



REQUEST FOR PROPOSAL (RFP)

NAME & ADDRESS OF FIRM	DATE: January 23, 2020
	REFERENCE: Scaling-up Multi-Hazard Early Warning System and the Use of Climate Information in Georgia #00098643

Dear Sir / Madam:

We kindly request you to submit your Proposal for Preparation of Design of Flood-Prevention Measures in Town of Lagodekhi, Village Pirveli Maisi and Town Kobuleti

Please be guided by the form attached hereto as Annex 2, in preparing your Proposal.

Proposals may be submitted on or before 17:00, Friday, February 14, 2020 and via courier mail to the address below:

United Nations Development Programme
9, Eristavi Street, Tbilisi, Georgia - UN House 1st floor
Box name: Preparation of Design of Flood-Prevention Measures in Town of Lagodekhi, Village Pirveli Maisi and Town Kobuleti

Prep-bid meeting: Pre-bid conference will be conducted:

Time: 15:00 GMT+4;

Date: 31 January 2020;

Venue: Project office – 2, Koka Kldiashvili st. II floor, apt 1, Tbilisi, Georgia 9 Eristavi str, Tbilisi, 0179, Georgia.

If interested bidders cannot attend the pre-bid conference, it is possible to join the meeting *via skype only*. In that case, interested bidder must provide skype address by email to levan.gagua@undp.org (subject: Design of Flood-Prevention Measures) no later than COB January 29, 2020.

The Technical Proposal and the Financial Proposal envelopes MUST BE COMPLETELY SEPARATE and each of them must be submitted sealed individually and clearly marked on the outside as either "TECHNICAL PROPOSAL" or "FINANCIAL PROPOSAL", as appropriate. Each envelope SHALL clearly indicate the name of the bidder. The Technical Proposal and the Financial Proposal must be submitted in English language.

The outer envelopes shall:

Bear the name and address of the bidder;

Be addressed to UNDP;

Bear a warning that states "Not to be opened before the time and date for proposal opening".

In the course of preparing your Proposal, it shall remain your responsibility to ensure that it reaches the address above on or before the deadline. Proposals that are received by UNDP after the deadline indicated above, for whatever reason, shall not be considered for evaluation.

Services proposed shall be reviewed and evaluated based on completeness and compliance of the Proposal and responsiveness with the requirements of the RFP and all other annexes providing details of UNDP requirements.

The Proposal that complies with all of the requirements, meets all the evaluation criteria and offers the best value for money shall be selected and awarded the contract. Any offer that does not meet the requirements shall be rejected.

Any discrepancy between the unit price and the total price shall be re-computed by UNDP, and the unit price shall prevail and the total price shall be corrected. If the Service Provider does not accept the final price based on UNDP's re-computation and correction of errors, its Proposal will be rejected.

No price variation due to escalation, inflation, fluctuation in exchange rates, or any other market factors shall be accepted by UNDP after it has received the Proposal. At the time of Award of Contract or Purchase Order, UNDP reserves the right to vary (increase or decrease) the quantity of services and/or goods, by up to a maximum twenty five per cent (25%) of the total offer, without any change in the unit price or other terms and conditions.

Any Contract or Purchase Order that will be issued as a result of this RFP shall be subject to the General Terms and Conditions attached hereto. The mere act of submission of a Proposal implies that the Service Provider accepts without question the General Terms and Conditions of UNDP, herein attached as Annex 3.

Please be advised that UNDP is not bound to accept any Proposal, nor award a contract or Purchase Order, nor be responsible for any costs associated with a Service Providers preparation and submission of a Proposal, regardless of the outcome or the manner of conducting the selection process.

UNDP's vendor protest procedure is intended to afford an opportunity to appeal for persons or firms not awarded a Purchase Order or Contract in a competitive procurement process. **In the event that** you believe you have not been fairly treated, you can find detailed information about vendor protest procedures in the following link:

<http://www.undp.org/content/undp/en/home/operations/procurement/protestandsanctions/>

UNDP encourages every prospective Service Provider to prevent and avoid conflicts of interest, by disclosing to UNDP if you, or any of your affiliates or personnel, were involved in the preparation of the requirements, design, cost estimates, and other information used in this RFP.

UNDP implements a zero tolerance on fraud and other proscribed practices, and is committed to preventing, identifying and addressing all such acts and practices against UNDP, as well as third parties involved in UNDP activities. UNDP expects its Service Providers to adhere to the UN Supplier Code of Conduct found in this link : http://www.un.org/depts/ptd/pdf/conduct_english.pdf

Thank you and we look forward to receiving your Proposal.

Sincerely yours,

Ketevan Skhireli
Project Coordinator

J. 16/02/2020
23.02.2020.

Description of Requirements

Context of the Requirement	<p>In early 2019, The United Nations Development Program (UNDP), with the financial support of the Green Climate Fund (GCF) has launched a 7-year project for Georgia entitled: <i>"Scaling-up Multi-Hazard Early Warning System and the Use of Climate Information in Georgia"</i> (hereafter GCF project). The project is implemented jointly with the Ministry of Environmental Protection and Agriculture (MEPA) playing an executing entity's/implementing partner's role for it.</p> <p>An overall objective of the project is to reduce exposure of Georgia's communities, livelihoods and infrastructure to climate-induced natural hazards through a well-functioning nation-wide multi-hazard early warning system and risk-informed local action.</p> <p>Under the activity 3.3, the project aims at the implementation of priority risk reduction interventions that would significantly reduce the risks against which the Multi-Hazard Early Warning Systems (MHEWS) will operate. For achieving this goal, the project will implement 13 site-specific prioritized risk reduction interventions (structural measures) for areas where risk from climate-induced natural hazards is the highest. Part of these measures will be financed by Ministry of Regional Development and Infrastructure (MRDI) as part of the co-financing agreement and others will be funded by UNDP through GCF project.</p> <p>Based on the outcomes of the preliminary cost-benefit analysis, the short-listed structural measures were identified for 13 sites (8 in Western Georgia and 5 in Eastern Georgia). The locations of the 13 sites for structural measures is provided in Figure 1 below (See Annex 4 – TOR). Out of these 13 sites, the current assignment covers three – site 4 (river Lagodekhiskhevi), site 9 (river Tskhenitskali) and site 5 (River Achkva). (please see Figures 2, 3 and 4 in TOR).</p> <p>At project proposal stage, structural measures were designed to a reasonable level of detail based on existing data. However, to facilitate the construction of the structural measures, the detailed design of the interventions for these locations must be prepared. Additionally, in 2018 the topographic survey for site 5-Kobuleti (River Achkva) has been prepared to certain level of detail. The file can be obtained through the following link: https://drive.google.com/drive/folders/1TgpJTbE4dYyk9onfbn2VTPyEd7sA-a3?usp=sharing</p> <p>For this purpose, the project seeks to engage a company to provide technical support, conduct necessary surveys in order to prepare the detailed design and bills of quantities for these interventions.</p> <p>Detailed information on the project can be found in TOR – Annex 4.</p>
Implementing Partner of UNDP	N/A
Brief Description of the Required Services	<p>The overall objective of the assignment is to prepare the detailed design of the structural measures to be implemented under the framework of GCF project on three specific locations/sites on the rivers Lagodekhiskhevi, Tskhenitskali and Achkva.</p> <p>Detailed description can be found in TOR - Annex 4.</p>

List and Description of Expected Outputs to be Delivered	<div>1. Site examination, reconnaissance and development of the survey/investigation program;</div> <div>2. Topographical survey;</div> <div>3. Hydrological analysis and hydraulic modelling;</div> <div>4. Geophysical survey/Geotechnical investigation;</div> <div>5. Identification and evaluation of options;</div> <div>6. Multi-criterion comparative analysis of the options for structural measures, submission of Interim Report;</div> <div>7. Design of the flood protection facilities;</div> <div>8. Construction drawings and specifications;</div> <div>9. Bill of Quantities and Cost Estimate.</div> <div>The list above indicates all possible outputs for all sites. The exact output per each site is given in the TOR – Annex 4.</div>											
Person to Supervise the Work/Performance of the Service Provider	"Scaling-up Multi-Hazard Early Warning System and the Use of Climate Information in Georgia" Team Leader in Community Based Processes and GCF Project International Engineer.											
Frequency of Reporting	Reporting will be linked with the deliverables. All deliverables should be submitted in English and Georgian. The list of deliverables is indicated in the TOR (Annex 4). The deliverables will be reviewed by UNDP and will provide comments if any within 1 month upon submission.											
Progress Reporting Requirements	N/A											
Location of work	<div><input checked="" type="checkbox"/> At Contractor's Location</div> <div><input checked="" type="checkbox"/> Town of Lagodekhi (Lagodekhi Municipality)</div> <div><input checked="" type="checkbox"/> Village Pirveli Maisi (Abasha Municipality)</div> <div><input checked="" type="checkbox"/> Town of Kobuleti (Kobuleti Municipality)</div>											
Expected duration of work	Contract Duration is 5 months.											
Target start date	March 20, 2020											
Latest completion date	August 20, 2020											
Travels Expected	<div>Offerors will need to travel to following regions of Georgia:</div> <table><tr><th>Destination/s</th><th>Estimated Duration</th><th>Brief Description of Purpose of the Travel</th><th>Target Date/s</th></tr><tr><td>Town of Lagodekhi, Kobuleti Town Village Pirveli Maisi</td><td>2 month</td><td>Field work: detailed site examination; topographical survey.</td><td>March – May 2020</td></tr></table>				Destination/s	Estimated Duration	Brief Description of Purpose of the Travel	Target Date/s	Town of Lagodekhi, Kobuleti Town Village Pirveli Maisi	2 month	Field work: detailed site examination; topographical survey.	March – May 2020
Destination/s	Estimated Duration	Brief Description of Purpose of the Travel	Target Date/s									
Town of Lagodekhi, Kobuleti Town Village Pirveli Maisi	2 month	Field work: detailed site examination; topographical survey.	March – May 2020									
Special Security Requirements	N/A											
Facilities to be Provided by UNDP (i.e., must be excluded from Price Proposal)	N/A											
Implementation Schedule												

indicating breakdown and timing of activities/sub-activities	<input checked="" type="checkbox"/> Service Provider is required to propose implementation schedule according to the TOR (chapter 5, annex 4).				
Names and curriculum vitae of individuals who will be involved in completing the services	<input checked="" type="checkbox"/> Required				
Currency of Proposal	<input checked="" type="checkbox"/> United States Dollars Note: For local contractors, the payment will be made in GEL according to UN exchange rate at the date of payment. https://treasury.un.org/operationalrates/OperationalRates.php#G				
Value Added Tax on Price Proposal	<input checked="" type="checkbox"/> must be exclusive of VAT and other applicable indirect taxes				
Validity Period of Proposals (Counting for the last day of submission of quotes)	<input checked="" type="checkbox"/> 90 days In exceptional circumstances, UNDP may request the Service Provider to extend the validity of the Proposal beyond what has been initially indicated in this RFP. The Proposal shall then confirm the extension in writing, without any modification whatsoever on the Proposal.				
Partial Quotes	<input checked="" type="checkbox"/> Not permitted				
Payment Terms	Installments	Outputs	Percentage of contract price	Timing: No later than	Condition for Payment Release
	1	Survey/investigation program for all 3 site	30%	March 31, 2020	Within thirty (30) days from the date of meeting the following conditions: a) UNDP's written acceptance (i.e., not mere receipt) of the quality of the outputs; and b) Receipt of invoice from the Service Provider.
	2	Report on surveys and mapping conducted for Lagodekhi (River Lagodekhiskhevi) and Pirveli Maisi (River Tskhenistskali)	15%	April 30, 2020	
	3	Interim report for Kobuleti (River Achkva);	15%	May 30, 2020	
	4	Final Construction Drawings and bill of quantities for Kobuleti (River Achkva); Interim report for Lagodekhi (River Lagodekhiskhevi) and Pirveli Maisi (River Tskhenistskali);	20%	June 30, 2020	
	5	Detailed Drawings and Bills of Quantity for Lagodekhi (River Lagodekhiskhevi) and Pirveli Maisi (River Tskhenistskali)	20%	August 10, 2020	
Note: The payment schedule is preliminary and is based on the expected Target start date March 20, 2020. The payment dates might be re-scheduled according to actual contract award date.					

Person(s) to review/inspect/ approve outputs/completed services and authorize the disbursement of payment	"Scaling-up Multi-Hazard Early Warning System and the Use of Climate Information in Georgia" Team Leader in Community Based Processes and GCF Project International Engineer.
Type of Contract to be Signed	<input checked="" type="checkbox"/> Contract for Professional Services
Criteria for Contract Award	<input checked="" type="checkbox"/> Highest Combined Score (based on the 70% technical offer and 30% price weight distribution) <input checked="" type="checkbox"/> Full acceptance of UNDP Contract General Terms and Conditions (GTC). This is a mandatory criterion and cannot be deleted regardless of the nature of services required. Non-acceptance of the GTC may be grounds for the rejection of the Proposal.
Criteria for the Assessment of Proposal	<p><u>Technical Proposal (70%)</u></p> <input type="checkbox"/> Expertise of the Firm 30% <input type="checkbox"/> Methodology, Its Appropriateness to the Concition and Timeliness of the Implementation Plan 40 % <input type="checkbox"/> Management Structure and Qualification of Key Personnel 30 %
	<p><u>Financial Proposal (30%)</u></p> <p>To be computed as a ratio of the Proposal's offer to the lowest price among the proposals received by UNDP.</p> <p>For further details, please refer to Technical Proposal Evaluation Form (Annex 5). The technical proposal is evaluated on the basis of its responsiveness to the Terms of Reference (TOR) and scoring is allocated in accordance with the Annex 5. If the offeror does not meet any of the minimum technical qualification criteria/requirements given in Annex 5, it will be assessed by score zero and will be automatically disqualified. Disqualified offeror will not be evaluated further.</p>
UNDP will award the contract to:	<input checked="" type="checkbox"/> One and only one Service Provider
Annexes to this RFP	<input checked="" type="checkbox"/> Form for Submission of Proposal (Annex 2) <input checked="" type="checkbox"/> General Terms and Conditions / Special Conditions (Annex 3) <input checked="" type="checkbox"/> Detailed TOR (Annex 4) <input checked="" type="checkbox"/> Brief for Topographic and Infrastructure Condition Survey (Annex 4a) <input checked="" type="checkbox"/> Technical Proposal Evaluation Form (Annex 5)
Contact Person for Inquiries (Written inquiries only)	<p>Nino Sherozia Project Admin/Finance Associate nino.sherozia@undp.org</p> <p>Levan Gagua Project Contracting Assistant levan.gagua@undp.org</p> <p>Any delay in UNDP's response shall not be used as a reason for extending the deadline for submission, unless UNDP determines that such an extension is necessary and communicates a new deadline to the Proposers.</p>

<p>Other Information [pls. specify]</p>	<p><u>Prep-bid meeting: Pre-bid conference will be conducted:</u></p> <p>Time: 15:00 GMT+4; Date: January 31, 2020; Venue: Project office – 2, Koka Kldiashvili st. II floor, apt 1, Tbilisi, Georgia 9 Eristavi str, Tbilisi, 0179, Georgia.</p> <p>If interested bidders cannot attend the pre-bid conference, it is possible to join the meeting <u>via skype only</u>. In that case, interested bidder must provide skype address by email to levan.gagua@undp.org (subject: Design of Flood-Prevention Measures) no later than COB January 29, 2020.</p>
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FORM FOR SUBMITTING SERVICE PROVIDER'S PROPOSAL

(This Form must be submitted only using the Service Provider's Official Letterhead/Stationery)

[insert: Location].

[insert: Date]

To: Ketevan Skhireli, Project Coordinator "Scaling-up Multi-Hazard Early Warning System and the Use of Climate Information in Georgia" 9 Eristavi Street (UN House) Tbilisi 0179

Dear Sir/Madam:

We, the undersigned, hereby offer to render the following services to UNDP in conformity with the requirements defined in the RFP dated 1/23/2020, and all of its attachments, as well as the provisions of UNDP General Contract Terms and Conditions:

A. Qualifications of the Service Provider

The Service Provider must have:

Experience of the Firm:

- ✓ At least 10 years of experience of the company in conducting the similar assignments – Structural engineering, preparation of design layout and bill of quantities. Including, but not limited to following areas: flood protection measures, channel rehabilitation measures and riverbed strengthening/protection measures **(minimum requirement)**;
- ✓ Experience in conducting of at least 5 projects of similar size out of which at least two design contracts with the value not less than 70 000 USD each. **(minimum requirement)**;
- ✓ Bank letter certifying annual turnover not less than 1,000,000 GEL (per year) during last 3 years **(minimum requirement)**;
- ✓ At least 3 reference letters on successful implementation of similar tasks during last 3 years **(minimum requirement)**;
- Having reference from an international organization for conducting similar surveys – would be an asset.

The Service Provider must describe and explain how and why they are the best entity that can deliver the requirements of UNDP by indicating the following:

- a) *Company Profile – describing the nature of business, field of expertise, no more than 10 pages;*
- b) *Business Licenses – Registration Papers, Tax Payment Certification, etc.*
- c) *Track Record – list of clients for similar services as those required by UNDP, indicating description of contract scope, contract duration, contract value, contract references;*
- d) *Certificates and Accreditation (if any) – including Quality Certificates, Patent Registrations, Environmental Sustainability Certificates, etc.*

B. Proposed Methodology for the Completion of Services

The Service Provider must describe how it will address/deliver the demands of the RFP; providing a detailed description of the essential performance characteristics, reporting conditions and quality assurance mechanisms that will be put in place, while demonstrating that the proposed methodology will be appropriate to the local conditions and context of the work.

