coordination among the APs, UWSCG and local NGOs.

66. For mitigating the disputes during LARP implementation period, the Grievance Redress Committee (GRC) will be established at the local government level consisting of:

- a. Chair – representative of the municipality
- b. Member – local representative of UWSCG
- c. Member – local community representative
- d. Member – subproject affected person
- e. Member – local NGO representative.

67. Resolution of the complaints and grievances will follow the following priority order:

- a. Resolution of the complaint will be attempted at the village level with the involvement of community leaders and informal mediators;
- b. If still unsettled, a grievance shall then be lodged with the GRC. The AP will be invited by the GRC to hear the case no later than two weeks after the complaints have been filed. Two days after the hearing, the GRC will inform the AP about decision of the committee;
- c. In the event the GRC fails to settle the disputed issue, the case shall be lodged to the UWSCG. The AP must lodge the complaint within 2 weeks after receiving response on the original complaint from the GRC, and must produce documents supporting his/her claim. The UWSCG will provide a response within 2 weeks after registering the complaint. The UWSCG's decision must be in compliance with provisions of this LARP and RF; and
- d. If response to the grievance is still unacceptable to the claimant, he/she is entitled to submit the complaint to the appropriate court. The APs might be assisted by the local NGO.

68. In case of unanticipated impacts, civil works for that section will be temporarily suspended. UWSCG will inform ADB, and will prepare a resettlement plan for review and approval by ADB. The LARP will be disclosed and implemented, and a monitoring report will be submitted prior to possessing the land and commencing the civil works.

## B. Environmental Safeguards

69. In order to ensure compliance with ADB Safeguard Policy Statement (2009), MRDI as Executing Agency and UWSCG as Implementing Agency will ensure the implementation of the following requirements and procedures for the Investment Program. MRDI has endorsed the Environmental Assessment and Review Framework (EARF)<sup>9</sup> that has been prepared for the Investment Program. The EARF and the environmental assessment process as required under the EARF will be followed during implementation and necessary IEE and EMP will be prepared.

Environmental Management Actions	Implementation Activities	Conditions Required to Complete Actions
<i>Pre-construction commences</i>	Activity 1: Project becomes effective	
Environmental recording system established in IPMO, UWSCG.	Activity 2: IPMO established with ESU. Environment staff appointed to ESU	Budget, facilities and staff for ESU have been provided according to Loan Agreement
Design and implement baseline monitoring for environmental conditions; unless this has been undertaken during the environmental assessment stage	Activity 3: Prepare project baseline environmental matrix	
• Environment Specialist (ES)	Activity 4: Pre-construction:	Appointment of Design and

<sup>9</sup> Updated EARF is available at: <http://www.adb.org/projects/documents/urban-services-improvement-investment-program-tranche-3-earf>

<b>Environmental Management Actions</b>	<b>Implementation Activities</b>	<b>Conditions Required to Complete Actions</b>
prepares Design Brief for design consultants that incorporates EMP Design requirements <ul style="list-style-type: none"> <li>• ES checks Design Brief meets EMP requirements</li> </ul>	Design; Incorporation of EMP requirements	Supervision consultant with necessary technical capacity to address EMP requirements
<ul style="list-style-type: none"> <li>• ES extracts construction requirements from EMP and pass to design consultants for inclusion in Tender documents</li> <li>• ES reviews Tender documents and confirm that environmental management provisions are sufficient</li> </ul>	Activity 5: Tender documents prepared	Standard environmental conditions have been prepared which are integrated into Tender documents
ESU review environmental conditions of Bid and rank contractors on this ability	Activity 6: Tenders evaluated and Contractor appointed	ES to be a member of the Bid Evaluation Panel
ES reviews SEMP	Activity 7: Contractor prepares Site EMP (SEMP)	<ul style="list-style-type: none"> <li>• Contractor appoints Environmental Manager.</li> <li>• After award of contract Contractor has 30 days to prepare SEMP.</li> <li>• ADB CWRD Guidance notes on preparing SEMP available</li> </ul>
ESU verifies compliance of Contractor with SEMP at site meeting	Activity 8: Contractor inducted to site by ESU	Contractor cannot take possession of construction site until (i) SEMP has been approved and (ii) induction is completed satisfactorily
ES informs IPMO that Contractor is now cleared to start work	Activity 9: Contractor approved to start work	
<b><i>Pre-construction completed</i></b>		
<b><i>Construction commences</i></b>		
<ul style="list-style-type: none"> <li>• ES, IPMO monitors contractor's SEMP compliance activities.</li> <li>• ES audits construction activities</li> <li>• ES evaluates monitoring program</li> </ul>	Activity 2: Environmental monitoring undertaken and reports prepared. <ul style="list-style-type: none"> <li>• By Contractor: Monthly environmental report sent to IPMO</li> <li>• Bi-annual environmental report to ADB and country environmental agency</li> </ul>	Contractor complies with SEMP requirements for implementing and monitoring work on-site <ul style="list-style-type: none"> <li>• ADB CWRD Guidance notes on preparing monitoring reports available</li> </ul>
	Activity 3: Construction completed and project commissioned	<ul style="list-style-type: none"> <li>• Project works completed in accordance with the SEMP and all sites satisfactorily rehabilitated and restored.</li> </ul>

Environmental Management Actions	Implementation Activities	Conditions Required to Complete Actions
<b>Construction completed</b>		<ul style="list-style-type: none"> <li>• ES reviews and sign-off on completed work</li> <li>• Final environmental monitoring report prepared</li> <li>• Payments may be withheld if sites not cleared and closed to meet SEMP specifications.</li> </ul>
<b>Note: Work on subprojects for subsequent tranches is likely to begin during implementation of Project 1 subprojects</b>		
<b>Sub Projects for subsequent tranches</b> Subprojects assessed against the selection criteria set out in the environmental assessment and review framework	Activity 1: Potential subprojects for new tranche identified	
<ul style="list-style-type: none"> <li>• Environmental classification completed. Categorization forms sent to ADB regional Department and local Environment Authority for confirmation.</li> <li>• ES prepares TOR for environmental assessment requirements</li> <li>• Consultant appointed to prepare the necessary environmental assessment documents</li> </ul>	Activity 2: Preliminary Design undertaken for subprojects	
Environmental Assessment documents to accompany PFR Documents to be reviewed by ES CWRD.	Activity 3: Project Financing request submitted to ADB  Activity 4: Subprojects in new tranche approved	
<ul style="list-style-type: none"> <li>• Design and implement baseline monitoring for environmental conditions; unless this has been undertaken during the environmental assessment stage</li> </ul>	Activity 5: Prepare project baseline environmental matrix	
<ul style="list-style-type: none"> <li>• ES prepare Design Brief for design consultants that incorporates EMP Design requirements</li> <li>• ES check Design Brief meets EMP requirements</li> </ul>	Activity 6: Pre-construction: Design; Incorporation of EMP requirements	
<ul style="list-style-type: none"> <li>• ES extracts construction requirements from EMP and pass to design consultants for inclusion in Tender documents</li> <li>• ES reviews Tender documents and confirm that environmental</li> </ul>	Activity 7: Tender documents prepared	

<b>Environmental Management Actions</b>	<b>Implementation Activities</b>	<b>Conditions Required to Complete Actions</b>
management provisions are sufficient		
ES review environmental conditions of Bid and rank contractors on this ability	Activity 8: Tenders evaluated and Contractor appointed	
ES reviews SEMP	Activity 9: Contractor prepares Site EMP (SEMP)	
	Activity 10: Contractor inducted to site by ESU	

70. The EARF will be reviewed regularly and, if deemed necessary, updated during later tranches of the MFF. The eligibility and entitlement provisions of the EARF will not be lowered in subsequent revisions and updates.

