



REQUEST FOR PROPOSAL (RFP)

NAME & ADDRESS OF FIRM	DATE: February 5, 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 **Introduction and implementation of methods and tools for the systematic gender-sensitive socio-economic vulnerability assessment for decision-making for prioritization of resilience investments.**

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

Proposals may be submitted on or before 17:00p.m (GMT+04) Wednesday, March 11, 2020 via courier mail to the address below:

**United Nations Development Programme
9, Eristavi Street, Tbilisi, Georgia - UN House 1st floor
Ivane Tsiklauri
Box name: Socio-Economic Assessment**

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

Time: 15:00 GMT+4;

Date: February 13, 2020;

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

If interested bidders cannot attend the pre-bid conference, it is possible to join the meeting **only via skype (No other mean communication will be excepted including Business Skype)**. In that case, interested bidder must provide skype address by email to levan.gagua@undp.org (subject: Socio-Economic Assessment) no later than COB February 12, 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 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 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,


Project Coordinator
Ketevan Skhireli
2/27/2020

Description of Requirements

Context of the Requirement	Project “Scaling-up Multi-Hazard Early Warning System and the Use of Climate Information in Georgia”
Implementing Partner of UNDP	Ministry of Environmental Protection and Agriculture of Georgia (MEPA)
Brief Description of the Required Services	<p>Develop and codify the changes required to the exiting GIS-based socio-economic model, which was developed under AF/UNDP project for Rioni river basin (2012-2016); Upscaling the existing socio-economic model to include risk modelling, and mapping for 7 hazards (floods, landslides, mudflows, avalanches, hailstorms, strong wind and droughts) and calculate economic damages of all receptor sectors; Conduct survey and collect data in the following river basins: Natanebi, Kintrishi and Supsa.</p> <p>Develop and codify the user interface and other aspects of the model based on the user requirements; Establish GIS-based multi-hazard socio-economic vulnerability database for integration of all relevant socio-economic, receptor, and other datasets; Develop vulnerability survey tools including participatory Geographical Information Systems (PGIS) methods. PGIS will be a tool included in the GIS-based socio-economics tool.</p> <p><i>For details refer to ToR – Annex N4.</i></p>
List and Description of Expected Outputs to be Delivered	<p>Contractor is expected to produce the following deliverables:</p> <ol style="list-style-type: none"> 1. Report on review and assessment of the existing socio-economic and comparative review and assessment of existing off-the-shelf socio-economic models against technical specification; 2. Requirements specification for modelling tool (covering functional and non-functional requirements); 3. System design specification for modelling tool; 4. Draft of updated socio-economic model tool; 5. Technical manual, draft user manual for socio economic model; 6. User acceptance testing results and report; 7. Socio-economic model for Supsa river basin (with Multi-hazard maps); 8. Socio-economic model for Natanebi river basin (with Multi-hazard maps); 9. Socio-economic model for Kintrishi river basin (with Multi-hazard maps); 10. Final GIS-based multi-hazard socio-economic vulnerability modelling tool delivered to UNDP and EMS; 11. Survey strategy (February); Survey preparation (logistical plan); 12. Report reviewing data quality of data extracted from secondary sources (Public Registry Orthophotos; 112 data; Geostat data; Open street map) or provided during data sampling to include mosaic of GIS layers for all sector receptors within communities, Municipalities and Regions for all modelled hazard intensities for Flood, Wind, Hail, Drought, Landslide, Mudflow and Avalanche hazards. Modelled intensity hazards will be provided to the consultant; 13. Established GIS-based multi-hazard socio-economic vulnerability database for integration of all relevant socio-economic, receptor, and other datasets; 14. Developed vulnerability survey tools including participatory