The methodology will be assessed against following criteria:

- 1. Understanding of the site specification*
- 2. Methodology is in line with the proposal*
- 3. The timelines of the activities for each site*

C. Qualifications of Key Personnel

If required by the RFP, the Service Provider must provide:

a) Names and qualifications of the key personnel:

At a minimum:

Project Coordinator

- with at least 7 years of experience of management and coordination of structural measures design surveys (minimum requirement)

Hydrologist/hydraulic engineer

- with at least 10 years of experience in conducting hydrological and hydraulic surveys and investigation for the design of structural measures in Georgia in the following areas: riverbank protection measures, flood protection measures, riverbed strengthening/protection measures (minimum requirement);

Structural engineer

- with at least 10 years of experience in designing the structural measures in the following areas: riverbank protection measures, flood protection measures, riverbed strengthening/protection measures (minimum requirement)

Geologist

- with at least 10 years of experience in providing the geotechnical investigation, reporting and interpretation of the soil property design parameters in Georgia in the infrastructure related projects (minimum requirement)

Cost Estimator

- with at least 10 years of experience in providing cost estimates and developing bills of quantities in Georgia in the infrastructure related projects (minimum requirement)

Computer Aided Design (CAD) Specialist/GIS Specialist

- with at least 10 years of experience in providing computer aided design (CAD) in Georgia in the infrastructure related projects (minimum requirement)

The other professional team if deemed appropriate by the contractor to fulfill the requirements as spelled out in this RFP (Note: It is possible to combine several expert functions within one individual, provided that the candidate fully meets all needed qualifications).

b) CVs demonstrating qualifications must be submitted; and

c) Written confirmation from each personnel that they are available for the entire duration of the contract.

D. Cost Breakdown per Deliverable*

N	Deliverables [list them as referred to in the RFP]	Percentage of Total Price (Weight for payment)	Price (Lump Sum, All Inclusive)
1	Survey/investigation program for all 3 sites	30%	
2	Report on surveys and mapping conducted for Lagodekhi (River Lagodekhiskhevi) and Pirveli Maisi (River Tskhenistskali)	15%	
3	Interim report for Kobuleti (River Achkva);	15%	
4	Final Construction Drawings and bill of quantities for Kobuleti (River Achkva); Interim report for Lagodekhi (River Lagodekhiskhevi) and Pirveli Maisi (River Tskhenistskali)	20%	
5	Detailed Drawings and Bills of Quantity for Lagodekhi (River Lagodekhiskhevi) and Pirveli Maisi (River Tskhenistskali)	20%	
	Total	100%	

*This shall be the basis of the payment tranches

E. Cost Breakdown by Cost Component (to be filled in according to the tables below, separately: Table N1 - Lagodekhi and Pirveli Maisi and Table N2 – Kobuleti)

Table N1

Estimate Cost Breakdown for Preparation of Design of Flood-Prevention Measures in Town of Lagodekhi and Village Pirveli Maisi						
EXPECTED DESIGN INPUT COST ESTIMATE: Two Sites						
Nº	Design Input Item Description	Involved Resources / Needed Personnel	Unit of Measurement	Quantity / Engagement days	Rate / Price (USD)	Total (USD)
1	Site examination, reconnaissance and development of the survey/investigation program	Project Coordinator	man/day			
		Hydrologist/hydraulics engineer				
		Geologist				
		Additional Staff (if Any)				
2	Topographical survey (For reference refer to the Annex 4a)	GPS/Total Station Survey & Data Processing	Hectare			
		Drone overfly, Data Processing	Hectare			
		Echo-sounding	Hectare			
3	Hydrological analysis and hydraulic modelling	Hydrologist/hydraulics engineer	man/day			
		CAD/GIS Specialist				
4	Geotechnical investigation (For	<u>To be Specified by the bidder</u>	Lump Sum			

	reference refer to the Annex 4b)					
5	Identification and evaluation of options	Hydrologist/hydraulics engineer	man/day			
Structural Engineer						
CAD/GIS Specialist						
Cost Estimator						
Additional Staff (if Any)						
6	Multi-criterion comparative analysis of the options for structural measures, submission of Interim Report	Project Coordinator	man/day			
Hydrologist/hydraulics engineer						
Structural Engineer						
CAD/GIS Specialist						
Cost Estimator						
Additional Staff (if Any)						
7	Design of the flood protection facilities	Project Coordinator	man/day			
Hydrologist/hydraulics engineer						
Structural Engineer						
CAD/GIS Specialist						
Geologist						
Additional Staff (if Any)						
8	Construction drawings and specifications	Project Coordinator	man/day			
CAD/GIS Specialist						
Structural Engineer						
Additional Staff (if Any)						
9	Bill of Quantities and Cost Estimate	Project Coordinator	man/day			
Structural Engineer						
Cost Estimator						
Additional Staff (if Any)						
Sub – Total						
Other Costs						
1	Transportation of personnel	To the site and back	KM			
2	Accommodation		man/day			
3	Daily Allowance		man/day			
4	Communication		Lump Sum			
5	Translation Cost		per page			
6	Other Costs as applicable					
Sub – Total						
				GRAND TOTAL (USD)		

Note: Under Other Costs companies shall include detailed list of all costs associated with implementation of the tasks and deliverables, each cost shall be justified and clearly calculated. Other related costs can be subject to UNDP review and approval;

Table N2

Estimate Cost Breakdown for Preparation of Design of Flood-Prevention Measures in Town Kobuleti River Achkva						
EXPECTED DESIGN INPUT COST ESTIMATE: One Site						
Nº	Design Input Item Description	Involved Resources / Needed Personnel	Unit of Measurement	Quantity / Engagement days	Rate / Price (USD)	Total (USD)
1	Site examination, condition audit of diversion channel, review adequacy of topographic survey	Project Coordinator	man/day			
		Hydrologist/hydraulics engineer				
		Geologist				
		Additional Staff (if Any)				
2	Topographical survey. (For reference refer to the Annex 4a)	GPS/Total Station Survey & Data Processing	Hectare			
		Drone overfly, Data Processing	Hectare			
		Echo-sounding	Hectare			
3	Hydrological analysis and hydraulic modelling	Hydrologist/hydraulics engineer	man/day			
		CAD/GIS Specialist				
4	Geophysical survey/Geotechnical investigation Geotechnical investigation (For reference refer to the Annex 4b)	<u>To be Specified by the bidder</u>	Lump Sum			
5	Identification and evaluation of options	Hydrologist/hydraulics engineer	man/day			
		Structural Engineer				
		CAD/GIS Specialist				
		Cost Estimator				
		Additional Staff (if Any)				
6	Multi-criterion comparative analysis of the options for structural measures, submission of Interim Report	Project Coordinator	man/day			
		Hydrologist/hydraulics engineer				
		Structural Engineer				
		CAD/GIS Specialist				
		Cost Estimator				
		Additional Staff (if Any)				
7	Design of the flood protection facilities	Project Coordinator	man/day			
		Hydrologist/hydraulics engineer				
		Structural Engineer				
		CAD/GIS Specialist				

		Geologist				
		Additional Staff (if Any)				
8	Construction drawings and specifications	Project Coordinator	man/day			
		CAD/GIS Specialist				
		Structural Engineer				
		Additional Staff (if Any)				
9	Bill of Quantities and Cost Estimate	Project Coordinator	man/day			
		Structural Engineer				
		Cost Estimator				
		Additional Staff (if Any)				
	Sub – Total					
	Other Costs					
1	Transportation of personnel	To the site and back	KM			
2	Accommodation		man/day			
3	Daily Allowance		Lump Sum			
4	Communication					
5	Translation Cost		per page			
6	Other Costs as applicable					
	Sub - Total					
	GRAND TOTAL (USD)					

Note: Under Other Costs companies shall include detailed list of all costs associated with implementation of the tasks and deliverables, each cost shall be justified and clearly calculated. Other related costs can be subject to UNDP review and approval;

*[Name and Signature of the Service Provider's
Authorized Person]
[Designation]
[Date]*

GENERAL TERMS AND CONDITIONS FOR CONTRACTS

PAGE 1

This Contract is between the United Nations Development Programme, a subsidiary organ of the United Nations established by the General Assembly of the United Nations (hereinafter "UNDP"), on the one hand, and a company or organization indicated in the Face Sheet of this Contract (hereinafter the "Contractor"), on the other hand.

1. LEGAL STATUS OF THE PARTIES: UNDP and the Contractor shall be referred to as a "Party" or, collectively, "Parties" hereunder, and:

1.1 Pursuant, inter alia, to the Charter of the United Nations and the Convention on the Privileges and Immunities of the United Nations, the United Nations, including its subsidiary organs, has full juridical personality and enjoys such privileges and immunities as are necessary for the independent fulfillment of its purposes.

1.2 The Contractor shall have the legal status of an independent contractor vis-à-vis UNDP, and nothing contained in or relating to the Contract shall be construed as establishing or creating between the Parties the relationship of employer and employee or of principal and agent. The officials, representatives, employees, or subcontractors of each of the Parties shall not be considered in any respect as being the employees or agents of the other Party, and each Party shall be solely responsible for all claims arising out of or relating to its engagement of such persons or entities.

2. OBLIGATIONS OF THE CONTRACTOR:

2.1 The Contractor shall deliver the goods described in the Technical Specifications for Goods (hereinafter the "Goods") and/or perform and complete the services described in the Terms of Reference and Schedule of Payments (hereinafter the "Services"), with due diligence and efficiency, and in accordance with this Contract. The Contractor shall also provide all technical and administrative support needed in order to ensure the timely and satisfactory delivery of the Goods and/or performance of the Services.

2.2 To the extent that the Contract involves any purchase of the Goods, the Contractor shall provide UNDP with written evidence of the delivery of the Goods. Such evidence of delivery shall, at the minimum, consist of an invoice, a certification of conformity, and other supporting shipment documentation as may otherwise be specified in the Technical Specifications for Goods.

REV.: SEPTEMBER 2017 UNDP GENERAL TERMS AND CONDITIONS FOR CONTRACTS PAGE 2

2.3 The Contractor represents and warrants the accuracy of any information or data provided to UNDP for the purpose of entering into this Contract, as well as the quality of the deliverables and reports foreseen under this Contract, in accordance with the highest industry and professional standards.

2.4 All time limits contained in this Contract shall be deemed to be of the essence in respect of the performance of the delivery of the Goods and/or the provision of the Services.

3. LONG TERM AGREEMENT: If the Contractor is engaged by UNDP on the basis of a long-term agreement ("LTA") as indicated in the Face Sheet of this Contract, the following conditions shall apply:

3.1 UNDP does not warrant that any quantity of Goods and/or Services shall be ordered during the term of the LTA.

3.2 Any UNDP business unit, including, but not limited to, a Headquarters unit, a Country Office or a Regional Centre, as well as any United Nations entity, may benefit from the retainer and order Goods and/or Services from the Contractor hereunder.

3.3 The Contractor shall provide the Services and/or deliver the Goods, as and when requested by UNDP and reflected in a Purchase Order, which shall be subject to the terms and conditions stipulated in this Contract. For the avoidance of doubt, UNDP shall acquire no legal obligations towards the Contractor unless and until a Purchase Order is issued.

3.4 The Goods and/or Services shall be at the Discount Prices annexed hereto. The prices shall remain in effect for a period of three years from the Starting Date stated in the Face Sheet of this Contract.

3.5 In the event of any advantageous technical changes and/or downward pricing of the Goods and/or Services during the term of the retainer, the Contractor shall notify UNDP immediately. UNDP shall consider the impact of any such event and may request an amendment to the retainer.

3.6 The Contractor shall report semi-annually to UNDP on the Goods delivered and/or Services provided, unless otherwise specified in the Contract. Each report should be submitted to the UNDP Contact Person indicated in as indicated in the Face Sheet hereto, as well as to a UNDP business unit that has placed a Purchase Order for the Goods and/or Services during the reporting period.

3.7 The LTA shall remain in force for the maximum period of two years and may be extended by UNDP for one additional year by mutual agreement of the Parties.

4. PRICE AND PAYMENT:

4.1 FIXED PRICE: If Fixed Price is chosen as a payment method pursuant to the Face Sheet of this Contract, in full consideration for the complete and satisfactory delivery of the Goods and/or provision of the Services, UNDP shall pay the Contractor a fixed amount indicated in the Face Sheet of this Contract.

4.1.1 The amount stated in the Face Sheet of this Contract is not subject to any adjustment or revision because of price or currency fluctuations, or the actual costs incurred by the Contractor in the performance of the Contract.

4.1.2 UNDP shall effect payments to the Contractor in the amounts and pursuant to the schedule of payments set forth in the Terms of Reference and Schedule of Payments, upon completion by the Contractor of the corresponding deliverable(s) and upon acceptance by UNDP of the original invoices submitted by the Contractor to the UNDP Contact Person indicated in the Face Sheet of this Contract, together with whatever supporting documentation that may be required by UNDP:

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4.1.3 Invoices shall indicate a deliverable completed and the corresponding amount payable. 4.1.4 Payments effected by UNDP to the Contractor shall be deemed neither to relieve the Contractor of its obligations under this Contract nor as acceptance by UNDP of the Contractor's delivery of the Goods and/or provision of the Services. 4.2 COST REIMBURSEMENT: If Cost Reimbursement is chosen as a payment method pursuant to the Face Sheet of this Contract, in full consideration for the complete and satisfactory delivery of the Goods and/or provision of the Services under this Contract, UNDP shall pay the Contractor an amount not exceeding the total amount stated in the Face Sheet of this Contract.

4.2.1 The said amount is the maximum total amount of reimbursable costs under this Contract. The breakdown of costs contained in the Financial Proposal, referred to in the Face Sheet to this Contract shall specify the maximum amount per each cost category that is reimbursable under this Contract. The Contractor shall specify in its invoices or financial reports (as required by UNDP) the amount of the actual reimbursable costs incurred in the delivery of the Goods and/or the provision of the Services.

4.2.2 The Contractor shall not provide the Services and/or deliver the Goods or equipment, materials and supplies that may result in any costs in excess of the amount stated in the Face Sheet of this Contract, or of the maximum amount per each cost category specified in the breakdown of costs contained in the Financial Proposal, without the prior written agreement of the UNDP Contact Person.

4.2.3 The Contractor shall submit original invoices or financial reports (as required by UNDP) for the Goods delivered in accordance with the Technical Specifications for Goods and/or the Services provided in accordance with the schedule set forth in the Terms of Reference and Schedule of Payments. Such invoices or financial reports shall indicate a deliverable or deliverables completed and the corresponding amount payable. They shall be submitted to the UNDP Contact Person, together with whatever supporting documentation of the actual costs incurred that is required in the Financial Proposal, or may be required by UNDP.

4.2.4 UNDP shall effect payments to the Contractor upon completion by the Contractor of the deliverable(s) indicated in the original invoices or financial reports (as required by UNDP) and upon acceptance of these invoices or financial reports by UNDP. Such payments shall be subject to any specific conditions for reimbursement specified in the breakdown of costs contained in the Financial Proposal.

4.2.5 Payments effected by UNDP to the Contractor shall be deemed neither to relieve the Contractor of its obligations under this Contract nor as acceptance by UNDP of the Contractor's delivery of the Goods and/or performance of the Services.

5. ADVANCE PAYMENT:

5.1 If an advance payment is due to the Contractor pursuant to the Face Sheet of this Contract, the Contractor shall submit an original invoice for the amount of that advance payment upon signature of this Contract by the Parties.

5.2 If an advance payment representing 20% or more of the total contract value, or amounting to US\$30,000 or more, is to be made by UNDP upon signature of the Contract by the Parties, such payment shall be contingent upon receipt and acceptance by UNDP of a bank guarantee or a certified cheque for the full amount of the advance payment, valid for the duration of the Contract, and in a form acceptable to UNDP.

6. SUBMISSION OF INVOICES AND REPORTS:

6.1 All original invoices, financial reports and any other reports and supporting documentation required under this Contract shall be submitted by mail by the Contractor to UNDP Contact Person. Upon REV.: SEPTEMBER 2017 UNDP GENERAL TERMS AND CONDITIONS FOR CONTRACTS PAGE 4 request of the Contractor, and subject to approval by UNDP, invoices and financial reports may be submitted to UNDP by fax or email.

6.2 All reports and invoices shall be submitted by the Contractor to the UNDP Contact Person specified in the Face Sheet of this Contract.

7. TIME AND MANNER OF PAYMENT:

7.1 Invoices shall be paid within thirty (30) days of the date of their acceptance by UNDP. UNDP shall make every effort to accept an original invoice or advise the Contractor of its non-acceptance within a reasonable time from receipt.

7.2 Where the Services are to be provided, in addition to an invoice, the Contractor shall submit to UNDP a report, describing in detail the Services provided under the Contract during the period of time covered in each report.

8. RESPONSIBILITY FOR EMPLOYEES: To the extent that the Contract involves the provision of the Services to UNDP by the Contractor's officials, employees, agents, servants, subcontractors and other representatives (collectively, the Contractor's "personnel"), the following provisions shall apply:

8.1 The Contractor is responsible for and shall assume all risk and liabilities relating to its personnel and property. 8.2 The Contractor shall be responsible for the professional and technical competence of the personnel it assigns to perform work under the Contract and will select reliable and competent individuals who will be able to effectively perform the obligations under the Contract and who, while doing so, will respect the local laws and customs and conform to a high standard of moral and ethical conduct.

8.3 Such Contractor personnel shall be professionally qualified and, if required to work with officials or staff of UNDP, shall be able to do so effectively. The qualifications of any personnel whom the Contractor may assign or may propose to assign to perform any obligations under the Contract shall be substantially the same, or better, as the qualifications of any personnel originally proposed by the Contractor.

8.4 At the option of and in the sole discretion of UNDP: 8.4.1 the qualifications of personnel proposed by the Contractor (e.g., a curriculum vitae) may be reviewed by UNDP prior to such personnel's performing any obligations under the Contract; 8.4.2 any personnel proposed by the Contractor to perform obligations under the Contract may be interviewed by qualified staff or officials of UNDP prior to such personnel's performing any obligations under the Contract; and, 8.4.3 in cases in which, pursuant to Article 8.4.1 or 8.4.2, above, UNDP has reviewed the qualifications of such Contractor's personnel, UNDP may reasonably refuse to accept any such personnel.