71. UWSCG will require the contractors to refine, prepare, and implement site specific environmental management plan for each subproject in order to implement the environmental requirements of the IEEs, which will also form an integral part of construction contracts. The site specific environmental management plans will be endorsed by the construction supervision consultants, and subsequently approved by UWSCG. Environmental mitigation measures during construction will be implemented by the contractor, and will be monitored by the construction supervision consultant. UWSCG will be responsible for overall EMP implementation with assistance from the construction supervision consultant and environmental consultant engaged by UWSCG under IPMO. Any change in investment scope and technical design will be promptly informed by UWSCG to ADB, and the respective IEE/EMP will be updated by the consultant, which will be endorsed by the construction supervision consultant and UWSCG before submitting to ADB for disclosure.

72. Meaningful public consultation with project affected people and stakeholders for all the IEEs including updated IEEs are required. Disclosure on ADB website and to the project affected people will be made for the safeguard documents and monitoring reports.

73. All the complaints will be handled by the project Grievance Redress Mechanism and in compliance with the ADB Accountability Mechanism Policy 2012.

### VIII. GENDER AND SOCIAL DIMENSIONS

74. Project 3 will benefit a population of 84,600 in Ureki and Kutaisi and improve living conditions and the economic and environment of these two towns of the Investment Program. The project will directly address access to improved water supply services for women and their households in Kutaisi (design population of 82,500), which is the second biggest city in Georgia, and improved access to WSS services in Ureki, a small town with a design population of 2,100 on the Black Sea. Ureki WSS system will cater additional tourist population of 10,000 (in the year 2015) and 34,500 (in the year 2040). Overall, access to safe sanitation will increase from 25% in 2011 to 88% in Kutaisi and Ureki; and access to 24-hour potable water supply will be increased from 74% in 2011 to 95% in Kutaisi and almost none to 95% in Ureki. Supporting information campaigns will leverage increased access to WSS to improve household water management and hygiene, in order to improve health outcomes.

75. Improved WSS services and generating awareness of the importance of clean water and hygiene will have significant impact on public health and hygiene, especially among the poor, internally displaced, and households headed by women. In communities of internally displaced people, the improved water quality and provision of public toilets, and washing facilities will reduce waterborne and sanitation-related disease and significantly cut coping costs incurred to compensate for inadequate water supply and low water pressure. The quality of life will be enhanced by environmental improvement consequent to introducing proper sewerage and sewage treatment in towns with decaying infrastructure and pit latrines. Construction for physical investments under the investment program will create temporary employment, and require labor for system operation and maintenance in the long term.

76. The Gender Action Plan (GAP) developed for Project 3 addresses improved WSS facilities for additional 86,400 population in Ureki and Kutaisi, consultation with women (as part of the water utility outreach activities, target 50% of those consulted), employment of women (15% minimum of new positions created through the project (30% in customer care), with a stipulation that all advertisements explicitly encourage applications from qualified women). Additionally, the GAP seeks to institutionally strengthen the water utility to address gender concerns through disaggregating customer feedback by sex for gender analysis and future planning; maintaining equal employment opportunities for the women and men in UWSCG, and facilitating their career development; and encouraging a pipeline of water sector professionals who are female through encouraging the enrolment of girls at the WSS program at university level.

77. A policy and advisory TA preceding the investment project consulted with central and local governments, civil society including NGOs, and community men and women meeting separately, using key informant interviews, surveys, and focus group discussions. These consultations were used to inform design of the overall MFF. During previous tranches, an NGO has been used to develop and pilot community awareness raising materials and messages regarding water and hygiene. A continuing activity from the previous tranche is outreach to customers through developing and disseminating IEC material on water, hygiene, sanitation, customer rights and water usage efficiency. This responsibility will now be continued by the water utility UWSCG, under its community outreach function. A Project 3 GAP implementation monitoring table is attached to the quarterly progress reports.

78. Through a pilot project<sup>10</sup> in Mestia and Marneuli, which was concluded in February 2013, a baseline data on household water management and sanitation practices was created by conducting a household survey. The pilot project was planned to showcase effective gender mainstreaming in the projects. The household surveys and IEC was conducted by an apex NGO with an extensive experience of working on gender issues and dissemination of information throughout the country. The apex NGO worked through local NGOs to address gender issues within the Investment Program. Involvement of NGOs facilitated better participation of communities, improved grievance and complaint mechanism and awareness amongst the communities about the Investment Program. Focus group discussions conducted in Marneuli and Mestia by Women's Information Center (WIC) to (i) reveal knowledge gaps on water, sanitation, hygiene and customer rights, and (ii) inform the content of the information-awareness campaign to be prepared by UWSCG. A training module was developed based on the focus group discussions by WIC and trainings were conducted with different groups of women and men in Marneuli and Mestia by WIC. The materials developed by the NGO will be used for customer outreach by UWSCG under Project 3.

79. A gender specialist appointed in IPMO, UWSCG staff, and safeguard specialist from Construction Supervision Consultants are responsible for monitoring and reporting of the poverty and social impact of the project, including implementation of the GAP. A gender consultant appointed under RETA (7563: Promoting Gender-Inclusive Growth in Central and West Asia Developing Member Countries) monitors that the GAPs are being implemented, and provides capacity support as required.

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<sup>10</sup> Partly financed through Output 3 of RETA-7563: Promoting Gender Inclusive Growth in Central and West Asia.

## Gender Action Plan – Project 3

Action and Description	Target/Indicator and Timeframe	Institutional Responsibility
<b>Output 1: Infrastructure Improvement</b>		
<ul style="list-style-type: none"> <li>• Consult both women and men during project implementation of WSS systems</li> <li>• Contract women in civil works, maintenance and recruitment in utilities (e.g., customer services, women meter readers, female engineers, etc.)</li> <li>• Reduce economic cost to women of time spent managing water supply, sanitation and ill health.</li> </ul>	<p>50% of consulted are women (2013-continuous)</p> <p>15% of recruited are women (2013-2017) All jobs are publically advertised and the advertisement includes a sentence on “applications by women encouraged”</p> <p>Women of 21,150 households in Ureki and Kutaisi will have improved or new water supply</p> <p>Women of 525 households in Ureki will have connection to new sewerage network.</p> <p>Incremental cost of securing adequate water supply reduced by 50% for every household (from \$1.28 per day in 2013)<sup>11</sup></p>	UWSCG
<b>Output 2: Institutional Effectiveness</b>		
<ul style="list-style-type: none"> <li>• Conduct baseline and final survey in project locations on households’ access to water integrating gender and poverty dimensions</li> <li>• Disaggregate customer feedback by sex for analysis and future planning in Ureki.</li> <li>• Develop gender sensitive HR strategy for UWSCG</li> </ul>	<p>2 surveys conducted (2013, 2017)</p> <p>Annual report on quantity and redress of complaints published (2012 – continuous)</p> <p>Yearly report on human resource development with gender analysis (2013)</p>	UWSCG

<sup>11</sup> Project economic analysis, 2013.