	<p>Geographical Information Systems (PGIS) methods;</p> <p>15. Designed/identified data collection and analysis application for indicators in each receptor sector;</p> <p>16. Community/Municipality engagement, mobilization and sensitization plans;</p> <p>17. Community/Municipality Communications strategy for prior to implementation of surveys;</p> <p>18. Field survey report for Supsa river basin;</p> <p>19. Field survey report for Natanebi river basin;</p> <p>20. Field survey report for Supsa river basin;</p> <p>21. Technical field reports.</p> <p>All main reports should be prepared in both languages Georgian and English.</p>																
Person to Supervise the Work/Performance of the Service Provider	Direct supervision by Project component team leader and Project international Environmental Economist Expert. Overall supervision by Project Coordinator.																
Frequency of Reporting	Per deliverable indicated in ToR																
Progress Reporting Requirements	N/A																
Location of work	<input checked="" type="checkbox"/> Exact Address/es: Kintrishi, Natanebi, Supsa river basins. <input checked="" type="checkbox"/> At Contractor's Location																
Expected duration of work	13 months																
Target start date	March 31, 2020																
Latest completion date	April 30, 2021																
Travels Expected	<table border="1"> <thead> <tr> <th>Destination/s</th><th>Estimated Duration</th><th>Brief Description of Purpose of the Travel</th><th>Target Date/s</th></tr> </thead> <tbody> <tr> <td>Kintrishi river basin</td><td>30 days</td><td>Socio-economic survey, sampling and data collection in Kintrishi basin</td><td>August, 2020</td></tr> <tr> <td>Natanebi river basin</td><td>30 days</td><td>Socio-economic survey, sampling and data collection in Natanebi basin</td><td>September, 2020</td></tr> <tr> <td>Supsa river basin</td><td>30 days</td><td>Socio-economic survey, sampling and data collection in Supsa basin</td><td>October, 2020</td></tr> </tbody> </table>	Destination/s	Estimated Duration	Brief Description of Purpose of the Travel	Target Date/s	Kintrishi river basin	30 days	Socio-economic survey, sampling and data collection in Kintrishi basin	August, 2020	Natanebi river basin	30 days	Socio-economic survey, sampling and data collection in Natanebi basin	September, 2020	Supsa river basin	30 days	Socio-economic survey, sampling and data collection in Supsa basin	October, 2020
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Special Security Requirements	N/A																
Facilities to be Provided by UNDP (i.e., must be excluded from Price Proposal)	UNDP is not providing any facilities, office or space for work. Moreover, under this assignment, the Project is not responsible for logistics and any type of organizational arrangements.																
Implementation Schedule indicating breakdown and timing of activities/sub-activities	<input checked="" type="checkbox"/> Required <input type="checkbox"/> Not Required																
Names and curriculum vitae of individuals who will be involved in completing the services	<input checked="" type="checkbox"/> Required <input type="checkbox"/> Not Required																

Currency of Proposal	<input checked="" type="checkbox"/> United States Dollars <i>Note: For local contractors, the payment will be made in GEL according to UN exchange rate at the date of payment.</i> 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 type="checkbox"/> 60 days <input checked="" type="checkbox"/> 90 days <input type="checkbox"/> 120 days In exceptional circumstances, UNDP may request the Proposer 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	The payment for services provided will be made into six installments upon acceptance of deliverables by UNDP <table border="1"> <thead> <tr> <th>Installments</th><th>Outputs</th><th>Percent.</th><th>Timing</th><th>Condition for Payment Release</th></tr> </thead> <tbody> <tr> <td>1</td><td>Deliverables, 2, 11, 12</td><td>10%</td><td>No later than end of June 2020</td><td rowspan="6"> 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. </td></tr> <tr> <td>2</td><td>Deliverables 1, 3, 13, 15</td><td>20%</td><td>No later than end of August 2020</td></tr> <tr> <td>3</td><td>Deliverables 14, 16, 17, 18, 19, 20, 21</td><td>20%</td><td>No later than end of October 2020</td></tr> <tr> <td>4</td><td>Deliverables 4, 5, 6</td><td>25%</td><td>No later than end of December 2020</td></tr> <tr> <td>5</td><td>Deliverables 7, 8, 9</td><td>15%</td><td>No later than end of March 2021</td></tr> <tr> <td>6</td><td>Deliverable 10</td><td>10%</td><td>No later than end of April 2021</td></tr> </tbody> </table>	Installments	Outputs	Percent.	Timing	Condition for Payment Release	1	Deliverables, 2, 11, 12	10%	No later than end of June 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	Deliverables 1, 3, 13, 15	20%	No later than end of August 2020	3	Deliverables 14, 16, 17, 18, 19, 20, 21	20%	No later than end of October 2020	4	Deliverables 4, 5, 6	25%	No later than end of December 2020	5	Deliverables 7, 8, 9	15%	No later than end of March 2021	6	Deliverable 10	10%	No later than end of April 2021
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Person(s) to review/inspect/ approve outputs/completed services and authorize the disbursement of payment	Direct supervision and review of the deliverables by Project component Team Leader, Project Chief Technical Advisor and Project Environmental Economic International Expert, overall clearance of the deliverables for the disbursement of payments by GCF Project Coordinator.																														
Type of Contract to be Signed	<input checked="" type="checkbox"/> Contract for Professional Services																														
Criteria for Contract Award	<input type="checkbox"/> Lowest Price Quote among technically responsive offers <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 the 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> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Expertise of the Firm 40% <input checked="" type="checkbox"/> Methodology, Its Appropriateness to the Condition and Timeliness of the Implementation Plan 20% <input checked="" type="checkbox"/> Management Structure and Qualification of Key Personnel 40% <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>
UNDP will award the contract to:	<input checked="" type="checkbox"/> One and only one Service Provider
Annexes to this RFP	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Form for Submission of Proposal (Annex 2) <input checked="" type="checkbox"/> General Terms and Conditions / Special Conditions (Annex 3)¹ <input checked="" type="checkbox"/> Detailed TOR.
Contact Person for Inquiries (Written inquiries only)	<ol style="list-style-type: none"> 1. Tender related procedures: Levan Gagua, Project Contracting/Procurement Assistant: levan.gagua@undp.ge 2. Technical assignment of the project: Ivane Tsiklauri, Project component team leader, ivane.tsiklauri@undp.org <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>
Other Information	<p>The cumulative/final evaluation of the bids will be performed based on the scoring method and the formula provided below:</p> <p>Rating the Technical Proposal (TP): $\text{TP Rating} = (\text{Total Score Obtained by the Offer} / \text{Max. Obtainable Score for TP}) \times 100$</p> <p>Rating the Financial Proposal (FP): $\text{FP Rating} = (\text{Lowest Priced Offer} / \text{Price of the Offer Being Reviewed}) \times 100$</p> <p>Total Combined Score: $\text{Combined Score} = (\text{TP Rating}) \times (\text{Weight of TP, e.g. 70\%}) + (\text{FP Rating}) \times (\text{Weight of FP, e.g., 30\%})$</p> <p><i>Note: 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.</i></p>