8.5 Requirements specified in the Contract regarding the number or qualifications of the Contractor's personnel may change during the course of performance of the Contract. Any such change shall be made only following written notice of such proposed change and upon written agreement between the Parties regarding such change, subject to the following: 8.5.1 UNDP may, at any time, request, in writing, the withdrawal or replacement of any of the Contractor's personnel, and such request shall not be unreasonably refused by the Contractor. REV.: SEPTEMBER 2017 UNDP GENERAL TERMS AND CONDITIONS FOR CONTRACTS PAGE 5

8.5.2 Any of the Contractor's personnel assigned to perform obligations under the Contract shall not be withdrawn or replaced without the prior written consent of UNDP, which shall not be unreasonably withheld.

8.5.3 The withdrawal or replacement of the Contractor's personnel shall be carried out as quickly as possible and in a manner that will not adversely affect the performance of obligations under the Contract.

8.5.4 All expenses related to the withdrawal or replacement of the Contractor's personnel shall, in all cases, be borne exclusively by the Contractor.

8.5.5 Any request by UNDP for the withdrawal or replacement of the Contractor's personnel shall not be considered to be a termination, in whole or in part, of the Contract, and UNDP shall not bear any liability in respect of such withdrawn or replaced personnel.

8.5.6 If a request for the withdrawal or replacement of the Contractor's personnel is not based upon a default by or failure on the part of the Contractor to perform its obligations in accordance with the Contract, the misconduct of the personnel, or the inability of such personnel to reasonably work together with UNDP officials and staff, then the Contractor shall not be liable by reason of any such request for the withdrawal or replacement of the Contractor's personnel for any delay in the performance by the Contractor of its obligations under the Contract that is substantially the result of such personnel's being withdrawn or replaced.

8.6 Nothing in Articles 8.3, 8.4 and 8.5, above, shall be construed to create any obligations on the part of UNDP with respect to the Contractor's personnel assigned to perform work under the Contract, and such personnel shall remain the sole responsibility of the Contractor.

8.7 The Contractor shall be responsible for requiring that all personnel assigned by it to perform any obligations under the Contract and who may have access to any premises or other property of UNDP shall: 8.7.1 undergo or comply with security screening requirements made known to the Contractor by UNDP, including but not limited to, a review of any criminal history;

8.7.2 when within UNDP premises or on UNDP property, display such identification as may be approved and furnished by UNDP security officials, and that upon the withdrawal or replacement of any such personnel or upon termination or completion of the Contract, such personnel shall immediately return any such identification to UNDP for cancellation.

8.8 Within one working day after learning that any of Contractor's personnel who have access to any UNDP premises have been charged by law enforcement authorities with an offense other than a minor traffic offense, the Contractor shall provide written notice to inform UNDP about the particulars of the charges then known and shall continue to inform UNDP concerning all substantial developments regarding the disposition of such charges. 8.9 All operations of the Contractor, including without limitation, storage of equipment, materials, supplies and parts, within UNDP premises or on UNDP property shall be confined to areas authorized or approved by UNDP. The Contractor's personnel shall not enter or pass through and shall not store or dispose of any of its equipment or materials in any areas within UNDP premises or on UNDP property without appropriate authorization from UNDP.

8.10 The Contractor shall (i) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the Services are being provided; and (ii) assume all risks and liabilities related to the Contractor's security, and the full implementation of the security plan. REV.: SEPTEMBER 2017 UNDP GENERAL TERMS AND CONDITIONS FOR CONTRACTS PAGE 6

8.11 UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of this contract. Notwithstanding the foregoing, the Contractor shall remain solely responsible for the security of its personnel and for UNDP's property in its custody as set forth in paragraph 8.10 above.

9. ASSIGNMENT:

9.1 Except as provided in Article 9.2, below, the Contractor may not assign, transfer, pledge or make any other disposition of the Contract, of any part of the Contract, or of any of the rights, claims or obligations under the Contract except with the prior written authorization of UNDP. Any such unauthorized assignment, transfer, pledge or other disposition, or any attempt to do so, shall not be binding on UNDP. Except as permitted with respect to any approved subcontractors, the Contractor shall not delegate any of its obligations under this Contract, except with the prior written consent of UNDP. Any such unauthorized delegation, or attempt to do so, shall not be binding on UNDP.

9.2 The Contractor may assign or otherwise transfer the Contract to the surviving entity resulting from a reorganization of the Contractor's operations, provided that: 9.2.1 such reorganization is not the result of any bankruptcy, receivership or other similar proceedings; and, 9.2.2 such reorganization arises from a sale, merger, or acquisition of all or substantially all of the Contractor's assets or ownership interests; and, 9.2.3 the Contractor promptly notifies UNDP about such assignment or transfer at the earliest opportunity; and, 9.2.4 the assignee or transferee agrees in writing to be bound by all of the terms and conditions of the Contract, and such writing is promptly provided to UNDP following the assignment or transfer.

10. SUBCONTRACTING: In the event that the Contractor requires the services of subcontractors to perform any obligations under the Contract, the Contractor shall obtain the prior written approval of UNDP. UNDP shall be entitled, in its sole discretion, to review the qualifications of any subcontractors and to reject any proposed subcontractor that UNDP reasonably considers is not qualified to perform obligations under the Contract. UNDP shall have the right to require any subcontractor's removal from UNDP premises without having to give any justification therefor. Any such rejection or request for removal shall not, in and of itself, entitle the Contractor to claim any delays in the performance, or to assert any excuses for the non-performance, of any of its obligations under the Contract, and the Contractor shall be solely responsible for all services and obligations performed by its subcontractors. The terms of any subcontract shall be subject to, and shall be construed in a manner that is fully in accordance with, all of the terms and conditions of the Contract.

11. PURCHASE OF GOODS: To the extent that the Contract involves any purchase of the Goods, whether in whole or in part, and unless specifically stated otherwise in the Contract, the following conditions shall apply to such purchases under the Contract:

11.1 DELIVERY OF GOODS: The Contractor shall hand over or make available the Goods, and UNDP shall receive the Goods, at the place for the delivery of the Goods and within the time for delivery of the Goods specified in the Contract. The Contractor shall provide to UNDP such shipment documentation (including, without limitation, bills of lading, airway bills, and commercial invoices) as are specified in the Contract or, otherwise, as are customarily utilized in the trade. All manuals, instructions, displays and any other information relevant to the Goods shall be in the English language unless otherwise specified in the Contract. Unless otherwise stated in the Contract (including, but not limited to, in any "INCOTERM" or similar trade term), the entire risk of loss, REV.: SEPTEMBER 2017 UNDP GENERAL TERMS AND CONDITIONS FOR CONTRACTS PAGE 7 damage to, or destruction of the Goods shall be borne exclusively by the Contractor until physical delivery of the Goods to UNDP in accordance with the terms of the Contract. Delivery of the Goods shall not be deemed in itself as constituting acceptance of the Goods by UNDP.

11.2 INSPECTION OF THE GOODS: If the Contract provides that the Goods may be inspected prior to delivery, the Contractor shall notify UNDP when the Goods are ready for pre-delivery inspection. Notwithstanding any pre-delivery inspection, UNDP or its designated inspection agents may also inspect the Goods upon delivery in order to confirm that the Goods conform to applicable specifications or other requirements of the Contract. All

reasonable facilities and assistance, including, but not limited to, access to drawings and production data, shall be furnished to UNDP or its designated inspection agents at no charge therefor. Neither the carrying out of any inspections of the Goods nor any failure to undertake any such inspections shall relieve the Contractor of any of its warranties or the performance of any obligations under the Contract.

11.3 PACKAGING OF THE GOODS: The Contractor shall package the Goods for delivery in accordance with the highest standards of export packaging for the type and quantities and modes of transport of the Goods. The Goods shall be packed and marked in a proper manner in accordance with the instructions stipulated in the Contract or, otherwise, as customarily done in the trade, and in accordance with any requirements imposed by applicable law or by the transporters and manufacturers of the Goods. The packing, in particular, shall mark the Contract or Purchase Order number and any other identification information provided by UNDP as well as such other information as is necessary for the correct handling and safe delivery of the Goods. Unless otherwise specified in the Contract, the Contractor shall have no right to any return of the packing materials.

11.4 TRANSPORTATION & FREIGHT: Unless otherwise specified in the Contract (including, but not limited to, in any "INCOTERM" or similar trade term), the Contractor shall be solely liable for making all transport arrangements and for payment of freight and insurance costs for the shipment and delivery of the Goods in accordance with the requirements of the Contract. The Contractor shall ensure that UNDP receives all necessary transport documents in a timely manner so as to enable UNDP to take delivery of the Goods in accordance with the requirements of the Contract.

11.5 WARRANTIES: Unless otherwise specified in the Contract, in addition to and without limiting any other warranties, remedies or rights of UNDP stated in or arising under the Contract, the Contractor warrants and represents that:

11.5.1 The Goods, including all packaging and packing thereof, conform to the technical specifications, are fit for the purposes for which such Goods are ordinarily used and for any purposes expressly made known in writing in the Contract, and shall be of even quality, free from faults and defects in design, material, manufacturer and workmanship;

11.5.2 If the Contractor is not the original manufacturer of the Goods, the Contractor shall provide UNDP with the benefit of all manufacturers' warranties in addition to any other warranties required to be provided under the Contract;

11.5.3 The Goods are of the quality, quantity and description required by the Contract, including when subjected to conditions prevailing in the place of final destination;

11.5.4 The Goods are free from any right of claim by any third-party, including claims of infringement of any intellectual property rights, including, but not limited to, patents, copyright and trade secrets;

11.5.5 The Goods are new and unused;

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11.5.6 All warranties will remain fully valid following any delivery of the Goods and for a period of not less than one (1) year following acceptance of the Goods by UNDP in accordance with the Contract;

11.5.7 During any period in which the Contractor's warranties are effective, upon notice by UNDP that the Goods do not conform to the requirements of the Contract, the Contractor shall promptly and at its own expense correct such non-conformities or, in case of its inability to do so, replace the defective Goods with Goods of the same or better quality or, at its own cost, remove the defective Goods and fully reimburse UNDP for the purchase price paid for the defective Goods; and,

11.5.8 The Contractor shall remain responsive to the needs of UNDP for any services that may be required in connection with any of the Contractor's warranties under the Contract.

11.6 ACCEPTANCE OF GOODS: Under no circumstances shall UNDP be required to accept any Goods that do not conform to the specifications or requirements of the Contract. UNDP may condition its acceptance of the Goods upon the successful completion of acceptance tests as may be specified in the Contract or otherwise agreed in writing by the Parties. In no case shall UNDP be obligated to accept any Goods unless and until UNDP has had a reasonable opportunity to inspect the Goods following delivery. If the Contract specifies that UNDP shall provide a written acceptance of the Goods, the Goods shall not be deemed accepted unless and until UNDP in fact provides such written acceptance. In no case shall payment by UNDP in and of itself constitute acceptance of the Goods.

11.7 REJECTION OF GOODS: Notwithstanding any other rights of, or remedies available to UNDP under the Contract, in case any of the Goods are defective or otherwise do not conform to the specifications or other requirements of the Contract, UNDP, at its sole option, may reject or refuse to accept the Goods, and within thirty (30) days following receipt of notice from UNDP of such rejection or refusal to accept the Goods, the Contractor shall, in sole option of UNDP:

11.7.1 provide a full refund upon return of the Goods, or a partial refund upon a return of a portion of the Goods, by UNDP; or,

11.7.2 repair the Goods in a manner that would enable the Goods to conform to the specifications or other requirements of the Contract; or,

11.7.3 replace the Goods with Goods of equal or better quality; and,

11.7.4 pay all costs relating to the repair or return of the defective Goods as well as the costs relating to the storage of any such defective Goods and for the delivery of any replacement Goods to UNDP.

11.8 In the event that UNDP elects to return any of the Goods for the reasons specified in Article 11.7, above, UNDP may procure the Goods from another source. In addition to any other rights or remedies available to UNDP under the Contract, including, but not limited to, the right to terminate the Contract, the Contractor shall be

liable for any additional cost beyond the balance of the Contract price resulting from any such procurement, including, inter alia, the costs of engaging in such procurement, and UNDP shall be entitled to compensation from the Contractor for any reasonable expenses incurred for preserving and storing the Goods for the Contractor's account.

11.9 TITLE: The Contractor warrants and represents that the Goods delivered under the Contract are unencumbered by any third party's title or other property rights, including, but not limited to, any liens or security interests. Unless otherwise expressly provided in the Contract, title in and to the Goods shall pass from the Contractor to UNDP upon delivery of the Goods and their acceptance by UNDP in accordance with the requirements of the Contract. REV.: SEPTEMBER 2017 UNDP GENERAL TERMS AND CONDITIONS FOR CONTRACTS PAGE 9

11.10 EXPORT LICENSING: The Contractor shall be responsible for obtaining any export license required with respect to the Goods, products, or technologies, including software, sold, delivered, licensed or otherwise provided to UNDP under the Contract. The Contractor shall procure any such export license in an expeditious manner. Subject to and without any waiver of the privileges and immunities of UNDP, UNDP shall lend the Contractor all reasonable assistance required for obtaining any such export license. Should any Governmental entity refuse, delay or hinder the Contractor's ability to obtain any such export license, the Contractor shall promptly consult with UNDP to enable UNDP to take appropriate measures to resolve the matter.

12. INDEMNIFICATION: 12.1 The Contractor shall indemnify, defend, and hold and save harmless, UNDP, and its officials, agents and employees, from and against all suits, proceedings, claims, demands, losses and liability of any kind or nature brought by any third party against UNDP, including, but not limited to, all litigation costs and expenses, attorney's fees, settlement payments and damages, based on, arising from, or relating to: 12.1.1 allegations or claims that the possession of or use by UNDP of any patented device, any copyrighted material, or any other goods, property or services provided or licensed to UNDP under the terms of the Contract, in whole or in part, separately or in a combination contemplated by the Contractor's published specifications therefor, or otherwise specifically approved by the Contractor, constitutes an infringement of any patent, copyright, trademark, or other intellectual property right of any third party; or, 12.1.2

any acts or omissions of the Contractor, or of any subcontractor or anyone directly or indirectly employed by them in the performance of the Contract, which give rise to legal liability to anyone not a party to the Contract, including, without limitation, claims and liability in the nature of a claim for workers' compensation. 12.2 The indemnity set forth in Article 12.1.1, above, shall not apply to: 12.2.1 A claim of infringement resulting from the Contractor's compliance with specific written instructions by UNDP directing a change in the specifications for the goods, property, materials, equipment or supplies to be or used, or directing a manner of performance of the Contract or requiring the use of specifications not normally used by the Contractor; or 12.2.2 A claim of infringement resulting from additions to or changes in any goods, property, materials equipment, supplies or any components thereof furnished under the Contract if UNDP or another party acting under the direction of UNDP made such changes. 12.3

In addition to the indemnity obligations set forth in this Article 12, the Contractor shall be obligated, at its sole expense, to defend UNDP and its officials, agents and employees, pursuant to this Article 12, regardless of whether the suits, proceedings, claims and demands in question actually give rise to or otherwise result in any loss or liability.

12.4 UNDP shall advise the Contractor about any such suits, proceedings, claims, demands, losses or liability within a reasonable period of time after having received actual notice thereof. The Contractor shall have sole control of the defense of any such suit, proceeding, claim or demand and of all negotiations in connection with the settlement or compromise thereof, except with respect to the assertion or defense of the privileges and immunities of UNDP or any matter relating thereto, for which only UNDP itself is authorized to assert and maintain. UNDP shall have the right, at its own expense, to be represented in any such suit, proceeding, claim or demand by independent counsel of its own choosing. REV.: SEPTEMBER 2017 UNDP GENERAL TERMS AND CONDITIONS FOR CONTRACTS