<b>Action and Description</b>	<b>Target/Indicator and Timeframe</b>	<b>Institutional Responsibility</b>
<ul style="list-style-type: none"> <li>• Maintain equal employment opportunities for the women and men in UWSCG, and facilitate their career development</li>   <li>• Encourage involvement of female students at WSS program at Georgia Technical University</li>   <li>• Increase outreach to customers through developing and disseminating IEC material on water, hygiene, sanitation, customer rights and water usage efficiency</li>   <li>• Ensure that all material is gender sensitive and provided to women through channels and times suitable to their works and domestic and work responsibilities</li>   <li>• Train staff of Service centers as hygiene and sanitation advocates</li> </ul>	<p>At least 30% of women staff in the target towns customer service care centers</p> <p>Number of female students enrolled in WSS university program (2014-continuous, baseline is zero as program does not exist)</p> <p>At least two information-awareness campaigns on water, hygiene and sanitation practices, consumer rights, complaint mechanisms disseminated in the target towns, using materials developed in previous tranches (2013 – continuous)</p> <p>Local women NGOs and female community leaders involved in IEC material distribution and are trained to conduct public awareness program (2013 – continuous)</p> <p>Staff of service centers trained on water, hygiene, sanitation practices, customer rights and complaint mechanisms (2013 – continuous)</p>	

## IX. PERFORMANCE MONITORING, EVALUATION, REPORTING AND COMMUNICATION

### A. Project Design and Monitoring Framework

Design Summary	Performance Targets and/or Indicators	Data Sources and/or Reporting Mechanisms	Assumptions and Risks
<p><b>Impact</b> Improved health of residents in the urban centers of Ureki and Kutaisi</p>	<p>By the end of the investment program plus 3 years (2022)</p> <p>Prevalence of waterborne illness in households reduced by at least 75% from incidence of 4% of households per annum in 2011</p> <p>Productive days lost to waterborne illness reduced by at least 75% from the current 8 days per person per annum</p>	<p>Sex-disaggregated baseline survey conducted at Investment Program inception (2011) and completion (2019), and in 2022.</p> <p>Surveys conducted as a part of PPMS and by UWSCG</p>	<p><b>Assumption</b> The Government continues to provide support for an enabling investment climate.</p>
<p><b>Outcome</b> Improved water supply and sanitation services in the urban centers of Ureki and improved water supply services in the urban centers of Kutaisi</p>	<p><b>By 2017</b> Residents' access to safe sanitation increased from 25% in 2011 to 88% in Ureki<sup>a</sup> (All existing 525 households will have new sewer connection)</p> <p>Residents' access to 24-hour potable water supply increased from 74% in 2011 to 95% in Kutaisi<sup>b</sup> and almost none to 95% in Ureki (525 existing households in Ureki will have new water connection, and 20,625 households in Kutaisi will have improved water supply service)</p> <p>100% households headed by women in the region covered</p>	<p>Annual sex disaggregated socioeconomic surveys undertaken as part of the PPMS to determine public satisfaction with the quality of water supply and sanitation</p> <p>National statistics on water supply quality and effluent discharge from MEPNR, MA, and UWSCG</p>	<p><b>Assumption</b> The government ensures UWSCG staff efficiently delivers the services.</p> <p><b>Risk</b> Political systems interfere with the enforcement of legislative and regulatory control</p>
<p><b>Output 1: Infrastructure Improvement</b></p> <p>Water supply system efficiency improved through rehabilitation, replacement, and coverage expanded in Ureki and Kutaisi</p>	<p><b>By 2017</b></p> <p><u>Ureki</u> 30 km of water distribution network constructed</p> <p>Residual chlorine at tail ends of water supply system maintained at 0.2–0.4 parts per million</p>	<p>Semiannual progress reports prepared by UWSCG</p> <p>Project component completion and commissioning certificates provided by investment program construction supervision consultant.</p> <p>PPMS reports prepared</p>	

	<p><u>Kutaisi</u> 11,000 cum reservoirs, 1,500 cum water pumping stations, 11 km of water transmission mains, and 158 km of distribution networks rehabilitated, reconstructed, or constructed</p> <p>Nonrevenue water progressively reduced from 60% to 30% (baseline and target to be established at investment program tranche inception)</p> <p>Residual chlorine at tail ends of water supply system maintained at 0.2–0.4 parts per million</p>	<p>by UWSCG</p> <p>UWSCG annual work plans</p>	
<p>Sewerage and sanitation system efficiency improved through rehabilitation, reconstruction, and coverage expanded in Ureki</p>	<p><b>By 2017</b></p> <p><u>Ureki</u> 69 km sewerage network constructed to improve access to sewerage network to cover 100% population including tourist population</p> <p>Sewage pumps operating daily and discharging sewage to treatment plants</p> <p>3.2 MLD Sewage treatment plants constructed to treat and safely discharge sewage</p>	<p>Semiannual progress reports prepared by UWSCG</p> <p>Project component completion and commissioning certificates provided by investment program construction supervision consultant.</p> <p>PPMS reports prepared by UWSCG</p> <p>UWSCG annual work plans</p>	
<p><b>Output 2: Institutional Effectiveness</b></p> <p>Geospatial WSS utility management systems operationalized</p> <p>Management capacity of UWSCG enhanced</p>	<p><b>By 2017</b></p> <p>GIS mapping of water and sewerage networks in 25 towns integrated into operational management</p> <p>WSS management program with Georgian universities operationalized</p> <p>Service centers, one each in Kutaisi and Ureki, with a customer care unit staffed by at least 30% women that informs, educates, and communicates on water, hygiene, and sanitation (Service center in Kutaisi has approximately 20</p>	<p>Semiannual progress reports prepared by UWSCG</p> <p>PPMS reports prepared by UWSCG</p> <p>UWSCG annual work plans</p>	<p><b>Assumption</b></p> <p><b>Risk</b> Poor enrollment in the WSS management program</p>

	staff per shift and that in Ureki will have 8-10 staff per shift)	
<b>Activities and Milestones:</b>  <b>1. Infrastructure Improvement</b> 1.1 Water reservoirs and transmission in Kutaisi and water distribution network in Kutaisi and Ureki constructed (December 2017) 1.2 Sewerage system including sewage treatment plant in Ureki constructed (December 2017) 1.3 Sewer cleaning and laboratory equipment are procured and made operational (December 2017)  <b>2. Institutional Effectiveness</b> 2.1 GIS mapping of water and sewerage networks in 25 towns completed (December 2016) 2.2 Course content with Georgian Universities on WSS operations designed and enrollment started (December 2017) 2.3 Sex-disaggregated consumer database for targeted marketing campaigns in Kutaisi (in additional project area covered by Project 3), and Ureki created (December 2015) 2.4 At least two information awareness campaigns on water, hygiene and sanitation practices, consumer rights, complaint mechanisms in Ureki and Kutaisi conducted (December 2016) 2.5 GAP targets implemented (December 2017)		<b>Inputs</b>  ADB: \$98 million from ADF Government: \$18 million <b>Total: \$116 million</b>

ADF = Asian Development Fund, cum = cubic meter, GAP = gender action plan, km = kilometer, MLD = million liters per day, PPMS = project performance management system, UWSCG = United Water Supply Company of Georgia LLC, WSS = water supply and sanitation

<sup>a</sup> Present population of Ureki is 1,400 (plus floating tourist population of 5,000), and design population by 2020 is 2,100 (plus floating tourist population of 17,200).

<sup>b</sup> Present population of Kutaisi project area is 66,000, and design population by 2020 is 82,400.

## B. Monitoring

80. **Project performance monitoring:** Disaggregated baseline data for output and outcome indicators gathered during Investment Program processing will be updated and reported quarterly through Investment Program quarterly progress reports prepared by UWSCG, and after each ADB review mission. These quarterly reports will provide information necessary to update ADB's project performance reporting system.<sup>12</sup>

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

82. **Safeguards monitoring:** Monitoring and reporting of the implementation on safeguards compliance with requirements and procedures will be prepared by UWSCG. Based on the contractor's monthly site inspection reports, semi-annual safeguards monitoring reports will be prepared with assistance from the UWSCG's environmental consultant, and submitted to ADB for disclosure. External monitoring will be carried out by an Independent Monitoring Agency appointed by UWSCG in two phases, once during the RP implementation, and once a year later. The monitoring reports will be submitted prior to possessing the land, and commencing the civil works. Quarterly project progress reports will include a section on safeguard covenants' compliance and safeguard performance.