¹ Service Providers are alerted that non-acceptance of the terms of the General Terms and Conditions (GTC) may be grounds for disqualification from this procurement process.

FORM FOR SUBMITTING SERVICE PROVIDER'S PROPOSAL²

(This Form must be submitted only using the Service Provider's Official Letterhead/Stationery³)

[insert: Location].

[insert: Date]

To: [insert: Name and Address of UNDP focal point]

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 2/5/2020, and all of its attachments, as well as the provisions of the UNDP General Contract Terms and Conditions :

A. Qualifications of the Service Provider

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) Profile – describing the nature of business, field of expertise, certification (if any) etc.;
- b) Business License – Registration Paper.
- c) Minimum 7 (seven) years of experience, starting from 2000 year, related to GIS consultancy, including field data collection and spatial data analysis projects **(Minimum Requirement);**
- d) At least one successfully executed project (contract) with GIS based similar complexity within the last 5 (five) years **(Minimum Requirement);**
- e) At least 1 (one) reference letter confirming successfully implemented GIS projects **(Minimum Requirement);**
- f) The bidder must have a local office in Georgia, which is a registered company in Georgia – Registration paper or tax payment certification **(Minimum Requirement);**
- g) The bidder must be equipped with at least 4 (four) units of Survey Grade GPS receivers **(Minimum Requirement);**
- h) A Bank letter certifying annual turnover not less than 350 000 GEL (per year) during last 3 years **(minimum requirement);**
- i) The experience in the area of GIS development (programming custom, advanced analytical solutions) is considered as an asset;
- j) Written Self-Declaration that the company is not in the UN Security Council 1267/1989 List, UN Procurement Division List or Other UN Ineligibility List.

² This serves as a guide to the Service Provider in preparing the Proposal.

³ Official Letterhead/Stationery must indicate contact details – addresses, email, phone and fax numbers – for verification purposes

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.

Note: The bidder should identify all of the relevant and up-to-date hardware and software to be used in the assignment in their proposed technical methodology and is expected to have access to these undertaking the assignment

C. Qualifications of Key Personnel

Service Provider must provide:

1. Names and qualifications of the key personnel that will perform the services indicating who is Project Manager, who are supporting, etc.
2. CVs demonstrating qualifications defined as per ToR must be submitted as given in Annex N5.
3. Written confirmation from each personnel that they are available for the entire duration of the contract.

Company must propose: Project Manager/GIS Analyst (PM); Developer (Programmer) – minimum one expert; Field Survey Manager (FSM) – minimum one expert; Field Surveyor – minimum four experts; GIS Operator – minimum two operators.