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12.5 In the event the use by UNDP of any Goods, property or Services provided or licensed to UNDP by the Contractor, in whole or in part, in any suit or proceeding, is for any reason enjoined, temporarily or permanently, or is found to infringe any patent, copyright, trademark or other intellectual property right, or in the event of a settlement, is enjoined, limited or otherwise interfered with, then the Contractor, at its sole cost and expense, shall, promptly, either: 12.5.1 procure for UNDP the unrestricted right to continue using such Goods or Services provided to UNDP; 12.5.2 replace or modify the Goods and/or Services provided to UNDP, or part thereof, with the equivalent or better Goods and/or Services, or part thereof, that is non-infringing; or, 12.5.3 refund to UNDP the full price paid by UNDP for the right to have or use such Goods, property or Services, or part thereof. 13. INSURANCE AND LIABILITY: 13.1 The Contractor shall pay UNDP promptly for all loss, destruction, or damage to the property of UNDP caused by the Contractor's personnel or by any of its subcontractors or anyone else directly or indirectly employed by the Contractor or any of its subcontractors in the performance of the Contract. 13.2 Unless otherwise

provided in the Contract, prior to commencement of performance of any other obligations under the Contract, and subject to any limits set forth in the Contract, the Contractor shall take out and shall maintain for the entire term of the Contract, for any extension thereof, and for a period following any termination of the Contract reasonably adequate to deal with losses: 13.2.1 insurance against all risks in respect of its property and any equipment used for the performance of the Contract; 13.2.2 workers' compensation insurance, or its equivalent, or employer's liability insurance, or its equivalent, with respect to the Contractor's personnel sufficient to cover all claims for injury, death and disability, or any other benefits required to be paid by law, in connection with the performance of the Contract; 13.2.3 liability insurance in an adequate amount to cover all claims, including, but not limited to, claims for death and bodily injury, products and completed operations liability, loss of or damage to property, and personal and advertising injury, arising from or in connection with the Contractor's performance under the Contract, including, but not limited to, liability arising out of or in connection with the acts or omissions of the Contractor, its personnel, agents, or invitees, or the use, during the performance of the Contract, of any vehicles, boats, airplanes or other transportation vehicles and equipment, whether or not owned by the Contractor; and, 13.2.4 such other insurance as may be agreed upon in writing between UNDP and the Contractor. 13.3 The Contractor's liability policies shall also cover subcontractors and all defense costs and shall contain a standard "cross liability" clause. 13.4 The Contractor acknowledges and agrees that UNDP accepts no responsibility for providing life, health, accident, travel or any other insurance coverage which may be necessary or desirable in respect of any personnel performing services for the Contractor in connection with the Contract. 13.5 Except for the workers' compensation insurance or any self-insurance program maintained by the Contractor and approved by UNDP, in its sole discretion, for purposes of fulfilling the Contractor's requirements for providing insurance under the Contract, the insurance policies required under the Contract shall: REV.: SEPTEMBER 2017 UNDP GENERAL TERMS AND CONDITIONS FOR CONTRACTS PAGE 11 13.5.1 name UNDP as an additional insured under the liability policies, including, if required, as a separate endorsement under the policy; 13.5.2 include a waiver of subrogation of the Contractor's insurance carrier's rights against UNDP; 13.5.3 provide that UNDP shall receive written notice from the Contractor's insurance carrier not less than thirty (30) days prior to any cancellation or material change of coverage; and, 13.5.4 include a provision for response on a primary and non-contributing basis with respect to any other insurance that may be available to UNDP. 13.6 The Contractor shall be responsible to fund all amounts within any policy deductible or retention. 13.7 Except for any self-insurance program maintained by the Contractor and approved by UNDP for purposes of fulfilling the Contractor's requirements for maintaining insurance under the Contract, the Contractor shall maintain the insurance taken out under the Contract with reputable insurers that are in good financial standing and that are acceptable to UNDP. Prior to the commencement of any obligations under the Contract, the Contractor shall provide UNDP with evidence, in the form of certificate of insurance or such other form as UNDP may reasonably require, that demonstrates that the Contractor has taken out insurance in accordance with the requirements of the Contract. UNDP reserves the right, upon written notice to the Contractor, to obtain copies of any insurance policies or insurance program descriptions required to be maintained by the Contractor under the Contract. Notwithstanding the provisions of Article 13.5.3, above, the Contractor shall promptly notify UNDP concerning any cancellation or material change of insurance coverage required under the Contract. 13.8 The Contractor acknowledges and agrees that neither the requirement for taking out and maintaining insurance as set forth in the Contract nor the amount of any such insurance, including, but not limited to, any deductible or retention relating thereto, shall in any way be construed as limiting the Contractor's liability arising under or relating to the Contract. 14. ENCUMBRANCES AND LIENS: The Contractor shall not cause or permit any lien, attachment or other encumbrance by any person to be placed on file or to remain on file in any public office or on file with UNDP against any monies due to the Contractor or that may become due for any work done or against any goods supplied or materials furnished under the Contract, or by reason of any other claim or demand against the Contractor or UNDP. 15. EQUIPMENT FURNISHED BY UNDP TO THE CONTRACTOR: Title to any equipment and supplies that may be furnished by UNDP to the Contractor for the performance of any obligations under the Contract shall rest with UNDP, and any such equipment shall be returned to UNDP at the conclusion of the Contract or when no longer needed by the Contractor. Such equipment, when returned to UNDP, shall be in the same condition as when delivered to the Contractor, subject to normal wear and tear, and the Contractor shall be liable to compensate UNDP for the actual costs of any loss of, damage to, or degradation of the equipment that is beyond normal wear and tear. 16. COPYRIGHT, PATENTS AND OTHER PROPRIETARY RIGHTS: 16.1 Except as is otherwise expressly provided in writing in the Contract, UNDP shall be entitled to all intellectual property and other proprietary rights including, but not limited to, patents, copyrights, and trademarks, with regard to products, processes, inventions, ideas, know-how, or documents and other materials which the Contractor has developed for UNDP under the Contract and which bear a direct relation to or are produced or prepared or collected in consequence of, or during the course of, the performance of the Contract. The Contractor acknowledges and agrees that such products, documents and other materials constitute works made for hire for UNDP. REV.: SEPTEMBER 2017 UNDP GENERAL TERMS AND CONDITIONS FOR CONTRACTS PAGE 12 16.2 To the extent that any such intellectual property or other proprietary rights consist of any intellectual property or other proprietary rights of the Contractor: (i) that

pre-existed the performance by the Contractor of its obligations under the Contract, or (ii) that the Contractor may develop or acquire, or may have developed or acquired, independently of the performance of its obligations under the Contract, UNDP does not and shall not claim any ownership interest thereto, and the Contractor grants to UNDP a perpetual license to use such intellectual property or other proprietary right solely for the purposes of and in accordance with the requirements of the Contract. 16.3 At the request of UNDP, the Contractor shall take all necessary steps, execute all necessary documents and generally assist in securing such proprietary rights and transferring or licensing them to UNDP in compliance with the requirements of the applicable law and of the Contract. 16.4 Subject to the foregoing provisions, all maps, drawings, photographs, mosaics, plans, reports, estimates, recommendations, documents, and all other data compiled by or received by the Contractor under the Contract shall be the property of UNDP, shall be made available for use or inspection by UNDP at reasonable times and in reasonable places, shall be treated as confidential, and shall be delivered only to UNDP authorized officials on completion of work under the Contract. 17. PUBLICITY, AND USE OF THE NAME, EMBLEM OR OFFICIAL SEAL OF UNDP OR THE UNITED NATIONS: The Contractor shall not advertise or otherwise make public for purposes of commercial advantage or goodwill that it has a contractual relationship with UNDP, nor shall the Contractor, in any manner whatsoever use the name, emblem or official seal of UNDP or the United Nations, or any abbreviation of the name of UNDP or the United Nations in connection with its business or otherwise without the written permission of UNDP. 18. CONFIDENTIAL NATURE OF DOCUMENTS AND INFORMATION: Information and data that is considered proprietary by either Party or that is delivered or disclosed by one Party ("Discloser") to the other Party ("Recipient") during the course of performance of the Contract, and that is designated as confidential ("Information"), shall be held in confidence by that Party and shall be handled as follows: 18.1 The Recipient shall: 18.1.1 use the same care and discretion to avoid disclosure, publication or dissemination of the Discloser's Information as it uses with its own similar Information that it does not wish to disclose, publish or disseminate; and, 18.1.2 use the Discloser's Information solely for the purpose for which it was disclosed. 18.2 Provided that the Recipient has a written agreement with the following persons or entities requiring them to treat the Information confidential in accordance with the Contract and this Article 18, the Recipient may disclose Information to: 18.2.1 any other party with the Discloser's prior written consent; and, 18.2.2 the Recipient's employees, officials, representatives and agents who have a need to know such Information for purposes of performing obligations under the Contract, and employees officials, representatives and agents of any legal entity that it controls, controls it, or with which it is under common control, who have a need to know such Information for purposes of performing obligations under the Contract, provided that, for these purposes a controlled legal entity means: 18.2.2.1 a corporate entity in which the Party owns or otherwise controls, whether directly or indirectly, over fifty percent (50%) of voting shares thereof; or, 18.2.2.2 any entity over which the Party exercises effective managerial control; or, REV.: SEPTEMBER 2017 UNDP GENERAL TERMS AND CONDITIONS FOR CONTRACTS PAGE 13 18.2.2.3 for the United Nations, a principal or subsidiary organ of the United Nations established in accordance with the Charter of the United Nations. 18.3 The Contractor may disclose Information to the extent required by law, provided that, subject to and without any waiver of the privileges and immunities of the United Nations, the Contractor will give UNDP sufficient prior notice of a request for the disclosure of Information in order to allow UNDP to have a reasonable opportunity to take protective measures or such other action as may be appropriate before any such disclosure is made. 18.4 UNDP may disclose Information to the extent as required pursuant to the Charter of the United Nations, or pursuant to resolutions or regulations of the General Assembly or rules promulgated thereunder. 18.5 The Recipient shall not be precluded from disclosing Information that is obtained by the Recipient from a third party without restriction, is disclosed by the Discloser to a third party without any obligation of confidentiality, is previously known by the Recipient, or at any time is developed by the Recipient completely independently of any disclosures hereunder. 18.6 These obligations and restrictions of confidentiality shall be effective during the term of the Contract, including any extension thereof, and, unless otherwise provided in the Contract, shall remain effective following any termination of the Contract. 19. FORCE MAJEURE; OTHER CHANGES IN CONDITIONS: 19.1 In the event of and as soon as possible after the occurrence of any cause constituting force majeure, the affected Party shall give notice and full particulars in writing to the other Party, of such occurrence or cause if the affected Party is thereby rendered unable, wholly or in part, to perform its obligations and meet its responsibilities under the Contract. The affected Party shall also notify the other Party of any other changes in condition or the occurrence of any event which interferes or threatens to interfere with its performance of the Contract. Not more than fifteen (15) days following the provision of such notice of force majeure or other changes in condition or occurrence, the affected Party shall also submit a statement to the other Party of estimated expenditures that will likely be incurred for the duration of the change in condition or the event of force majeure. On receipt of the notice or notices required hereunder, the Party not affected by the occurrence of a cause constituting force majeure shall take such action as it reasonably considers to be appropriate or necessary in the circumstances, including the granting to the affected Party of a reasonable extension of time in which to perform any obligations under the Contract. 19.2 If the Contractor is rendered unable, wholly or in part, by reason of force majeure to perform its obligations and meet its responsibilities under the Contract, UNDP shall have the right to suspend or terminate the

Contract on the same terms and conditions as are provided for in Article 20, "Termination," except that the period of notice shall be seven (7) days instead of thirty (30) days. In any case, UNDP shall be entitled to consider the Contractor permanently unable to perform its obligations under the Contract in case the Contractor is unable to perform its obligations, wholly or in part, by reason of force majeure for any period in excess of ninety (90) days.

19.3 Force majeure as used herein means any unforeseeable and irresistible act of nature, any act of war (whether declared or not), invasion, revolution, insurrection, terrorism, or any other acts of a similar nature or force, provided that such acts arise from causes beyond the control and without the fault or negligence of the Contractor. The Contractor acknowledges and agrees that, with respect to any obligations under the Contract that the Contractor must perform in areas in which UNDP is engaged in, preparing to engage in, or disengaging from any peacekeeping, humanitarian or similar operations, any delays or failure to perform such obligations arising from or relating to harsh REV.: SEPTEMBER 2017 UNDP GENERAL TERMS AND CONDITIONS FOR CONTRACTS PAGE 14 conditions within such areas, or to any incidents of civil unrest occurring in such areas, shall not, in and of itself, constitute force majeure under the Contract.

20. TERMINATION: 20.1 Either Party may terminate the Contract for cause, in whole or in part, upon thirty (30) day's notice, in writing, to the other Party. The initiation of conciliation or a arbitral proceedings in accordance with Article 23 "Settlement of Disputes," below, shall not be deemed to be a "cause" for or otherwise to be in itself a termination of the Contract. 20.2 UNDP may terminate the Contract at any time by providing written notice to the Contractor in any case in which the mandate of UNDP applicable to the performance of the Contract or the funding of UNDP applicable to the Contract is curtailed or terminated, whether in whole or in part. In addition, unless otherwise provided by the Contract, upon sixty (60) day's advance written notice to the Contractor, UNDP may terminate the Contract without having to provide any justification therefor. 20.3 In the event of any termination of the Contract, upon receipt of notice of termination that has been issued by UNDP, the Contractor shall, except as may be directed by UNDP in the notice of termination or otherwise in writing: 20.3.1 take immediate steps to bring the performance of any obligations under the Contract to a close in a prompt and orderly manner, and in doing so, reduce expenses to a minimum; 20.3.2 refrain from undertaking any further or additional commitments under the Contract as of and following the date of receipt of such notice; 20.3.3 place no further subcontracts or orders for materials, services, or facilities, except as UNDP and the Contractor agree in writing are necessary to complete any portion of the Contract that is not terminated; 20.3.4 terminate all subcontracts or orders to the extent they relate to the portion of the Contract terminated; 20.3.5 transfer title and deliver to UNDP the fabricated or unfabricated parts, work in process, completed work, supplies, and other material produced or acquired for the portion of the Contract terminated; 20.3.6 deliver all completed or partially completed plans, drawings, information, and other property that, if the Contract had been completed, would be required to be furnished to UNDP thereunder; 20.3.7 complete performance of the work not terminated; and, 20.3.8 take any other action that may be necessary, or that UNDP may direct in writing, for the minimization of losses and for the protection and preservation of any property, whether tangible or intangible, related to the Contract that is in the possession of the Contractor and in which UNDP has or may be reasonably expected to acquire an interest. 20.4 In the event of any termination of the Contract, UNDP shall be entitled to obtain reasonable written accountings from the Contractor concerning all obligations performed or pending in accordance with the Contract. In addition, UNDP shall not be liable to pay the Contractor except for those Goods satisfactorily delivered and/or Services satisfactorily provided to UNDP in accordance with the requirements of the Contract, but only if such Goods or Services were ordered, requested or otherwise provided prior to the Contractor's receipt of notice of termination from UNDP or prior to the Contractor's tendering of notice of termination to UNDP. REV.: SEPTEMBER 2017 UNDP GENERAL TERMS AND CONDITIONS FOR CONTRACTS PAGE 15 20.5 UNDP may, without prejudice to any other right or remedy available to it, terminate the Contract forthwith in the event that: 20.5.1 the Contractor is adjudged bankrupt, or is liquidated, or becomes insolvent, or applies for a moratorium or stay on any payment or repayment obligations, or applies to be declared insolvent; 20.5.2 the Contractor is granted a moratorium or a stay, or is declared insolvent; 20.5.3 the Contractor makes an assignment for the benefit of one or more of its creditors; 20.5.4 a Receiver is appointed on account of the insolvency of the Contractor; 20.5.5 the Contractor offers a settlement in lieu of bankruptcy or receivership; or, 20.5.6 UNDP reasonably determines that the Contractor has become subject to a materially adverse change in its financial condition that threatens to substantially affect the ability of the Contractor to perform any of its obligations under the Contract. 20.6 Except as prohibited by law, the Contractor shall be bound to compensate UNDP for all damages and costs, including, but not limited to, all costs incurred by UNDP in any legal or non-legal proceedings, as a result of any of the events specified in Article 20.5, above, and resulting from or relating to a termination of the Contract, even if the Contractor is adjudged bankrupt, or is granted a moratorium or stay or is declared insolvent. The Contractor shall immediately inform UNDP of the occurrence of any of the events specified in Article 20.5, above, and shall provide UNDP with any information pertinent thereto. 20.7 The provisions of this Article 20 are without prejudice to any other rights or remedies of UNDP under the Contract or otherwise. 21. NON-WAIVER OF RIGHTS: The failure by either Party to exercise any rights available to it, whether under the Contract or otherwise, shall not be deemed for any purposes to constitute a waiver by the other Party of any such right or any remedy associated therewith, and shall not relieve the Parties of any of their

obligations under the Contract. 22. NON-EXCLUSIVITY: Unless otherwise specified in the Contract, UNDP shall have no obligation to purchase any minimum quantities of goods or services from the Contractor, and UNDP shall have no limitation on its right to obtain goods or services of the same kind, quality and quantity described in the Contract, from any other source at any time. 23. SETTLEMENT OF DISPUTES: 23.1 AMICABLE SETTLEMENT: The Parties shall use their best efforts to amicably settle any dispute, controversy, or claim arising out of the Contract or the breach, termination, or invalidity thereof. Where the Parties wish to seek such an amicable settlement through conciliation, the conciliation shall take place in accordance with the Conciliation Rules then obtaining of the United Nations Commission on International Trade Law ("UNCITRAL"), or according to such other procedure as may be agreed between the Parties in writing. 23.2 ARBITRATION: Any dispute, controversy, or claim between the Parties arising out of the Contract or the breach, termination, or invalidity thereof, unless settled amicably under Article 23.1, above, within sixty (60) days after receipt by one Party of the other Party's written request for such amicable settlement, shall be referred by either Party to arbitration in accordance with the UNCITRAL Arbitration Rules then obtaining. The decisions of the arbitral tribunal shall be based on general principles of international commercial law. The arbitral tribunal shall be empowered to order the return or destruction of goods or any property, whether tangible or intangible, or of any confidential information provided under the Contract, order the termination of the Contract, or order that any other protective measures be taken with respect to the goods, services or any other property, REV.: SEPTEMBER 2017 UNDP GENERAL TERMS AND CONDITIONS FOR CONTRACTS PAGE 16 whether tangible or intangible, or of any confidential information provided under the Contract, as appropriate, all in accordance with the authority of the arbitral tribunal pursuant to Article 26 ("Interim measures") and Article 34 ("Form and effect of the award") of the UNCITRAL Arbitration Rules. The arbitral tribunal shall have no authority to award punitive damages. In addition, unless otherwise expressly provided in the Contract, the arbitral tribunal shall have no authority to award interest in excess of the London Inter-Bank Offered Rate ("LIBOR") then prevailing, and any such interest shall be simple interest only. The Parties shall be bound by any arbitration award rendered as a result of such arbitration as the final adjudication of any such dispute, controversy, or claim. 24. PRIVILEGES AND IMMUNITIES: Nothing in or relating to the Contract shall be deemed a waiver, express or implied, of any of the privileges and immunities of the United Nations, including its subsidiary organs. 25. TAX EXEMPTION: 25.1 Article II, Section 7, of the Convention on the Privileges and Immunities of the United Nations provides, inter alia, that the United Nations, including its subsidiary organs, is exempt from all direct taxes, except charges for public utility services, and is exempt from customs restrictions, duties, and charges of a similar nature in respect of articles imported or exported for its official use. In the event any governmental authority refuses to recognize the exemptions of UNDP from such taxes, restrictions, duties, or charges, the Contractor shall immediately consult with UNDP to determine a mutually acceptable procedure. 25.2 The Contractor authorizes UNDP to deduct from the Contractor's invoices any amount representing such taxes, duties or charges, unless the Contractor has consulted with UNDP before the payment thereof and UNDP has, in each instance, specifically authorized the Contractor to pay such taxes, duties, or charges under written protest. In that event, the Contractor shall provide UNDP with written evidence that payment of such taxes, duties or charges has been made and appropriately authorized, and UNDP shall reimburse the Contractor for any such taxes, duties, or charges so authorized by UNDP and paid by the Contractor under written protest. 26. MODIFICATIONS: 26.1 No modification or change in this Contract shall be valid and enforceable against UNDP unless executed in writing by the duly authorized representatives of the Parties. 26.2 If the Contract shall be extended for additional periods in accordance with the terms and conditions of the Contract, the terms and conditions applicable to any such extended term of the Contract shall be the same terms and conditions as set forth in the Contract, unless the Parties shall have agreed otherwise pursuant to a valid amendment concluded in accordance with Article 26.1, above. 26.3 The terms or conditions of any supplemental undertakings, licenses, or other forms of agreement concerning any Goods or Services provided under the Contract shall not be valid and enforceable against UNDP nor in any way shall constitute an agreement by UNDP thereto unless any such undertakings, licenses or other forms are the subject of a valid amendment concluded in accordance with Article 26.1, above. 27. AUDITS AND INVESTIGATIONS: 27.1 Each invoice paid by UNDP shall be subject to a post-payment audit by auditors, whether internal or external, of UNDP or by other authorized and qualified agents of UNDP at any time during the term of the Contract and for a period of three (3) years following the expiration or prior termination of the Contract. REV.: SEPTEMBER 2017 UNDP GENERAL TERMS AND CONDITIONS FOR CONTRACTS PAGE 17 27.2 UNDP may conduct investigations relating to any aspect of the Contract or the award thereof, the obligations performed under the Contract, and the operations of the Contractor generally relating to performance of the Contract at any time during the term of the Contract and for a period of three (3) years following the expiration or prior termination of the Contract. 27.3 The Contractor shall provide its full and timely cooperation with any such inspections, post-payment audits or investigations. Such cooperation shall include, but shall not be limited to, the Contractor's obligation to make available its personnel and any relevant documentation for such purposes at reasonable times and on reasonable conditions and to grant to UNDP access to the Contractor's premises at reasonable times and on reasonable conditions in connection with such access to the Contractor's personnel and relevant documentation. The