83. **Gender and social dimensions monitoring:** See DMF and the GAP for monitoring indicators. Currently, the IPMO reports on GAP indicators and the RETA Consultant confirms the figures. The RETA Consultant is also guiding on UWSCG's public awareness program. GAP implementation monitoring table for the Project will be attached to the quarterly progress reports.

## C. Evaluation

84. Within 6 months of physical completion of each project under the Investment Program the MRDI will submit a project completion report to ADB.<sup>13</sup>

## D. Reporting

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

## E. Stakeholder Communication Strategy

86. The Project intends to maximize the benefits by transparently communicating relevant project information to stakeholders by various means. The consultations are being carried out

<sup>12</sup> ADB's project performance reporting system is available at:

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

<sup>13</sup> Project completion report format is available at: <http://www.adb.org/Consulting/consultants-toolkits/PCR-Public-Sector-Landscape.rar>

during design and implementation of the WSS system and gender analysis is being carried out on needs and problems of men and women in relation to WSS services, with minimum 50% participation from women. The stakeholder communication strategy during project execution aims to: (a) improve public support and sustainability of the rehabilitated/upgraded WSS systems; (b) facilitate change in the hygiene and sanitation practices of the population in the project area; and (c) promote public feedback during the construction and operation phase of the facilities. Item (b) is covered under the hygiene and sanitation promotion under the GAP. Promotion of public feedback (item c) is covered under the Grievance Redress Mechanism disclosure for the IEE and LARP implementation, establishment of customer care units, and web disclosure of safeguards plans/monitoring reports, contract awards, and audited financial statements.

87. UWSCG will disclose all key project-related information, including the scope, cost, and financial and institutional arrangements of the Project, project safeguard reports such as IEE and LARP, and procurement related information in English and Georgian languages on their respective websites. The summary of LARP is disclosed to the project affected people in Georgian language. When the new water and sewer connections are being given or when the UWSCG introduces new tariff and other charges, they will conduct extensive consultations and establish communication programs with support of consultants in order to ensure effective participation, understanding and support of stakeholders.

88. As a part of the IPMO team, UWSCG have a Safeguard Specialist who would act as a focal point for regular contact with the project affected people and other stakeholders. In addition the customer care units will be designated as program focal points for regular contact with other interested stakeholders. All the key project related information will be made available with the local UWSCG offices in Georgian language. The safeguard specialist from construction supervision consultant will supervise monitor implementation of EMP, LARP and GAP. The Director of UWSCG will be responsible person for monitoring the disclosure and dissemination of the information. The communication strategy for the program is summarized in the table below.

### Communications Strategy Matrix for Project 3

Communications Context: <i>Public support and sustainability of the rehabilitated/expanded WSS in the project areas depend on increased public awareness on the benefit of these investments to their wellbeing and modification in their hygiene and sanitation practices. Moreover, quality of construction works and UWSCG service also need transparency and an effective mechanism for receiving and addressing public feedback.</i>									
Project Objective: <i>Safe, reliable, and sustainable WSS that contribute to improved living standards and environment in the project areas</i>									
Strategic Elements						Work Plan Elements			Evaluation
Communication Objective	Key Risks	Audience	Current/ Desired Behavior	Messages/ Info Needs	Channel Activity	Time	Responsibility	Resource Needs	Expected Outcomes
1. Public is informed of the benefits of (a) improved WSS, and (b) hygiene/ sanitation practices to the population in the project areas <sup>14</sup>	Lack of interest to connect to the improved WSS  and unwillingness to change behavior related to hygiene and sanitation	Households in the project areas	Move from unwillingness to willingness to connect  Improved behavior related to hygiene and sanitation	Incidence of waterborne diseases and how an improved WSS system and better hygiene can save money and time	IEC materials (posters/ pamphlets) distributed in schools, offices, market places and hospitals/clinics in project towns  Newspaper ads and articles  Training and seminars	2013 - continuous	Local women NGOs and female community leaders involved in IEC material distribution and are trained to conduct public awareness program  Staff of service centers trained on water, hygiene, sanitation practices, customer rights and complaint mechanisms		Target households connections to the improved/ upgrade WSS achieved  Target improvement in hygiene of population achieved

<sup>14</sup> This is part of the Gender Action Plan for the Investment Program.

Communications Context: *Public support and sustainability of the rehabilitated/expanded WSS in the project areas depend on increased public awareness on the benefit of these investments to their wellbeing and modification in their hygiene and sanitation practices. Moreover, quality of construction works and UWSCG service also need transparency and an effective mechanism for receiving and addressing public feedback.*

Project Objective: *Safe, reliable, and sustainable WSS that contribute to improved living standards and environment in the project areas*

Strategic Elements						Work Plan Elements			Evaluation
Communication Objective	Key Risks	Audience	Current/ Desired Behavior	Messages/ Info Needs	Channel Activity	Time	Responsibility	Resource Needs	Expected Outcomes
2. People affected by LARP in Ureki are informed of their rights and the plans to compensate and assist them	Complaints from APs may cause delay	APs	Maintain support for the project	Information on AP entitlements and schedule of LARP implementation	Visits by social development specialists of IPMO and construction supervision consultants, distribution of LARP summary documents to APs, and posting of approved LARP in the ADB website	Upon approval of LARP	UWSCG (through its social development specialist and social development specialist of construction supervision consultant)		No complaint received from APs on their entitlements and compensation received.
3. Stakeholders informed of likely environmental impacts during construction and mitigation measures planned and actually conducted	Complaints from local communities may cause delay	Communities	Maintain support for the project	Information on subproject environmental impacts and mitigation measures	Visits by environment specialists of IPMO and construction supervision consultants  Posting of updated IEEs/EMPs and EMRs in the ADB website  Explanations by contractors		UWSCG (through its social development specialists from IPMO and construction supervision consultant, and contractors)		No complaint received from local community on management of environmental impacts from the subprojects



Communications Context: <i>Public support and sustainability of the rehabilitated/expanded WSS in the project areas depend on increased public awareness on the benefit of these investments to their wellbeing and modification in their hygiene and sanitation practices. Moreover, quality of construction works and UWSCG service also need transparency and an effective mechanism for receiving and addressing public feedback.</i>									
Project Objective: <i>Safe, reliable, and sustainable WSS that contribute to improved living standards and environment in the project areas</i>									
Strategic Elements						Work Plan Elements			Evaluation
Communication Objective	Key Risks	Audience	Current/ Desired Behavior	Messages/ Info Needs	Channel Activity	Time	Responsibility	Resource Needs	Expected Outcomes
4. Stakeholders/ general public informed of mechanism for providing feedback on the project thereby improving quality of project outputs	Unidentified feedback or unresolved concerns may affect quality of construction and operations of the facilities	Communities	Improved public feedback and support for the construction activities and improved quality of UWSCG service	Information on subproject Grievance Redress Mechanism under IEE and LARP implementation  Information on the UWSCG customer care units	Dissemination of summary information on LARP  Visits and consultations by IPMO and construction supervision consultants' specialists  IECs (included in item 1)		UWSCG (through its IPMO and local offices)  Customer care units		Public feedback/ complaints are received and addressed leading to improved quality of construction and improved operations of the UWSCGs
5. Bidders and the public are informed of contract awards	Complaints from bidders or interested parties may delay works	Bidders/ general public	Improved trust on the selection of contracts for civil works and supply of goods	Info on results of bid evaluation	Publication in a local newspaper or widely available website	Upon UWSCG signing of bid evaluation report	UWSCG (through Procurement Specialist under IPMO)		Improved transparency in contracting and improved public trust
6. General public is informed of project expenditures	Low public trust on the expenditures may affect willingness to support project during implementation	General public	Improved public trust	Audited financial report	Disclosure in ADB website	Within 30 days upon receipt	ADB Project Team		Improved transparency and public trust in expenditures related to the project

## X. ANTICORRUPTION POLICY

89. ADB reserves the right to investigate, directly or through its agents, any violations of the Anticorruption Policy relating to the Project.<sup>15</sup> 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/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.<sup>16</sup>

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

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<sup>15</sup> Available at: <http://www.adb.org/Documents/Policies/Anticorruption-Integrity/Policies-Strategies.pdf>

<sup>16</sup> ADB's Integrity Office web site is available at: <http://www.adb.org/integrity/unit.asp>

## **XI. ACCOUNTABILITY MECHANISM**

91. 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 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 a good faith effort to solve their problems by working with the concerned ADB operations department. Only after doing that, and if they are still dissatisfied, should they approach the Accountability Mechanism.<sup>17</sup>

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<sup>17</sup> For further information see: <http://www.adb.org/Accountability-Mechanism/default.asp>.