Contractor shall require its agents, including, but not limited to, the Contractor's attorneys, accountants or other advisers, to reasonably cooperate with any inspections, post-payment audits or investigations carried out by UNDP hereunder. 27.4 UNDP shall be entitled to a refund from the Contractor for any amounts shown by such audits or investigations to have been paid by UNDP other than in accordance with the terms and conditions of the Contract. The Contractor also agrees that, where applicable, donors to UNDP whose funding is the source of, in whole or in part, the funding for the procurement of Goods and/or Services which are the subject of this Contract, shall have direct recourse to the Contractor for the recovery of any funds determined by UNDP to have been used in violation of or inconsistent with this Contract. 28. LIMITATION ON ACTIONS: 28.1 Except with respect to any indemnification obligations in Article 12, above, or as are otherwise set forth in the Contract, any arbitral proceedings in accordance with Article 23.2, above, arising out of the Contract must be commenced within three years after the cause of action has accrued. 28.2 The Parties further acknowledge and agree that, for these purposes, a cause of action shall accrue when the breach actually occurs, or, in the case of latent defects, when the injured Party knew or should have known all of the essential elements of the cause of action, or in the case of a breach of warranty, when tender of delivery is made, except that, if a warranty extends to future performance of the goods or any process or system and the discovery of the breach consequently must await the time when such goods or other process or system is ready to perform in accordance with the requirements of the Contract, the cause of action accrues when such time of future performance actually begins. 29. ESSENTIAL TERMS: The Contractor acknowledges and agrees that each of the provisions in Articles 30 to 36 hereof constitutes an essential term of the Contract and that any breach of any of these provisions shall entitle UNDP to terminate the Contract or any other contract with UNDP immediately upon notice to the Contractor, without any liability for termination charges or any other liability of any kind. In addition, nothing herein shall limit the right of UNDP to refer any alleged breach of the said essential terms to the relevant national authorities for appropriate legal action. 30. SOURCE OF INSTRUCTIONS: The Contractor shall neither seek nor accept instructions from any authority external to UNDP in connection with the performance of its obligations under the Contract. Should any authority external to UNDP seek to impose any instructions concerning or restrictions on the Contractor's performance under the Contract, the Contractor shall promptly notify UNDP and provide all reasonable assistance required by UNDP. The Contractor shall not take any action in respect of the performance of its obligations under the Contract that may adversely affect the interests of UNDP or the United Nations, and the Contractor shall perform its obligations under the Contract with the fullest regard to the interests of UNDP. REV.: SEPTEMBER 2017 UNDP GENERAL TERMS AND CONDITIONS FOR CONTRACTS PAGE 18 31. STANDARDS OF CONDUCT: The Contractor warrants that it has not and shall not offer any direct or indirect benefit arising from or related to the performance of the Contract, or the award thereof, to any representative, official, employee or other agent of UNDP. The Contractor shall comply with all laws, ordinances, rules and regulations bearing upon the performance of its obligations under the Contract. In addition, in the performance of the Contract, the Contractor shall comply with the Standards of Conduct set forth in the Secretary General's Bulletin ST/SGB/2002/9 of 18 June 2002, entitled "Regulations Governing the Status, Basic Rights and Duties of Officials other than Secretariat Officials, and Expert on Mission" and ST/SGB/2006/15 of 26 December 2006 on "Post-employment restrictions", and shall also comply with and be subject to the requirements of the following documents then in force at the time of signature of the Contract: 31.1 The UN Supplier Code of Conduct; 31.2 UNDP Policy on Fraud and other Corrupt Practices ("UNDP Anti-fraud Policy"); 31.3 UNDP Office of Audit and Investigations (OAI) Investigation Guidelines; 31.4 UNDP Social and Environmental Standards (SES), including the related Accountability Mechanism; 31.5 UNDP Vendor Sanctions Policy; and 31.6 All security directives issued by UNDP. The Contractor acknowledges and agrees that it has read and is familiar with the requirements of the foregoing documents which are available online at www.undp.org or at <http://www.undp.org/content/undp/en/home/operations/procurement/business/>. In making such acknowledgement, the Contractor represents and warrants that it is in compliance with the requirements of the foregoing, and will remain in compliance throughout the term of this Contract. 32. OBSERVANCE OF THE LAW: The Contractor shall comply with all laws, ordinances, rules, and regulations bearing upon the performance of its obligations under the Contract. In addition, the Contractor shall maintain compliance with all obligations relating to its registration as a qualified vendor of goods or services to UNDP, as such obligations are set forth in UNDP vendor registration procedures. 33. CHILD LABOR: The Contractor represents and warrants that neither it, its parent entities (if any), nor any of the Contractor's subsidiary or affiliated entities (if any) is engaged in any practice inconsistent with the rights set forth in the Convention on the Rights of the Child, including Article 32 thereof, which, inter alia, requires that a child shall be protected from performing any work that is likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral, or social development. 34. MINES: The Contractor represents and warrants that neither it, its parent entities (if any), nor any of the Contractor's subsidiaries or affiliated entities (if any) is engaged in the sale or manufacture of anti-personnel mines or components utilized in the manufacture of anti-personnel mines. 35. SEXUAL EXPLOITATION: 35.1 In the performance of the Contract, the Contractor shall comply with the Standards of Conduct set forth in the Secretary-General's bulletin ST/SGB/2003/13 of 9 October 2003, concerning "Special measures for protection from

sexual exploitation and sexual abuse." In particular, the Contractor shall not engage in any conduct that would constitute sexual exploitation or sexual abuse, as defined in that bulletin. 35.2 The Contractor shall take all appropriate measures to prevent sexual exploitation or abuse of anyone by its employees or any other persons engaged and controlled by the Contractor to perform any services under the Contract. For these purposes, sexual activity with any person less than eighteen years of age, regardless of any laws relating to consent, shall constitute the sexual exploitation and abuse of such person. In addition, the Contractor shall refrain from, and shall take all reasonable and appropriate measures to prohibit its employees or other persons engaged and controlled by it from exchanging any money, goods, services, or other things of value, for sexual favors or activities, or from engaging any sexual activities that are exploitive or degrading to any person. 35.3 UNDP shall not apply the foregoing standard relating to age in any case in which the Contractor's personnel or any other person who may be engaged by the Contractor to perform any services under the Contract is married to the person less than the age of eighteen years with whom sexual activity has occurred and in which such marriage is recognized as valid under the laws of the country of citizenship of such Contractor's personnel or such other person who may be engaged by the Contractor to perform any services under the Contract. 36. ANTI-TERRORISM: The Contractor agrees to undertake all reasonable efforts to ensure that none of the UNDP funds received under the Contract is used to provide support to individuals or entities associated with terrorism and that recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to Resolution 1267 (1999). The list can be accessed via https://www.un.org/sc/suborg/en/sanctions/1267/aq_sanctions_list. This provision must be included in all sub-contracts or sub-agreements entered into under the Contract.

Annex 4

TERMS OF REFERENCE

Preparation of Design of Flood-Prevention Measures for Lagodekhi (River Lagodekhiskhevi), Pirveli Maisi (River Tskhenistskali) and Kobuleti (River Achkva)

Projects:	Scaling-up Multi-Hazard Early Warning System and the Use of Climate Information in Georgia
Proposal Title:	Preparation of Design of Flood-Prevention Measures for Lagodekhi (River Lagodekhiskhevi), Pirveli Maisi (River Tskhenistskali) and Kobuleti (River Achkva)
Expected Starting Date:	March 20, 2020
Duration of Contract:	5 Months.

1. BACKGROUND

In early 2019, The United Nations Development Program (UNDP), with the financial support of the Green Climate Fund (GCF) has launched a 7-year project for Georgia entitled: ***Scaling-up Multi-Hazard Early Warning System and the Use of Climate Information in Georgia*** (hereafter GCF project). The project is implemented jointly with the Ministry of Environmental Protection and Agriculture (MEPA) playing an executing entity's/implementing partner's role for it.

An overall objective of the project is to reduce exposure of Georgia's communities, livelihoods and infrastructure to climate-induced natural hazards through a well-functioning nation-wide multi-hazard early warning system and risk-informed local action. The project will catalyse a paradigm shift in the national climate risk management, climate-proofed disaster risk reduction and early warning approaches. The project innovation and transformative change will also include (a) participatory "Last Mile" communication solutions tailored to the needs of local communities, including CBEWSs; (b) increasing implementation capacities for carrying out cost-effective risk reduction and community resilience measures through such innovative approaches as watershed/floodplain restoration, agroforestry, etc., and combination of structural and non-structural protection measures aimed at reducing exposure and increasing effectiveness of the early warning; (c) combining best available science and local knowledge for vulnerability assessment, hazard and risk mapping, disaster modelling and forecasting etc.

Under the activity 3.3, the project aims at the implementation of priority risk reduction interventions that would significantly reduce the risks against which the Multi-Hazard Early Warning Systems (MHEWS) will operate. For achieving this goal, the project will implement 13 site-specific prioritized risk reduction interventions (structural measures) for areas where risk from climate-induced natural hazards is the highest. Part of these measures will be financed by Ministry of Regional Development and Infrastructure (MRDI) as part of the co-financing agreement and others will be funded by UNDP through GCF project.

Based on the outcomes of the preliminary cost-benefit analysis, the short-listed structural measures were identified for 13 sites (8 in Western Georgia and 5 in Eastern Georgia). The locations of the 13 sites for structural measures is provided in Figure 1 below. Out of these 13 sites, the current assignment covers three – site 4 (river Lagodekhiskhevi), site 9 (river Tskhenitskali) and site 5 (River Achkva). (please see Figures 2, 3 and 4 below)

At project proposal stage, structural measures were designed to a reasonable level of detail based on existing data. However, to facilitate the construction of the structural measures, the detailed design of the interventions for these locations must be prepared. Additionally, in 2018 the topographic survey for site 5-Kobuleti (River Achkva) has been prepared to certain level of detail. The file can be obtained through the following link: https://drive.google.com/drive/folders/1TgpJTbE4dYyk9onfbn2VTPyEd7sA-_a3?usp=sharing

Figure 1. Location of the 13 sites for structural measures

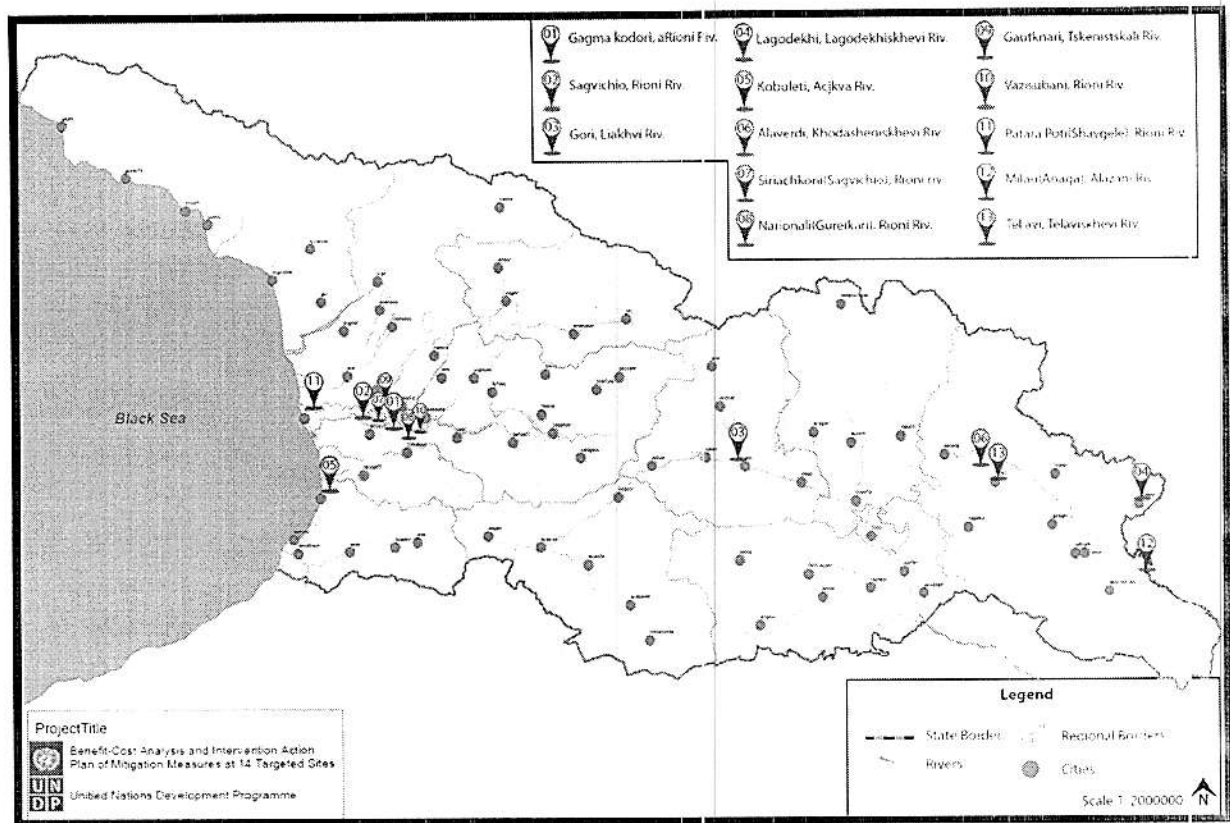
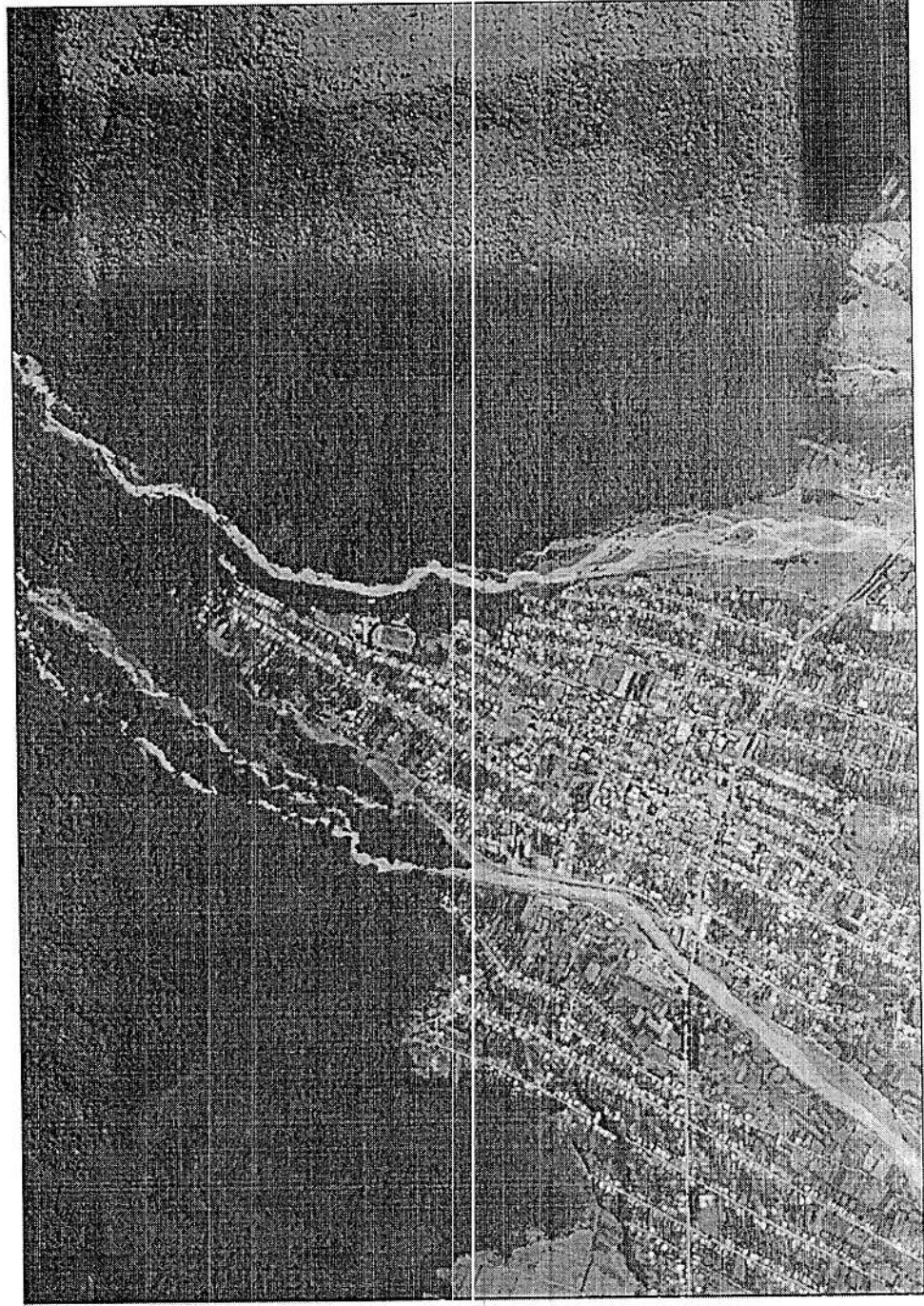