## **XII. RECORD OF PAM CHANGES**

### 92. PAM Updates

Initial PAM	:	18 November 2013
Revision 1	:	07 October 2014

**ANNEX 1**  
**The Terms of Reference for Appointment of Consultants**  
**Developing Geographic Information System (GIS)**

**I. OVERVIEW**

1. A framework financing agreement (FFA) for the multitranche financing facility (the Facility) MFF 0055: Georgia for the Urban Services Improvement Investment Program (the Investment Program) was signed between the Government of Georgia (the Government) and the Asian Development Bank (ADB) on 1 March 2011. Subsequently, on 30 March 2011, ADB's Board of Directors approved the Facility for financing the Investment Program in an amount of \$500 million. The Investment Program's executing agency is the Ministry of Regional Development and Infrastructure (MRDI) and implementing agency is the United Water Supply Company of Georgia LLC (UWSCG).

2. Project 3 will improve the water supply and sanitation (WSS) services in Ureki town and augment water supply in Kutaisi town, which are covered by the Investment Program.<sup>18</sup> The government submitted a periodic financing request for the third tranche on 24 May 2013.

**A. Component 1: Infrastructure Improvement**

3. The first component will support infrastructure investments to rehabilitate, improve, and expand WSS facilities in six secondary towns and benefit approximately 335,000 residents, or 38% of urban residents in the region served by UWSCG (about 7.6% and 14.3% of the total and urban population, respectively, in Georgia).<sup>14</sup> This includes system optimization and resource rationalization to improve service efficiency. It will provide vehicles and equipment for system operation and maintenance and for assessing system performance in these towns. It will also help Georgia reduce its carbon footprint by reducing greenhouse gas emissions and installing energy efficient systems.

**B. Component B: Institutional Effectiveness**

4. The second component will develop capacity in MRDI, MEPNR, MA, and GNEWSRC to support more effective regulation of WSS services. It will finance the services of an internationally reputed water operator as a management contractor, to improve UWSCG's technical, management, and financial performance, all fundamental for efficient WSS delivery. Through these improvements, UWSCG will boost its revenues and creditworthiness. Over a 3-year period, the management contractor will assist UWSCG in managing its operations and improving the delivery of WSS services. By substituting for top and key management staff in the UWSCG head office and regional branches, the management contractor will undertake long-term capital planning and asset strengthening, procurement, the supervision of capital improvement works, system operation and maintenance, and improved financial management, including improved revenue collection efficiency and expenditure management. The management contractor's fees will have fixed and variable components, with the latter linked to performance indicators and targets.

**C. Component 3: Project Implementation Support**

5. The third component will support project implementation with focus on detailed engineering; construction supervision; procurement; safeguards compliance; preparation of the

<sup>18</sup> The design and monitoring framework is in Appendix 2.

subsequent tranches of the investment program; and a public awareness program on health, hygiene, sanitation, and water conservation. Consumer feedback through knowledge, attitude, and practice surveys will inform the design of the capacity-building programs.

## II. PROJECT 3

6. Project 3 includes the following outputs: (i) water supply and sanitation (WSS) system improvement through rehabilitation, replacement, and expansion of water supply and sewerage coverage in Ureki and Kutaisi; (ii) strengthened institutional effectiveness by operationalization of geospatial WSS management system and enhancing management capacity of UWSCG.

7. MRDI will be the project executing agency and UWSCG will be the implementing agency. A construction supervision consultant financed under Project 1 will continue to oversee the implementation of the civil works contracts under Project 3. Project 1 had also financed the services of an internationally reputed water operator as a management consultant to improve UWSCG's technical, management, and financial performance, all fundamental for efficient WSS delivery. The Management consultant will continue working through the implementation of Project 3.

8. Under the infrastructure improvement component for Project 3, the water supply system in Kutaisi town will be augmented through construction of three reservoirs of cumulative 12,000 cum capacity, two pumping stations, and corresponding water transmission mains of 11 km, and distribution network of 158 km. In addition, a new water supply and sewerage system for Ureki town is proposed comprising of: 30 km of water distribution network, 69 km of sewage collection system, and 3.2 MLD capacity of sewage treatment plant. A sewer cleaning vehicle and water quality testing laboratory equipment are proposed to be procured under the project. The Project 3 will benefit approximately 200,000 households by the end of the project period.

9. The institutional support component under Project 3 will include; (i) GIS mapping of water and sewerage network for 49 towns, (ii) human resource development through WSS management program in Georgian universities, (iii) creation of sex-disaggregated consumer database to develop targeted marketing campaigns, and (iv) establishing customer care units in the service centers, which are staffed by at least 30% women that informs, educates, and communicates on water, hygiene and sanitation.

## III. OBJECTIVES

10. The Program objective is to improve the health of residents in the urban centers of Ureki and Kutaisi. The outcome will be the improved water supply and sanitation services in the urban centers of Ureki and Kutaisi:

11. Through the Investment Program, ADB supports improvement in urban water supply and sanitation (WSS) services in Georgia, with a strong focus on long-term sustainability of investment. The sustainability will be strongly dependent on the quality of and supply in the local professional resources to take on the daily operations of water utility companies in Georgia, primarily United Water Supply Company of Georgia (UWSCG) which covers services to 58% of country's urban population.

## IV. SCOPE OF SERVICES

### A. Outputs

12. The outputs of this consultancy include:
- (i) georeferenced cadastral maps for project cities with thematic layers;
  - (ii) a database on water supply and sanitation (WSS) assets, including the condition and layout (superimposed as a thematic layer);
  - (iii) a database on consumers (superimposed as a thematic layer); and
  - (iv) a web-based WSS utility management system on a geographic information system (GIS) domain at the service utility's headquarters for decision making.

### B. Activities

13. Main activities for the Consulting services are described below (the description may not be exhaustive and the activities shall not necessarily be limited to those described).

#### i. Procuring Data Products and Cadastral Sheets

14. Cloud-free satellite images in Geo-Tiff format with Rational Polynomial Coefficient (RPC) files should be procured along with cadastral maps of appropriate scale from constituent administration or local self-government bodies.

#### ii. Conducting a Global Positioning System Survey of Principal and Secondary Reference Points

15. Georeferencing the cadastry and high resolution remote sensing data requires precise location control. Referencing using 3D coordinates obtained with differential positioning using GPS receivers gives an accuracy of about 1 meter. A sufficient number of ground control points (GCPs) should be identified in the field and a single frequency GPS survey should be undertaken with reference to the principal reference point. The data should be post-processed to derive World Geodetic System-1984 (WGS-84) coordinates. Spot heights should be generated using barometric measurements at close intervals to provide terrain elevation information.

16. Depending on the terrain conditions, appropriate elevation information will need to be provided. A GPS survey by real time kinematic mode should be carried out to generate as much elevation data as possible. GCPs function as base stations, with their computed coordinates serving as controls, and the rover receiving the corrections through the radio modem communications provides positions accurate to 30 cm or less. This will be carried out in a grid pattern so that a digital elevation model with a fair representation of the terrain is obtained.