Figure 2. Location of the site in the town of Lagodekhi

FLOOD PROTECTION MEASURES FOR LAGODEKHISKEVI RIVER IN TOWN OF LAGODEKHI
SITE LAYOUT MAP

ASSUMED START OF THE FLOOD PROTECTION INTERVENTION
X=60600.3; Y=45375.1/3



ASSUMED END OF THE FLOOD PROTECTION INTERVENTION
X=60650.2; Y=45375.6

Figure 3. Location of site in the village Pirveli Maisi

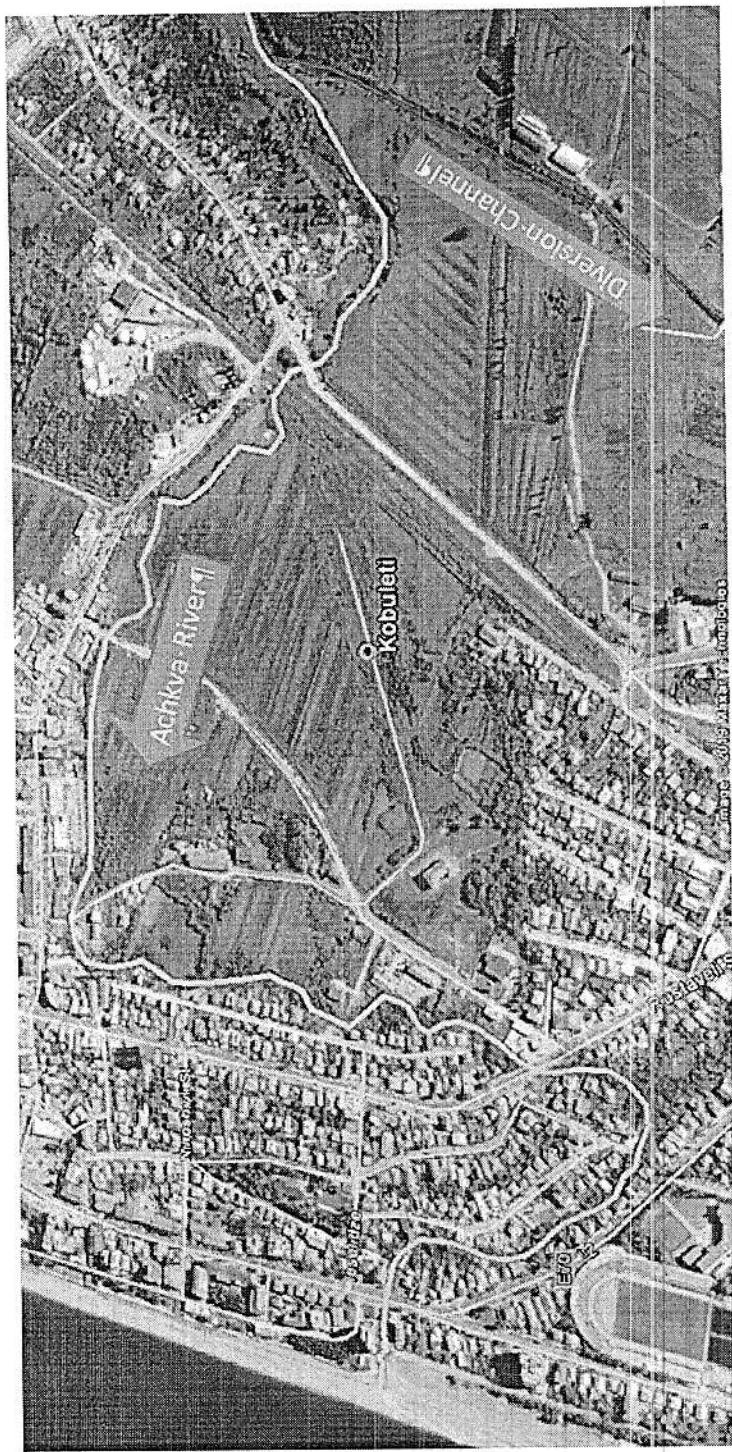
FLOOD PROTECTION MEASURES FOR TSKHISTSKALI RIVER IN VILLAGE OF GAUTSKINARI
SITE LAYOUT MAP

ASSUMED START OF THE FLOOD PROTECTION INTERVENTION
X=278251.4, Y=446414.9



ASSUMED END OF THE FLOOD PROTECTION INTERVENTION
X=278251.4, Y=446414.9

Figure 4. Location of site in the town Kobuleti



2. AIM OF THE ASSIGNMENT

The current assignment aims at preparation of the detailed designs for three locations (out of 13 locations shown above) – in the town of Lagodekhi, Lagodekhi Municipality (on the river Lagodekhishevi, site 4), in the Village Pirveli Maisi, Abasha Municipality (on the river Tskhenitskali, site 9) and Town Kobuleti, Kobuleti municipality (on the River Achkva, site 5) (see Figure 2, 3 and 4 above).

The contractor is expected to: a) conduct survey and investigation required hereto (including topographical survey and geotechnical investigation), undertake detailed hydrological and hydraulic assessment, investigate and evaluate potential alternative design approaches, prepare an interim report outlining the alternatives together with recommendations; b) prepare detailed drawings and specifications for the agreed works; and c) prepare bills of quantities for the preferred works (details of each site are given below in the chapter 4).

The contractor is expected to conduct multi-criteria comparative analysis in order to select the best options for structural measures on the target locations. The contractor will work under the direct supervision of the international and national structural Engineers hired by the GCF project. The contractor/designer is expected to closely cooperate with GCF Project environmental and social Safeguard experts (Both – National and International) during the identification options and impact multi-criteria analysis.

3. OBJECTIVES OF THE ASSIGNMENT

The overall objective of the assignment is to prepare the detailed design of the structural measures to be implemented under the framework of GCF project on specific three locations/sites on the rivers Lagodekhishevi Tskhenitskali and Achkva.

4. SCOPE OF WORK AND EXPECTED OUTPUT

The delivered services of the contractor must provide design of feasible and cost-effective measures for protection of the impact areas. The design documentation must allow UNDP GCF Project for successful procurement of the construction services.

On the way to attaining the above objective, the successful bidder (further mentioned as "the Designer") shall undertake all the tasks required to meet these requirements. Following the key provisions of the technical proposal, the Designer must develop the detail program to obtain required baseline data including topographic survey, condition survey of existing flood control infrastructure (Lagodekhi and Kobuleti only), hydrologic analysis, hydraulic modelling, analysis of flood behaviour, geotechnical investigations (if necessary) and any other investigations required to enable the identification and evaluation of options to meet the requirements of the Project. The designer should work under direct supervision of GCF project international engineer and GCF project team leader on community-based processes.

The designer/contractor shall conduct multi-criteria comparative analysis of the options for structural measures. The designer is expected to work closely with UNDP GCF Project environmental and social Safeguard experts (Both – National and International) during the identification options and impact multi-criteria analysis.

4.1 LAGODEKHI AND PIRVELI MAISI

4.1.1 Survey

The designer has to undertake topographic mapping of the area based on the following requirements for each of the sites:

- detailed site examination;
- topographical survey of the area of interest sufficient to generate a digital elevation model (DEM) or at least, a series of cross sections of the rivers and their adjacent floodplain;
- topographic survey and condition survey of existing flood mitigation infrastructure (Lagodekhi only); and
- geotechnical investigation and/or geophysical survey (if required).

Additional information regarding the required survey outputs and extent are provided in Annex 4a

4.1.2 Geomorphologic Overview, Hydrologic Analysis and Hydraulic Modelling

The designer shall undertake studies and assessment of the geomorphic, hydrologic and hydraulic conditions, mode of flooding and seasonal variation of the conditions. They are required to collect and review all the available data in terms of maps, studies, publications, guidelines etc required thereto.

In particular, the designer shall undertake:

- a geomorphic overview of conditions at the site based on historic satellite or aerial photography and mapping in order to describe the current fluvial geomorphic conditions and their likely evolution over time (not required for Kobuleti);
- a hydrologic analysis to estimate peak flows at each site for a range of design floods i.e. 1%, 2%, 3% and 5% annual exceedance probability for current conditions and allowing for current estimates of the impacts of climate change;
- undertake hydraulic modelling for current conditions and for current conditions allowing for climate change;

4.1.3 Analysis and Design of the Structural Measures

Following its own design method statement, given in the technical proposal, the Designer shall undertake the below accomplishments:

- modify the hydraulic model to include a range of possible flood protection measures, including but not limited to flood protection walls, in-stream works to remove or relocate sediment within the river;
- investigate the effectiveness of the proposed alternative measures in effecting flood control including the sustainability of such measures taking account expected climate change impacts;
- prepare concept level designs for intervention measures considered to be feasible;
- Multi-criteria comparative analysis of the options considered; and
- Preparation of an Interim Report for review clearly setting out all of the above, including recommendations for the works to be designed.

4.1.4 Construction Drawings and Specification

Following submission of the Interim Report, the UNDP Project Management Team will revert with review comments, any requirements for clarification or additional work, and their approval for the final works to be included.

The Designer will then finalize the design for the approved works and prepare drawings to sufficient detail to enable the calling of tenders based on these drawings.

The Designer will also produce clear, detailed specifications for the works including specifications of the required materials, and construction requirements.

The Designer will also prepare and submit a Design Report which summarizes the information regarding each design including all assumptions, methodologies, modelling and calculations to enable detailed review prior to construction.

Each set of the construction drawings must represent baseline data and appropriate level of detailing for all of the components of the flood protection facilities including and not limited to:

- Layout of the earthwork plans considering staged construction;
- Associated cross sections and profiles for excavations, embankments and fillings;
- Layout, arrangement schedule and details of the protection measures and/or drainage facilities;
- Structural outline and reinforcement details of the restraint facilities; and
- Details for connections, embedded parts, fixings, attachments, accessories etc.

The drawings must present specifications in dual language, Georgian and English in A3 printout format. Selection of the drawing scales is left at the designer's discretion provided the drawings allow for acceptable readability.

The drawings must specify the materials used in the construction as per provisions of the design code and construction specifications applied. Whenever required by the applied design code, the drawings must specify performance parameters for testing of the materials and/or installations.

4.1.5 Bills of Quantities

Bill of Quantities (Cost estimate) should promote effective procurement and administration of the civil works so that it presents clear setup of differentiation of the civil works to appropriate level of detailing. It shall be construed by the following approach:

- Each of the line items imply unique set of activities;
- Any part of the given line item does not overlap with any part of the other;
- Each of the line items include all of the associated ancillary materials, accessories, supply, workmanship and/or machinery input.

Unit rates of the cost estimate must be defined based on the method acceptable for the procurement procedures of the Construction Services effective in Georgia.

4.1.6 Land Acquisition/Resettlement Plan

Land Acquisition and/or Resettlement should not be considered as an option. Thus, no engineering solution should be proposed, which might include Land Acquisition or Resettlement.

4.1.7 Realignment of the Utilities/Local Authorities

Any existing utilities deemed for relocation by the impact of the project shall be detected and assessed on the early stage of the design development. Extent of the impact of the project on the existing utilities shall be included in the multi-criterion analysis of the design options. In case, the project imposes impact on any of the existing utilities, the designer shall work in coordination of the respective owners to attain respective technical conditions and to reconcile expected scope of the project works in conjunction with functional specifics of the utilities.

4.1.8 Source of Materials / Construction Specification

Bill of Quantities shall consider availability of the construction materials and distance for haulage or transportation. Availability of the materials shall be introduced as one of the criteria in the process of the multi-criterion evaluation of the design options. Any construction material used in the final design of the project shall be specified as per the respective provisions of the design standard applied.

4.2 KOBULETI

The flow capacity of the Achkva River through Kobuleti has been historically found insufficient to convey the 1% AEP flood flow without overtopping, and a diversion channel was constructed in about the 1970's to divert a significant part of the flow during floods from the Achkva River to the Kintrishi River further south.

Due to the poor maintenance of the channel, on one hand and on the other hand, the inconsistent encroachment into the right of way of the channel during the period of political unstable, the current combined capacity of the Achkva River and the diversion channel have been found to be insufficient, with flooding still frequently occurring.

In 2018 the topographic survey for site 5-Kobuleti (River Achkva) has been prepared to certain level of detail. The file can be obtained through the following link:
https://drive.google.com/drive/folders/1TgpJTbE4dYyk9onfbn2VTPyEd7sA-_a3?usp=sharing

The purpose of current assignment is to fully prevent flooding of town of Kobuleti from 1% AEP flood. Additionally, it should be noted, that conveyance capacity of the natural branch of the Achkva river cannot be improved further due to certain reasons of impracticability. This branch is densely populated and heavily urbanized, so that widening of the channel would evolve into large scale of resettlement needs. Therefore, the design should focus on increasing the conveyance capacity of the diversion channel without further land acquisition. This is the objective of the design under request.

4.2.1 Condition Audit and Survey

The designer shall undertake a condition audit of the existing diversion channel to determine the following:

- Channel reaches in which the existing concrete structures can be retained (i.e. have a remaining life of at least 50 years) and extended in height only;
- Channel reaches in which additional width could be available within the existing corridor if the existing lining were removed;
- Channel reaches which are adequate to act as permanent formwork for new channel construction;
- Channel reaches which are unstable and must be demolished prior to reconstruction; and

- Channel reaches where bank failure has occurred, and complete reconstruction is required.

The channel condition audit will be used to inform the design process to result in the most economic design possible.

It is expected that sufficient topographic survey information is available from the 2018 design work in regard to the diversion channel, which will be provided to the successful consultant. The designer is to review the adequacy of the existing survey, and undertake any additional survey deemed to be necessary.

- Additional topographic survey will be in the form of geo-referenced cross-sections (Annex 4a provides additional information regarding survey requirements);
- Detailed survey at the diversion control structure site; and
- Geotechnical investigation and/or geophysical survey (Annex 4b provides additional information regarding the investigation requirements).

4.2.2 Hydrologic Analysis and Hydraulic Modeling

a) Hydrology

In order to undertake the design of this upgrade, it is first necessary to determine the combined 1% AEP design capacity at the diversion structure. Previous estimates of the design flood have varied greatly so an independent estimation based on a hydrologic (rainfall-runoff) model approach is required.

- Critically review the hydrologic calculations for the 1% AEP design flow;
- Set up a hydrologic model for the catchment (preferably using HEC-HMS) to obtain an independent estimate of 1% AEP design flow based on 1% AEP design rainfall (with calibration based on historic data if available);
- Run the model with increased design rainfalls taking account of anticipated climate change impacts;
- Prepare an Interim Report on the catchment hydrology for discussion and determination of design flow to be adopted.

b) Hydraulic modelling

1-dimensional hydraulic modelling is required to determine the discharge capacity of the Achkva River through Kobuleti prior to overbank flooding occurring, and also for the design of the upgraded diversion channel. This will require the following tasks:

- Achkva River:
 - Setup a 1-D hydraulic model (preferably HEC-RAS v5) of the Achkva River from upstream of the diversion point to the sea using all cross-section, culvert and bridge data;
 - Establish the 1% AEP storm tide level at the outfall of the Achkva River and the Kintrishi River to the Black Sea;
 - Run the model with a range of steady flows with 1% AEP storm tide tailwater condition to establish point of first overflow and flow at which this occurs;
- Diversion Channel
 - Ascertain the extent of land associated with the diversion channel and its neighboring properties to ensure that all works are undertaken within the drainage corridor;
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 - Modify the model taking account of the outcomes from the condition audit to determine the required cross-section/wall height to accommodate the following alternative design criteria using both the adopted 1% AEP diversion channel flow and with allowance for climate change – wholly reconstructed channel, and reconstructed channel only where required with wall height increase only where channel condition acceptable;
 - Prepare an interim report setting out the results from the above for discussion and resolution;

4.2.3 Analysis and Design of the Structural Measures

Following its own design method statement, given in the technical proposal, the Designer shall undertake the below accomplishments:

- *Diversion channel:*
 - Determine the maximum design discharge for the diversion channel based on the hydrologic

- analysis and the bank full capacity of the Achkva River;
 - Using the hydraulic model results develop designs to accommodate the design flow with a fully reconstructed channel and bridges, and with minimum reconstruction retaining existing channel reaches where these are deemed to be in a satisfactory condition to give a further 50 year design life;
 - Prepare preliminary cost estimates for the above options;
 - Prepare an interim report describing the two options, including recommendations, in order to enable a design decision to be made; and
 - Finalise design and prepare Design Report.
- *Design Diversion Control Structure to:*
 - Allow low to medium flows up to the bankfull capacity through Kobuleti to pass along the Achkva River;
 - Limit the maximum flow in the Achkva River flow to its bankfull capacity;
 - Ensure that the diversion structure is not overtopped in the 1% AEP event;
 - The 1-D hydraulic model should be used as a design tool in the above;
 - Liaise with Amelioration Department as necessary to ensure the design complies with their requirements; and
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Following submission of the Interim Report, the UNDP Project Management Team will revert with review comments, any requirements for clarification or additional work, and their approval for the final works to be included.

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4.2.8 Source of Materials / Construction Specification

Bill of Quantities shall consider availability of the construction materials and distance for haulage or transportation. Availability of the materials shall be introduced as one of the criteria in the process of the multi-criterion evaluation of the design options. Any construction material used in the final design of the project shall be specified as per the respective provisions of the design standard applied.

5. TIMING:

5.1. Activity schedule for Lagodekhi (River Lagodekhiskhevi), and Pirveli Maisi (River Tskenistskali)

№	Service	2020					
		March	April	May	June	July	August
1	Site examination, reconnaissance and development of the survey/investigation program						
2	Topographical survey						
3	Hydrological analysis and hydraulic modelling						
4	Geophysical survey/Geotechnical investigation						
5	Identification and evaluation of options						
6	Multi-criterion comparative analysis of the options for structural measures, submission of Interim Report						
7	Design of the flood protection facilities						
8	Construction drawings and specifications						
9	Bill of Quantities and Cost Estimate						

Note: The activity schedule is preliminary and is based on the expected Target start date March 20, 2020. The activities might be re-scheduled according to actual contract award date.

5.2 Activity schedule for Kobuleti (River Achkva)

Activity schedule for Kobuleti (River Achkva)							
№	Service	2020					
		March	April	May	June	July	August

1	Site examination, condition audit of diversion channel, review adequacy of topographic survey						
2	Topographical survey						
3	Hydrological analysis and hydraulic modelling						
4	Geophysical survey/Geotechnical investigation						
5	Identification and evaluation of options						
6	Multi-criterion comparative analysis of the options for structural measures, submission of Interim Report						
7	Design of the flood protection facilities						
8	Construction drawings and specifications						
9	Bill of Quantities and Cost Estimate						

Note: The activity schedule is preliminary and is based on the expected Target start date March 20, 2020. The activities might be re-scheduled according to actual contract award date.

6. DELIVERABLES

All deliverables should be prepared in English and Georgian.

The organization is expected to produce the following deliverables:

Nº	Deliverables	DUE DATE
1	Survey/investigation program for all 3 sites. Including: <ul style="list-style-type: none"> • Certification that the sites have been visited for the purpose of understanding the requirements; • Detail and methodology for topographic and structure condition surveys; 	March 31, 2020
2	Report on surveys and mapping conducted for Lagodekhi (River Lagodekhiskhevi) and Pirveli Maisi (River Tskhenistskali)	April 30, 2020
3	Interim report for Kobuleti (River Achkva); Including: <ul style="list-style-type: none"> • Details, methodology and results for hydrologic analysis – design flows for various probabilities of exceedance; • Details methodology and results for hydraulic modelling for existing conditions and with alternative mitigation measures; • Concept design for diversion control structure 	May 30, 2020
4	Final Construction Drawings and bill of quantities for Kobuleti (River Achkva); Interim report for Lagodekhi (River Lagodekhiskhevi) and Pirveli Maisi (River Tskhenistskali): Including: <ul style="list-style-type: none"> • Details and methodology for fluvial geomorphic overview – identify the causes of the problem and the broad options for mitigation; • Details and methodology for hydrologic analysis – design flows for various probabilities of exceedance; • Details and methodology for hydraulic modelling for existing conditions and with alternative mitigation measures; • Details of alternative options to be considered including computational procedures for rock sizing, scour depth estimation etc. 	June 30, 2020

5	Detailed Drawings and Bills of Quantity for Lagodekhi (River Lagodekhiskhevi) and Pirveli Maisi (River Tskhenistskali)	August 10, 2020
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7. ELIGIBILITY CRITERIA

- At least 10 years of experience of the company in conducting the similar assignments – Structural engineering, preparation of design layout and bill of quantities. Including, but not limited to following areas: flood protection measures, channel rehabilitation measures and riverbed strengthening/protection measures **(minimum requirement)**;
- Experience in conducting of at least 5 projects of similar size - At least two design contracts with the value not less than 70 000 USD each. **(minimum requirement)**;
- Bank letter certifying annual turnover not less than 1,000,000 GEL (per year) during last 3 years **(minimum requirement)**;
- At least 3 reference letters on successful implementation of similar tasks during last 3 years **(minimum requirement)**;
- Having reference from an international organization for conducting similar surveys – would be an asset;
- Qualified and experienced team consisting of, at a minimum: **(1) Project Coordinator** – with at least 7 years of experience of management and coordination of structural measures design surveys (minimum requirement); **(2) Hydrologist/hydraulic engineer** - with at least 10 years of experience in conducting hydrological and hydraulic surveys and investigation for the design of structural measures in Georgia in the following areas: riverbank protection measures, flood protection measures, riverbed strengthening/protection measures (minimum requirement); **(3) Structural engineer** with at least 10 years of experience in designing the structural measures in Georgia in the following areas: Riverbank protection measures, flood protection measures, riverbed strengthening/protection measures (minimum requirement); **(4) Geologist** with at least 10 years of experience in providing the geotechnical investigation reporting and interpretation of the soil property design parameters in Georgia in the infrastructure related projects (minimum requirement) **(5) Cost Estimator** - with at least 10 years of experience in providing cost estimates and developing bills of quantities in Georgia in the infrastructure related projects (minimum requirement); **(6) Computer Aided Design Specialist (CAD)/GIS Specialist** with at least 10 years of experience in providing computer aided design in Georgia in the infrastructure related projects (minimum requirement); **(7) Other professional team** as deemed appropriate by the contractor to fulfil the requirements as spelled out in this RFP (Note: It is possible to combine several expert functions in one individual, provided that the candidate fully meets all needed qualifications).

The contract shall be awarded based on Highest Combined Score (based on 70% technical offer and 30% price weight distribution).

The detailed evaluation criteria including all obtainable points in respective categories can be found in annex 5 – Technical Proposal Evaluation Form

8. PAYMENT MODALITY

Successful company will be paid in 5 instalments upon satisfactory accomplishment of each of the above-mentioned deliverables and according to the following scheme:

Deliverables	Amount to be paid
Deliverable 1: Survey/investigation program for all 3 sites	30%
Deliverable 2: Report on surveys and mapping conducted for Lagodekhi (River Lagodekhiskhevi) and Pirveli Maisi (River Tskhenistskali)	15%
Deliverable 3: - Interim report for Kobuleti (River Achkva);	15%

Deliverable 4: - Final Construction Drawings and bill of quantities for Kobuleti (River Achkva); - Interim report for Lagodekhi (River Lagodekhiskhevi) and Pirveli Maisi (River Tskhenistskali)	20%
Deliverable 5: Detailed Drawings and Bills of Quantity for Lagodekhi (River Lagodekhiskhevi) and Pirveli Maisi (River Tskhenistskali)	20%

UNDP will make the payment after satisfactory receipt of the due deliverable and a respective invoice.

Brief for Topographic and Infrastructure Condition Survey

Introduction

Whilst the survey techniques which will need to be employed and the general output requirements, are similar at both sites, there are distinct differences in the characteristics of the rivers at these sites, requiring separate specific requirements for each site.

The following paragraphs set out first the common requirements for both sites and then the individual requirements.

Common requirements

All survey will be in metric units. The technical specifications of the requirements for this survey are given below.

- Horizontal Datum: WGS 84;
- Projection UTM Zone: 38; and
- Vertical Datum: WGS 84, supported by the National network of CORS - (Continuously Operating Reference System)

General accuracy requirements:

- Horizontal +/- 100mm;
- Vertical +/- 5mm;
- Cross-section spacing is given for each of the sites in the site specific information – points along each cross-section should be spaced at approximately 5m intervals at random and at changes of slope.

Conventions to be observed:

- River chainages (distance) used in reports drawings/ maps to increase in the upstream direction; and
- Cross-sections are viewed looking downstream.

The Contractor will construct temporary reference points as required within the survey area which are referenced in compliance with the above, and maintain these during the period of the survey.

Presentation of results to local or assumed horizontal and vertical datum will not be acceptable.

In addition to hard copy maps the survey data will be provided in the following electronic formats:

- (i) Processed survey data in shp, xls and ascii (x,y,z or grid) format (as a minimum).
- (ii) All survey data shall be provided on external hard drive(s) in soft copy format and provided in mutually agreed hard copy format.
- (iii) A survey report shall be provided summarizing the survey results including survey methods used, equipment used, survey teams employed, survey accuracies achieved, any legitimate difficulties and delays in work execution, etc.
- (iv) A3 maps showing channel cross-section locations and end point reference points, cross-sections and longitudinal sections at scales to be legible at A4. Maps shall be provided in 3d in .dwg and .dxf format
- (v) Structural cross-section and plan diagrams showing dimensions and levels.

Where access to private or protected land is required for conducting the survey, UNDP will offer assistance in contacting the relevant agencies, but it will be the contractor's responsibility to ensure that all necessary permissions are obtained prior to entry. Where access issues delay the program, warnings should be issued at the earliest opportunity to notify UNDP of the delay and all reasonable endeavors used to bring program back on track.

Acceptable Technologies

Whilst the Contractor will be responsible for the final selection of survey technologies to be deployed in order to achieve the desired outcomes at each site, the following points indicate the technologies which are likely to be appropriate:

- Real time kinetic (RTK) GPS for setting of reference points and for detail survey (static method required for reference points);
- Aerial survey by drone using photogrammetric or lidar technology – this will require adequate ground control to achieve required vertical accuracy (given in site specific requirements) – note this may not be appropriate in parts of the sites because of heavy tree cover;
- Electronic total station (ETS); and

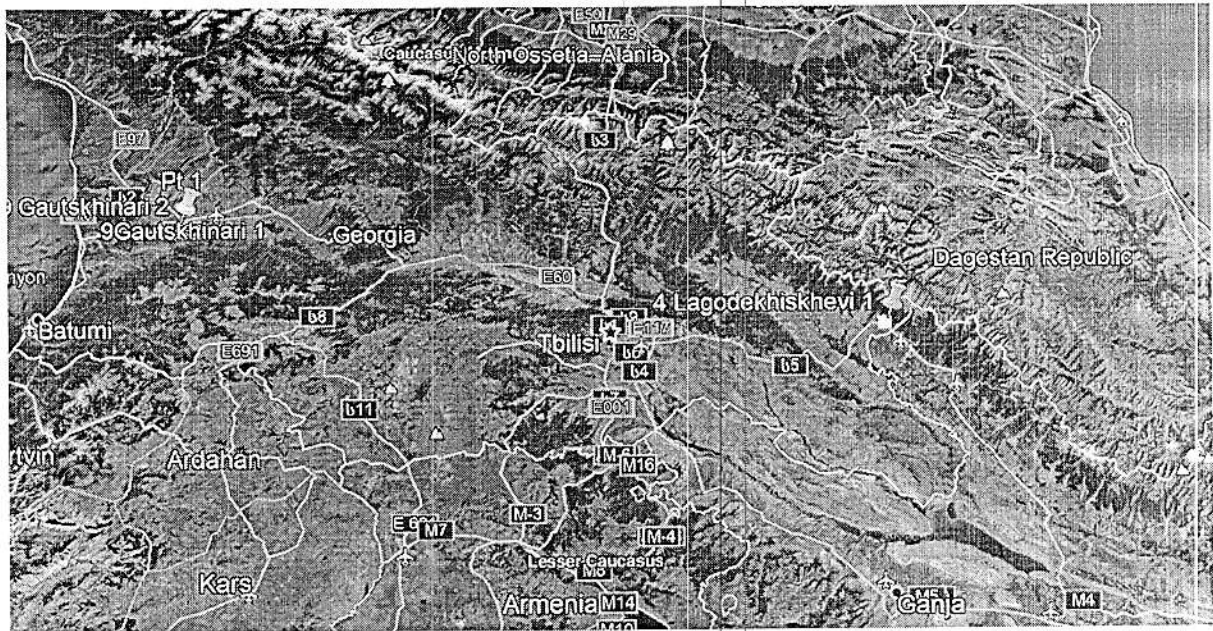
- For the below water parts of river cross-sections, depth sounding by level staff or pole where applicable, linked to ETS or DGPS or echo-sounder preferably linked to DGPS.

Site Requirements

a) Lagodekhi

Figure 5 below shows the general location of the Lagodekhi site, and Figure 6 shows more detail.

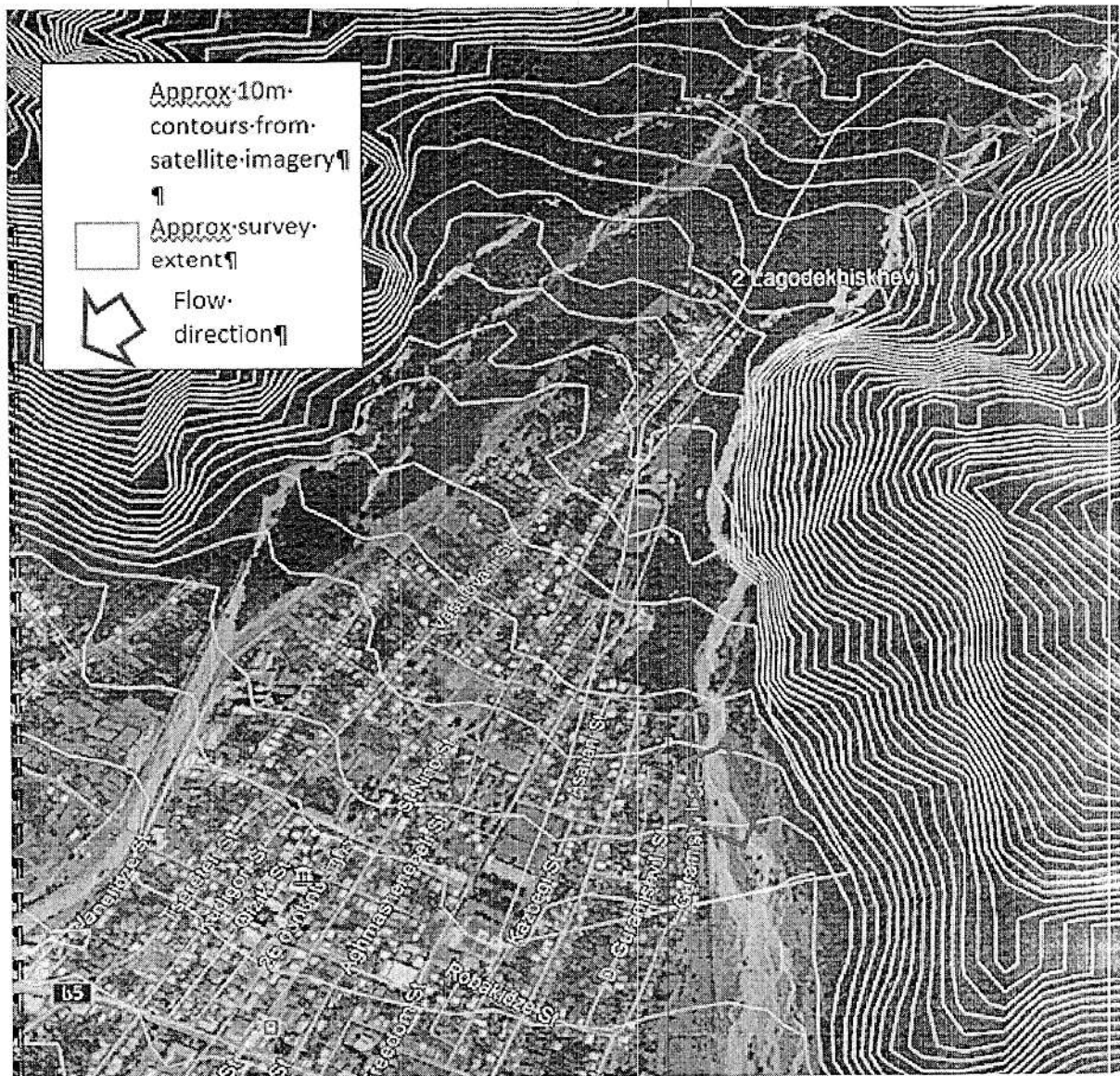
Figure 5 Location Plan Lagodekhi Site



The Lagodekhishevi River has formed an alluvial fan over the years from the deposition of sediment generated from higher reach in the catchment. The town is located on this sediment and the current major channel of the river is to the east of the town flowing from north to south.

The 10m satellite based contours shown on Figure 2 are indicative only, but are included to show that the difference in levels between the river and the highest point in the fan are not great. At present, during times of flood water can escape from the river along the various minor distributary channels allowing flood water to enter the town.

Figure 6. Lagodekhi - survey extent



The purpose of the project work at this site is to determine the most appropriate intervention measures and design the works required for implementation. These works are most likely to contain a combination of works to locally increase the capacity of the main channel to convey flood flows and the construction of a flood prevention wall set back from the current river bank. The requirements of the survey are to provide the basic topographic information on which this assessment will be based.

The western extent of the survey area is not fixed but is required to locate and include the relatively high ground or minor ridge line within the alluvial fan which may determine the preferred location of flood protection works. The eastern extent is to cover an approximate 5-10m vertical extent above the current river bank.

A detailed survey of the nominated area is required to pick up top and bottom of banks and channels, all changes of slope, and a general grid of spot levels at about 10m spacing. Within the town area entry of private property is not required and survey can be limited to streets and other places of open access. For streets the minimum requirement is for 3 points at each cross-section, namely, the crown level (high point), the gutter level (low point on both sides) and the kerb level (or adjacent ground level within the road reserve) on both sides.

In addition, a number of cross-sections of the main river channel and any significant minor channels will be required. The total survey section is about 3,000m and a minimum of 15 cross-sections are required at an average spacing of 200m. The spacing should be reduced where there are rapid changes in cross section, such as around islands or erosion features, and may be more spread out over more uniform sections. The river bed comprises cobbles to small boulders and water flow is generally shallow allowing wading and conventional survey.