#### iii. Georeferencing Satellite Data or Aerial Photos and Cadastry

17. To integrate spatial information on a GIS platform, all spatial information must conform to a specific real world coordinate system with a defined datum, and acquired satellite images must be referenced to a defined coordinate system.

18. Ortho-ready satellite images or aerial photographs should be georeferenced with respect to the GPS coordinates processed for the GCPs. Depending on the size and shape of the cities, the number of GCPs could vary. In order to maintain planimetric accuracy, referenced satellite images should be resampled using the second order polynomial method to minimize distortions

and horizontal displacements. The georeferenced images should be confirmed for their control accuracy by adopting the baseline distance concept.

19. The georeferenced images should be used as a reference frame for referencing the cadastry with an appropriate spread and number of registration points. The accuracy of the referenced cadastry should be verified by carrying out GCP matching, as well as through a baseline complementing exercise.

20. In Georgia, georeferenced and coordinated orthophotos are available and may be used as source data. Where satellite images are used to update newly developed areas, the steps outlined above may be followed. The town's administrative jurisdiction and UWSCG's service jurisdiction will define the spatial coverage.

#### iv. Preparing City Base Maps with Cadastral Control

21. The georeferenced cadastral maps should then be digitized using the ArcGIS platform for use as base maps for integration with spatial layers. The final seamless cadastral map should be reproduced at a scale of 1:5000 (or another scale agreed with the government), with administrative boundaries up to the lowest administration boundary level and survey plots, enabling local level application. The output should be in a shape file or geodatabase format. The cadastral map with individual survey field boundaries at a scale of 1:5000 (or as agreed with the government) should be the base map for this activity. The minimum mappable unit should be 2 mm x 2 mm. The accuracy level of maps at different stages of the operation should consider the following:

- **Thematic layers.** In the extraction of thematic layers the location and content accuracy should be restricted to 1:5000 scale (or another scale agreed with the government).
- **Layer integration.** In an optimal grid system, seamless thematic layers in cadastral scale should use the World Geodetic System (WGS)-84 datum and Universal Transverse Mercator (UTM) projection.

#### v. Deriving Thematic Layers

22. Through digital and visual analysis of satellite and aerial data, the following thematic layers (at a minimum mappable unit of 2 mm x 2 mm) should be developed:

- **Administrative boundaries.** The output should be in cadastral scale and the base map should indicate the individual survey field boundaries with administrative boundaries.
- **Land use and land cover.** Information on land use and land cover and the pattern of spatial distribution forms the basis for any development planning. The current land use trend should be assessed before suggesting alternate land use practices. An appropriate urban land use classification system based on prevalent planning norms should be derived. The land use categories should also consider built-up land, semi-built-up land and agriculture land.
- **Surface water bodies.** Surface water bodies (including both natural and man-made features, e.g., rivers, streams, canals, lakes, ponds, tanks, and reservoirs) should be categorized.
- **Settlement areas.** Broad settlement areas and individual buildings as discerned from satellite images should be demarcated and categorized.



- **Assets.** Important landmarks (e.g., government offices, other major buildings, hospitals, and churches) as discerned from the satellite images should be demarcated in the asset map.<sup>19</sup>

#### vi. Integrating Thematic Layers

23. The derived thematic layers should be integrated with the cadastral map provided with administrative boundaries and survey plots in the GIS domain to enable data retrieval and query processing at a later stage. The spatial layer information of the project cities will be reproduced in a georeferenced cadastral map at a scale of 1:5000 (or as agreed with the government). All thematic layers should be in WGS-84 datum and UTM projection. The digital output should be supplied in interoperable shape file and e00 file format for integration with other spatial and non-spatial data. Hard copy output in A0 size should be generated to include:

- an administrative map in cadastral scale with individual survey field boundaries, administrative boundaries and survey field numbers;
- land use and land cover map showing urban land use features including residential, commercial, industrial, transportation, and agricultural land use;
- landform map showing major landform units;
- detailed road network map showing, national highways, provincial highways, district roads and city roads;
- individual high rise buildings, clustered buildings (agglomerated structures), semi-clustered settlements, and sparse settlement areas;
- map showing the river courses, aquaculture ponds, canal, ponds, reservoir, tanks, waterlogged areas, marshy land, mud flats, etc; and
- major landmark assets (e.g., government offices, other major building complexes, hospitals, churches, and stadiums) in the form of polygon features.

#### vii. Establishing a Water Supply and Sanitation Asset and Consumer Database

24. With assistance from UWSCG staff, the TA will map water supply and sanitation assets in both cities. Asset attributes including age, material, asset condition, and other relevant technical specifications will be assigned to the system and mapped as a thematic layer for integration into the GIS domain. A database on asset information will also be generated and integrated with the service utility's management information system (MIS). In addition to data collection, asset database creation will include a data conversion and encoding process, definition of unique feature identities, and linkages to the GIS domain. Table 1 provides an indicative length of the WSS network in the investment program towns, which will be confirmed before commencing surveys.

- improve efficiency and effectiveness of the technical education management system through training of technical education policy planners, managers and administrators;
- develop undergraduate level academic curriculum in WSS utility operations (tailored after current local needs and translated in Georgian);
- select and train academic staff to deliver the curriculum;
- create laboratories (with latest hardware, software, instrumentation and tools) to promote R&D , improve practical training for students under the curriculum; and

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<sup>19</sup> Water supply and sanitation asset information will be captured as a separate activity after establishing the city base map with requisite features. The city base maps will also provide a planning platform for other government agencies in the development sector.

- support for the academic staff trained for a particular period of time (e.g. 2 academic years since the launch of the academic program).

### C. Staffing Requirement

25. The following description intends to describe from a more specific point of view the different inputs expected from the different team members. These are indicative but reflect the different expectations from ADB.

<b>Expertise/Position</b>	<b>Activity</b>	<b>Number of Persons</b>	<b>Person Months</b>
<b>International Staff</b>			
GIS Expert and Team Leader	Designing and establishing a comprehensive GIS, generating maps, coordinating GPS and satellite data and aerial photo integration, and processing of cadastral data. The Team Leader will also be responsible for finalizing the appropriate database software and procure it through Shopping Method.	1	13
WSS Specialist	Monitoring surveys, designing the utility management system, identifying management decision tools and integrating it with the GIS	4	52
GIS and Database Manager	Designing and establishing an asset database linked to the GIS	1	13
<b>National Staff</b>			
Field Survey Manager	Carrying out GPS field surveys	1	13
GPS Field Surveyor	Carrying out GPS field surveys	4	52
Field Data Collector (and detection specialist)	Carrying out GPS field surveys	4	52
Data Encoder and GIS Specialist	Mapping and digitizing	1	13
Data Encoder (Operator)	Mapping and digitizing	4	52
Drivers		4	52
<b>Total</b>		<b>24</b>	<b>320</b>

26. Detailed Terms of Reference and qualifications are listed below for key staff.

#### 1. GIS Expert and Team Leader

27. The team leader will carry out, but will not be limited to, the following tasks:

- Responsible for all study deliverables and coordinate and supervise the inputs from all team members
- Design and establish a comprehensive GIS, generating maps, coordinating GPS and satellite data and aerial photo integration, and processing of cadastral data.

- Direct liaison with clients to identify GIS needs and develop appropriate GIS products;
- Manage response and prioritization of requests for map products and services;
- Oversee development of city base maps with cadastral control
- Develop plan for mapping water supply and sanitation assets in identified cities. Asset attributes including age, material, asset condition, and other relevant technical specifications will be assigned to the system and mapped as a thematic layer for integration into the GIS domain.
- Maintain and expand the data repository and related meta database
- Conduct analysis and relate separate datasets to create analytical products;
- • Manage training and skills development support to utilities;

28. The Team Leader will be in charge of all other consultants, including the timing of their inputs and the quality of their products, liaise with the EA on a day to day basis and with ADB. With each consultant he/she will prepare and supervise a work plan. Once a week the team leader/program management specialist will hold a program progress meeting with other consultants and the EA to review progress on all fronts and resolve constraints. The team leader/program management specialist will be responsible for all reporting on the program in a timely manner. He/she will be responsible for updating the program schedule as per the critical path method of construction management.

29. **Qualifications:** The position of the GIS Expert/Team Leader will require

- Experience managing data collection, entry and maintenance;
- Experience in managing or developing databases (particularly MS Access) is essential;
- Strong practical experience in using Geographic Information Systems (GIS) is essential,
- Experience in managing and developing client relationships.
- Experience in product development, project management. Experience with the following technologies: Windows 95 and NT operating systems; client/server hardware and software; input/output technology, digitizing equipment, internet services and related technologies.
- Advanced University Degree.
- Five to seven years working experience.
- Experience on an ADB project and be familiar with ADB Guidelines. He/she shall also be required to give references for at least three recent projects.

## 2. WSS Specialist

30. The WSS Specialist will help the Team Leader to carry out, but not be limited to, the following tasks:

- Assist the team leader in deliverables and coordinate the inputs from other team members
- Help establish a comprehensive GIS, generating maps, coordinating GPS and satellite data and aerial photo integration, and processing of cadastral data.
- Monitor surveys
- Design utility management system
- Identify management decision tools and integrate them with the GIS
- Assist in maintaining and expanding the data repository and related meta database
- Conduct analysis and relate separate datasets to create analytical products;

- Manage training and skills development support to utilities;

31. **Qualifications:** The Water Engineer will have a Degree in civil/structure/ water supply engineering, supplemented with a master in construction management. In addition, he must have 15 years of experience in planning, and implementation of large-scale water supply and sanitation projects.

### 3. GIS / Database Specialist

32. The Database Specialist will help the Team Leader to carry out, but not be limited to, the following tasks:

- Work with the GIS expert to develop a geo-database, identify GIS packages and equipment
- Work with GIS expert to develop standards for database management & dissemination procedures
- Conduct an assessment to identify the needs of key partners of the mechanism and advise on products and services to enhance their work
- Produce maps, GIS information reports in hard and e-versions as well as web compatible
- Continually identify, acquire and enrich the database with external spatial data relevant to the mechanism
- Conduct training program for utility officers to develop GIS capacity
- Perform regular spatial analysis to reports

33. **Qualifications:** The position of the Database Specialist will require:

- Experience managing data collection, entry and maintenance;
- Bachelor degree in geography, geo-informatics, cartography or related field
- Minimum of 3 years of experience working with two or more GIS packages
- Knowledge and working experience on Microsoft SQL is advantageous
- Additional knowledge in conflict management and resolution,
- Strong written and oral skills in conveying GIS/spatial information to non-GIS/technical colleagues and partners
- Strength in statistical analysis is an advantage

### 4. Field Survey Manager

34. The position of the Field Survey Manager will require:

- Bachelor degree / diploma in geography, geo-informatics, cartography or related field
- Minimum of 8 years of experience out of which at least 2 years in the capacity of the Field Survey Manager
- Knowledge and working experience GIS mapping surveys is advantageous
- Additional knowledge in conflict management and resolution
- Strong written and oral skills

### 5. Field Surveyors

35. The position of the Field Surveyors will require:

- Diploma in geography, geo-informatics, cartography or related field

- Minimum of 4 years of experience working in field surveys
- Knowledge and working experience GIS mapping surveys is advantageous
- Strong written and oral skills

#### **6. Field Data Collectors**

36. The position of the Field Data Collectors will require:

- Graduate / Diploma holder
- Minimum of 4 years of experience working in field surveys data collection
- Knowledge and working experience GIS mapping surveys is advantageous
- Strong written and oral skills

#### **7. Data Encoders and GIS Specialist**

37. The position of the Data Encoders and GIS Specialist will require:

- Graduate / Diploma holder
- Minimum of 4 years of experience working in data encoding, digitization and mapping on GIS platforms, AUTOCAD, etc.
- Knowledge and working experience GIS mapping surveys is advantageous
- Strong written and oral skills

#### **8. Data Encoders**

38. The position of the Data Encoders will require:

- Graduate / Diploma holder
- Proficiency in computer applications, excel sheets, etc.
- Minimum of 2 years of experience working in data encoding

### **IV. Reporting Requirements**

39. The project reporting requirements are tabled below and will provide the basis for progress payments. The Consultant shall prepare and submit these reports and documents in both hard copy and digital version.

<b>Report</b>	<b>Submission Date</b>
Inception Report	Week 6
Interim Report	Week 12
Final Report	Week 20
Working papers and presentations as requested by the EA, ADB or GTU.	As appropriate

**ANNEX 2**  
**The Terms of Reference for Appointment of Consultants**  
**Developing University Level Educational Capacity in Water Supply and Sanitation Utility**  
**Operations**

**I. OVERVIEW**

1. A framework financing agreement (FFA) for the multitranche financing facility (the Facility) MFF 0055: Georgia for the Urban Services Improvement Investment Program (the Investment Program) was signed between the Government of Georgia (the Government) and the Asian Development Bank (ADB) on 1 March 2011. Subsequently, on 30 March 2011, ADB's Board of Directors approved the Facility for financing the Investment Program in an amount of \$500 million. The Investment Program's executing agency is the Ministry of Regional Development and Infrastructure (MRDI) and implementing agency is the United Water Supply Company of Georgia LLC (UWSCG).

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**A. Component 1: Infrastructure Improvement**

3. The first component will support infrastructure investments to rehabilitate, improve, and expand WSS facilities in six secondary towns and benefit approximately 335,000 residents, or 38% of urban residents in the region served by UWSCG (about 7.6% and 14.3% of the total and urban population, respectively, in Georgia). This includes system optimization and resource rationalization to improve service efficiency. It will provide vehicles and equipment for system operation and maintenance and for assessing system performance in these towns. It will also help Georgia reduce its carbon footprint by reducing greenhouse gas emissions and installing energy efficient systems.

**B. Component B: Institutional Effectiveness**

4. The second component will develop capacity in MRDI, MEPNR, MA, and GNEWSRC to support more effective regulation of WSS services. It will finance the services of an internationally reputed water operator as a management contractor, to improve UWSCG's technical, management, and financial performance, all fundamental for efficient WSS delivery. Through these improvements, UWSCG will boost its revenues and creditworthiness. Over a 3-year period, the management contractor will assist UWSCG in managing its operations and improving the delivery of WSS services. By substituting for top and key management staff in the UWSCG head office and regional branches, the management contractor will undertake long-term capital planning and asset strengthening, procurement, the supervision of capital improvement works, system operation and maintenance, and improved financial management, including improved revenue collection efficiency and expenditure management. The management contractor's fees will have fixed and variable components, with the latter linked to performance indicators and targets.

**C. Component 3: Project Implementation Support**

5. The third component will support project implementation with focus on detailed engineering; construction supervision; procurement; safeguards compliance; preparation of the subsequent tranches of the investment program; and a public awareness program on health,

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<sup>1</sup> The design and monitoring framework is in Appendix 2.

hygiene, sanitation, and water conservation. Consumer feedback through knowledge, attitude, and practice surveys will inform the design of the capacity-building programs.

## **II. PROJECT 3**

6. Project 3 includes the following outputs: (i) water supply and sanitation (WSS) system improvement through rehabilitation, replacement, and expansion of water supply and sewerage coverage in Ureki and Kutaisi; (ii) strengthened institutional effectiveness by operationalization of geospatial WSS management system and enhancing management capacity of UWSCG.