As the river bed comprises boulders from about 200mm to 700mm in size, the cross-section is locally variable. Points on the cross-section should be selected which are approximately average levels in the immediate vicinity.

In particular, the topographic survey must identify the location of the existing concrete and gabion flood protection walls including failed sections all. In addition, an engineering condition assessment of the existing walls is to be undertaken and detail thereof added to the survey drawings and report.

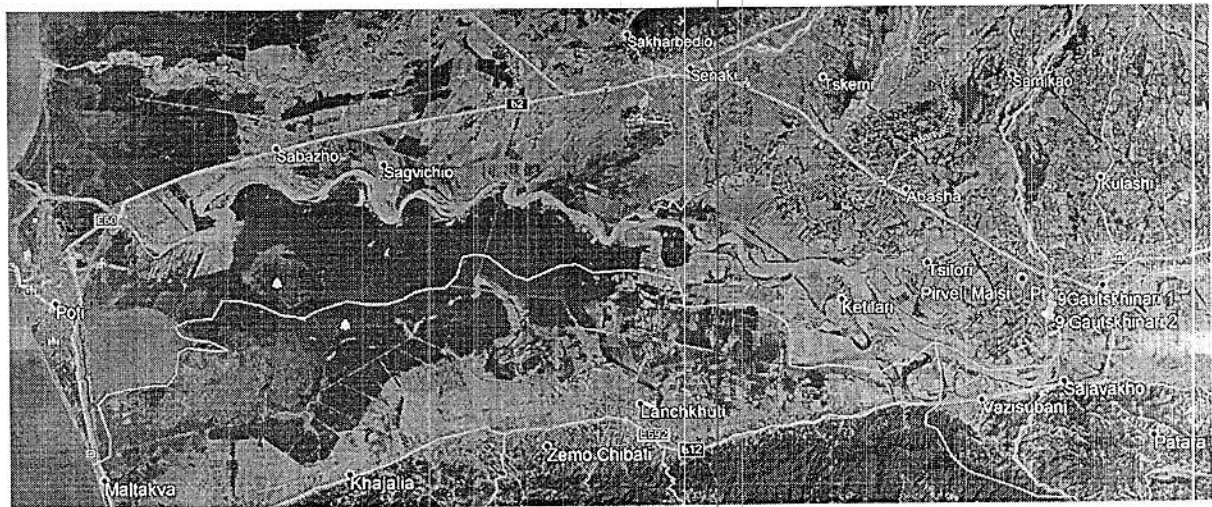
The wooded area on the west bank of the river and north of the town is a protected woodland area. The density of the tree cover may make drone survey or DGPS survey impractical. On the other hand, the time constraint may preclude the 10m grid detailed survey.

Contractors should take these factors into account in preparing their proposal for the survey component and must include details of their chosen methodology.

b) Pirveli Maisi

Figure 7 shows the general location of the Pirveli Maisi site, and Figure 8 shows more detail.

Figure 7. Location Plan - Pirveli Maisi Site



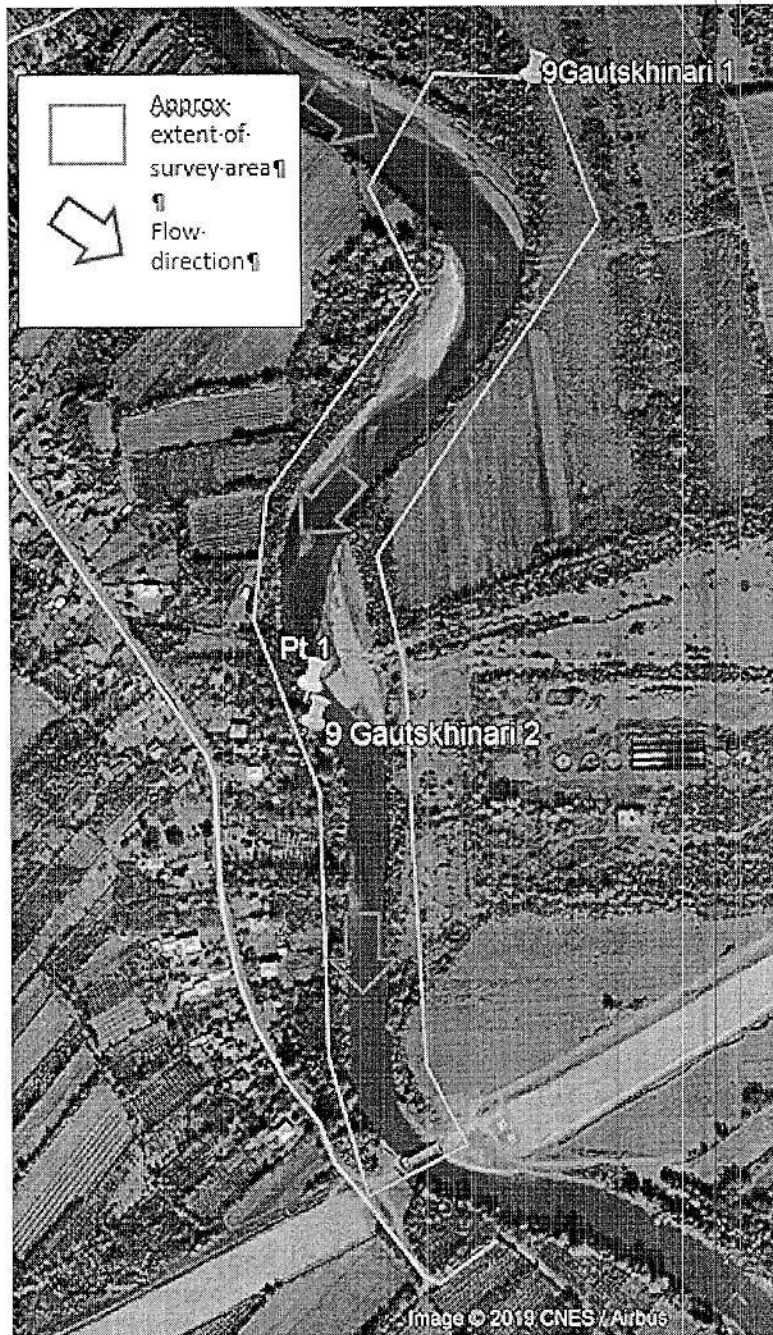
The site is located on the Tskhenistskali River which is a right bank tributary of the Rioni River.

At this site, erosion is occurring at various points on both banks as a result of downstream progression of the meanders. The purpose of the survey is to map the existing bank lines and sand bars, in order to determine the most appropriate intervention to minimize land loss. Only a narrow strip of 20m behind the current bank lines needs to be surveyed – together with notation of the land cover. The location of individual trees is not required.

A detailed survey of the nominated area is required to pick up top and bottom of banks and channels, all changes of slope, and a general grid of spot levels at about 10m spacing.

In addition, a number of cross-sections of the main river channel and any significant minor channels will be required. The total survey section is about 1,300m and a minimum of 13 cross-sections are required at an average spacing of 100m. The spacing should be such that the sand bars are fully represented by the survey which may require shorter spacing between cross-sections. Longer spacing between cross-sections is acceptable where no sand bars are evident. The survey will end at and include the detail of the road bridge.

Figure 8. Pirveli Maisi Site - Survey Area



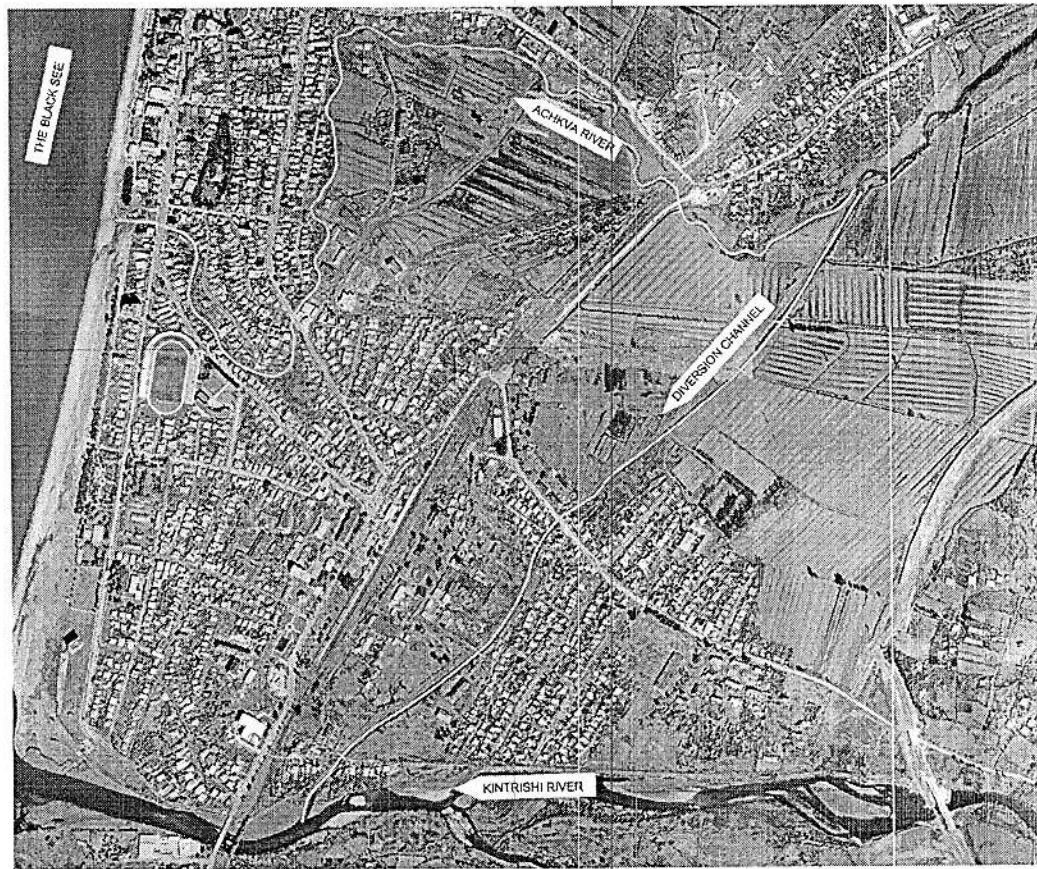
It is likely that the water depth at this site will require boat-based survey for the underwater sections, in which case the preferred methodology is using an echo sounder for depth measurement linked to DGPS to obtain the overall profile. Other approaches to obtaining the below water profile may be considered but must provide a comparable output.

Contractors should take these factors into account in preparing their proposal for the survey component and must include details of their chosen methodology.

c) Kobuleti

Figure 9 shows the alignment of the Achkva River through Kobuleti and the existing diversion channel, connected with the Kintrishi river.

Figure 9. Achkva River through Kobuleti and the channel diverted to Kintrishi River



Topographic survey along both channels are available from previous work in 2018. The information can be obtained through following link: <https://drive.google.com/drive/folders/1TgpJTbE4dYyk9onfbn2VTPyEd7sA-a3?usp=sharing>.

The existing survey data should be reviewed in regard to its "fitness for purpose" for hydraulic modelling along both channels. Additional survey is deemed to be necessary and not limited for the below background:

- Although the designer may use the existing topographical data for hydraulic modelling of the natural branch of the Achkva river, it may be required to extent such data for modelling of the diversion channel itself
- The current diversion control structure on the Achkva River at the head of the diversion channel needs to be replaced, and a detailed topographic survey of this site needs to be undertaken. This involves about 200 meters of upstream section to be surveyed
- thorough survey of the Kintrishi riverbed may be required to certain extent of need in order to obtain precondition for hydraulic modelling of the diversion channel
- design of the upgrade for the diversion channel may require the reconstruction of a number of bridges across the channel. Currently, number of the existing bridges is 9 including, footpath bridge, highway bridge and the field road bridges. Additional survey of the approach driveways at the bridges including adjacent facilities or properties are deemed necessary

Brief for Geotechnical Investigation

Common requirements

Geotechnical Investigation activities shall be programmed and implemented so, that to ensure safe design of the proposed structures; in particular:

- Adequate assessment of the bearing capacity and expected settlement of the foundations, and
- Predetermined factor of safety for global and local stability of the protection structure

In evaluation of the soil properties for geotechnical design application, the designer is to take into account recommendations of the state-of-the-practice guidelines. Number and depth of the investigation points must cover all the required extent in order to collect information to simulate the realistic model for geotechnical analysis. Method statement and input of the geotechnical investigation needs must be specified both in Technical and Financial components of the bid proposal. Failure to present such approach, may serve subject to disqualification.

The technical requirements for this investigation are given below.

- Drilling, sampling, handling, testing and interpretation of the baseline data must be performed in compliance with the BS or ASTM standard requirements, as commonly established in engineering practice of Georgia for international projects
- Intrusive methods of the investigation shall be employed;
- Indirect(nonintrusive) method may be accepted as of complementary nature only whereas limited access or substrata conditions find the direct method impractical or ineffective
- considering erratic or uniform nature of the substrata, at least one investigation point shall be performed every 30 m to 60 meter of the length of the design structure
- depth of the investigation from the assumed level of the footing shall be 1 to 2 times of the height of the structure
- index and performance parameters of the soil shall be obtained from the laboratory testing only.
- Indirect in-situ testing may be applied whereas strength or deformation properties of the soil cannot be obtained from the undisturbed samples
- The bidders are encouraged to show in their technical proposals how the collected geotechnical data will be used in their design of the structural measures of the different options.

Site Specific Requirements

Lagodekhi

The bidder is to take into account possible measures of the flood protection intervention based on their own findings during examination of the site. The existing retaining structure, constructed in the Soviet time may show some damages of the certain extent, where the respective replacements could be found appropriate. Alternatively, the designer may suggest complete replacement of the existing structure. Magnitude of the geotechnical investigation input must be evaluated based on the assessment of the technical conditions of the existing structure and on the approach of the designer thereto.

Pirveli Maisi

There is no existing structure at the site. Needs for the geotechnical investigation must be evaluated by the bidder based on the above terms of the Common Requirements in conjunction with the options of the structural interventions generated thereto. It is likely, that evaluation of the geotechnical investigation input will be based on the experience of the bidder in conducting survey, feasibility study and detail design for similar projects.

Kobuleti

Length of the existing diversion channel and its technical conditions control the needs for input of the geotechnical investigation activities. Existing bridges (9 in total) deemed for replacement, will need additional input of the geotechnical investigation.

Technical Evaluation Criteria

If the offeror does not meet any of the minimum technical qualification criteria/requirements defined in the sections 1, 2, and 3 of the Technical Evaluation Criteria (presented below), it will be given score (0) zero and will be automatically disqualified and will not be considered for further evaluation.

Summary of Technical Proposal Evaluation Forms		Points Obtainable
1.	Bidder's qualification, capacity and experience	300
2.	Proposed Methodology, Approach and Implementation Plan	400
3.	Key Personnel	300
Total		1000

Section 1. Bidder's qualification, capacity and experience		Points MAX obtainable
1.1	At least 10 years of experience of the company in conducting the similar assignments – Structural engineering, preparation of design layout and bill of quantities. Including, but not limited to following areas: flood protection measures, channel rehabilitation measures and riverbed strengthening/protection measures (minimum requirement);	100
	10 years (Minimum Requirement);	70
	More than 10 years;	100
1.2	Experience in conducting of at least 5 projects of similar size out of which at least two design contracts with the value not less than 70 000 USD each (minimum requirement);	70
	More than two design contracts with the value not less than 70 000 USD each	105
1.3	Bank letter certifying annual turnover not less than 1,000,000 GEL (per year) during last 3 years (minimum requirement);	35
1.4	At least 3 reference letters on successful implementation of similar tasks during last 3 years (minimum requirement);	35
1.5	Having reference from an international organization for conducting similar surveys (asset);	25
Total Section 1		300

Section 2. Proposed Methodology, Approach and Implementation Plan			Points MAX obtainable
2.1	Understanding of the site specification (minimum requirement)		100
2.2	Description of the Offeror's approach and methodology for meeting or exceeding the requirements of the Terms of Reference		
	Approach and methodology meet the requirements of the Terms of Reference (minimum requirement)	90	150
	Approach and methodology exceed requirements (and is more detailed elaborated) of the Terms of Reference	150	
2.3	The Timelines of the activities for the each site logical and realistic (minimum requirement)		
	The proposed duration of work is adequate to the Terms of Reference (minimum requirement)	90	150
	The proposed duration of work is less than indicated in Terms of Reference	150	
Total Section 2			400

Section 3. Management Structure and Key Personnel			Points MAX obtainable
3.1	Project Coordinator		
	At least 7 years of experience of management and coordination of structural measures design surveys (minimum requirement);	35	50
	More than 7 years of experience	50	
3.2	Hydrologist/hydraulic engineer		
	- with at least 10 years of experience in conducting hydrological and hydraulic surveys and investigation for the design of structural measures in Georgia in the following areas: riverbank protection measures, flood protection measures, riverbed strengthening/protection measures (minimum requirement);	35	50
	More than 10 years of experience	50	
3.3	Structural engineer		
	At least 10 years of experience in designing the structural measures in Georgia in the following areas: riverbank protection measures, flood protection measures, riverbed strengthening/protection measures (minimum requirement)	35	50
	More than 10 years of experience	50	
3.4	Geologist		
	At least 10 years of experience in providing the geotechnical investigation reporting and interpretation of the soil property design parameters in Georgia in the infrastructure related projects (minimum requirement)	35	50
	More than 10 years of experience	50	
3.5	Cost Estimator		
	- with at least 10 years of experience in providing cost estimates and developing bills of quantities in Georgia in the infrastructure related projects (minimum requirement)	35	50
	More than 10 years of experience	50	

3.6 Computer Aided Design (CAD) Specialist/GIS Specialist

At least 10 years of experience in providing computer aided design (CAD) in Georgia in the infrastructure related projects (minimum requirement)	35	50
More than 10 years of experience	50	
Total Section 3	300	