7. MRDI will be the project executing agency and UWSCG will be the implementing agency. A construction supervision consultant financed under Project 1 will continue to oversee the implementation of the civil works contracts under Project 3. Project 1 had also financed the services of an internationally reputed water operator as a management consultant to improve UWSCG's technical, management, and financial performance, all fundamental for efficient WSS delivery. The Management consultant will continue working through the implementation of Project 3.

8. Under the infrastructure improvement component for Project 3, the water supply system in Kutaisi town will be augmented through construction of three reservoirs of cumulative 12,000 cum capacity, two pumping stations, and corresponding water transmission mains of 11 km, and distribution network of 158 km. In addition, a new water supply and sewerage system for Ureki town is proposed comprising of: 30 km of water distribution network, 69 km of sewage collection system, and 3.2 MLD capacity of sewage treatment plant. A sewer cleaning vehicle and water quality testing laboratory equipment are proposed to be procured under the project. The Project 3 will benefit approximately 200,000 households by the end of the project period.

9. The institutional support component under Project 3 will include; (i) GIS mapping of water and sewerage network for 49 towns, (ii) human resource development through WSS management program in Georgian universities, (iii) creation of sex-disaggregated consumer database to develop targeted marketing campaigns, and (iv) establishing customer care units in the service centers, which are staffed by at least 30% women that informs, educates, and communicates on water, hygiene and sanitation.

## **III. OBJECTIVES**

10. The Program objective is to improve the health of residents in the urban centers of Ureki and Kutaisi. The outcome will be the improved water supply and sanitation services in the urban centers of Ureki and Kutaisi:

11. Through the Investment Program, ADB supports improvement in urban water supply and sanitation (WSS) services in Georgia, with a strong focus on long-term sustainability of investment. The sustainability will be strongly dependent on the quality of and supply in the local professional resources to take on the daily operations of water utility companies in Georgia, primarily United Water Supply Company of Georgia (UWSCG) which covers services to 58% of country's urban population.

## **IV. SCOPE OF SERVICES**

### **A. Activities**

12. Project 3 under the Investment Program will address: (i) shortage of local WSS sector professionals, and (ii) eroding vocational education capacity for the sector, through financing aimed at developing sector-specific educational programs with existing Georgia educational institutions. UWSCG is the primary beneficiary of the project. Cooperation arrangement with

Georgian Technical University (GTU) has been/will be made to facilitate implementation. Main activities for the Consulting services are described below (the description may not be exhaustive and the activities shall not necessarily be limited to those described):

- improve efficiency and effectiveness of the technical education management system through training of technical education policy planners, managers and administrators;
- develop undergraduate level academic curriculum in WSS utility operations (tailored after current local needs and translated in Georgian);
- select and train academic staff to deliver the curriculum;
- create laboratories (with latest hardware, software, instrumentation and tools) to promote R&D , improve practical training for students under the curriculum; and
- support for the academic staff trained for a particular period of time (e.g., 2 academic years since the launch of the academic program).

## B. Staffing Requirement

13. The consultant shall make available the following personnel for a three year period.

### Educational Capacity Building Consultants

Expertise/Position	Number of Persons	Duration of assignment (months)	Person Months
Team Leader – Education Specialist (curriculum program development, institutional arrangement) - International	1	5	5
Water engineer (practical hands-on instruction) - International	1	2	2
Administrative Specialist	1	5	5
MIS specialist - National	1	2	2
Translator	1	3	3
<b>TOTAL</b>	<b>5</b>	<b>17</b>	<b>17</b>

14. In preparing the TOR for the individual consultants the inputs have been grouped around the predominant responsibility of the team member as outlined in the table above.

## C. Terms of Reference

### 1. Team Leader/Education Specialist (curriculum program development, institutional arrangement) – International

15. The Team Leader will be responsible for overall management and implementation of the Program. He will be present almost full time to ensure that the system is running smoothly.

16. The Team Leader’s responsibilities will include but not limited to:

- rapid assessment of needs and gaps related to the content of the curriculum and the partner educational institutions;
- develop / improve/upgrade curriculum benchmarking against international institutions specializing in WSS.
- draft and translate revised curriculum;



- procurement of relevant equipment required for hands-on practical training as a part of academic instruction curriculum;
- set up partner institutions to share expertise, teaching and research facilities and to improve teaching learning processes
- qualification-based selection of prospective academic staff for the new curriculum;
- develop training program for the academic staff
- pilot test curriculum to selected group of students (subject to pass/fail certification);
- support of the trained academic staff for particular period of time after the launch of the educational training.

17. The team leader will be in charge of all other consultants, including the timing of their inputs and the quality of their products, liaise with the EA on a day to day basis and with ADB. With each consultant he/she will prepare and supervise a work plan. Once a week the team leader/program management specialist will hold a program progress meeting with other consultants and the EA to review progress on all fronts and resolve constraints. The team leader/program management specialist will be responsible for all reporting on the program in a timely manner. He/she will be responsible for updating the program schedule as per the critical path method of construction management.

18. The position of the team leader/program management specialist will require Master's degree in Technical Education, or related field of study. Ph.D in the field is a plus. He/she must have at least 15 years of applicable professional experience, prior experience managing a technical group, business line or office. Among the stated 15 years, he/she must have at least 5 years of experience as Team Leader and a minimum 10 years of experience in developing countries, preferably in the Asia Pacific region. He/she must have demonstrated skills in human resource management. He/she must have had experience on an ADB project and be familiar with ADB Guidelines. He/she shall also be required to give references for at least three recent projects.

## **2. Water Engineer (practical hands-on instruction) - International**

19. The Water Engineer will be responsible for the development of the technical aspect of the curriculum, under the guidance of the Team Leader. The duties of the specialist will be to:

- set up partner institutions to share expertise, teaching and research facilities and to improve teaching learning processes
- qualification-based selection of prospective academic staff for the new curriculum;
- develop training program for the academic staff
- pilot test curriculum to selected group of students (subject to pass/fail certification);
- support of the trained academic staff for particular period of time after the launch of the educational training.

20. The Water Engineer will have a Degree in civil/structure/ water supply engineering, supplemented with a master in construction management. In addition, he must have 15 years of experience in planning, and implementation of large-scale water supply and sanitation projects.

### 3. Administrative Specialist - National

21. The Administrative Specialist will assist in the management of logistics arrangement for GTU and facilitate communication between the EA, ADB and GTU. The duties of the specialist will be to assist the Team Leader and the Water Engineer to:

- set up partner institutions to share expertise, teaching and research facilities and to improve teaching learning processes
- qualification-based selection of prospective academic staff for the new curriculum;
- develop training program for the academic staff
- pilot test curriculum to selected group of students (subject to pass/fail certification);
- support of the trained academic staff for particular period of time after the launch of the educational training.

### 4. MIS Specialist - National

22. The MIS Specialist will be responsible for developing the information technology platform necessary to support the proposed curriculum and improve efficiency and effectiveness of the technical education management system. The MIS Specialist will support the Team Leader and the Water Engineer to:

- develop training program for the academic staff
- pilot test curriculum to selected group of students (subject to pass/fail certification);
- support of the trained academic staff for particular period of time after the launch of the educational training.

23. The MIS Specialist should have a master degree in Computer Science, along with at least 10 years' experience in developing MIS systems for academic institutions. For national consultant(s), experiences with international organizations shall be an added advantage.

## IV. Reporting Requirements

24. The project reporting requirements are tabled below and will provide the basis for progress payments. The Consultant shall prepare and submit these reports and documents in both hard copy and digital version

<b>Report</b>	<b>Submission Date</b>
Inception Report	Week 6
Interim Report	Week 12
Final Report	Week 20
Working papers and presentations as requested by the EA, ADB or GTU.	As appropriate