At minimum:

Project Manager /GIS Analyst (PM) – one expert:

The PM shall be responsible for the coordination of all consultancy services and ensuring the quality of the project deliverables. The proposed Project Manager will be evaluated according to the following criteria:

1	Project Manager/GIS Analyst
	Master's degree in the field related to Geography or Computer Science. (minimum requirement) .
	at least 10 years of experience in GIS consultancy and GIS project management (minimum requirement)
	Participation in at least one project specifically in socio-economic analysis;
	must possess an internationally accepted GIS certificate (minimum requirement)

Developer (Programmer) (Dev) – one expert

The proposed Developer (Programmer) will be evaluated according to the following criteria:

2.	Developer (Programmer)
	Master's degree in the field related to Computer Science; (minimum requirement)
	At least 7 years of experience in developing custom analytical GIS solutions and conducting spatial analysis. (minimum requirement)

Field Survey Manager (FSM) – one expert

The proposed Field Survey Manager will be evaluated according to the following criteria:

3.	Field Survey Manager
	Master's degree in the field related to Geography (minimum requirement)
	At least 4 years of experience managing field survey and data collection activities (minimum requirement)
	Must possess a certificate related to field survey and GPS operation (minimum requirement)

Field Surveyor– Minimum four experts

The proposed Field Surveyors will be evaluated according to the following criteria:

4.	Field Surveyor
	Bachelor's degree in the field related to Geography (minimum requirement)
	A certificate related to field survey and GPS operation (minimum requirement)
	Experience in field survey are considered as an asset

GIS Operator– Minimum two experts

The proposed GIS Operators will be evaluated according to the following criteria:

5.	GIS Operator
	Bachelor's degree in the field related to Geography or Computer Science (minimum requirement)
	At least 2 (two) years of experience in inputting/editing spatial and attributive data using GIS software (minimum requirement)

D. Cost Breakdown per Deliverable* მოვიდეს შესაბამისობაში ToR-თან და Work Plan-თან.

Instalment	Deliverables <i>[list them as referred to in the RFP]</i>	Percentage of Total Price <i>(Weight for payment)</i>	Price <i>(Lump Sum, All Inclusive)</i>
1	Deliverable 2,11,12	10%	
2	Deliverable 1,3,13,15	20%	
3	Deliverable 14,16,17,18,19,20,21	20%	
4	Deliverable 4,5,6	25%	
5	Deliverable 7,8,9	15%	
6	Deliverable 10	10%	
	Total	100%	

E. Cost Breakdown by Cost Component:

(The Bidder must only use the table below, while representing the budget of the project/assignment).

1. Personnel Services

№.	Description of Tasks	Man-Days Please indicate number of days required for each expert to be engaged in the specific task								
		Project Manager/ GIS Analyst*	Developer (Programmer)*	Field Survey Manager *	GIS Operator *	GIS Operator *	Field Surveyor *	Field Surveyor *	Field Surveyor *	Field Surveyor *
1	Review and assessment of the existing socio-economic model									
1.1	Report on review and assessment of the existing socio-economic and comparative review and assessment of existing off-the-shelf socio-economic models against technical specification									
2	Upscaling up of the existing socio-economic model									
2.1	Requirements specification for modelling tool (covering functional and non-functional requirements)									
2.2	System design specification for modelling tool									
2.3	Draft updated socio-economic model tool									
2.4	Draft technical manual, draft user manual for socio economic model									
2.5	User acceptance testing results and report									
2.6	Socio-economic model for Supsa river basin (with Multi-hazard maps)									
2.7	Socio-economic model for Natanebi river basin (with Multi-hazard maps)									
2.8	Socio-economic model for Kintrishi river basin (with Multi-hazard maps)									
2.9	Updated GIS-based multi-hazard socio-economic vulnerability modelling tool (including all software code) and data files delivered to UNDP and EMS									
3	Data collection and survey									
3.1	Survey strategy and Survey preparation (logistical plan)									
3.2	Report reviewing data quality of data extracted from secondary sources									
3.3	Establish GIS-based multi-hazard socio-economic vulnerability database for integration of all relevant socio-economic, receptor, and other datasets									

3.4	Develop vulnerability survey tools including participatory Geographical Information Systems (PGIS) methods									
3.5	Design/identify data collection and analysis application for indicators in each receptor sector									
3.6	Community/Municipality engagement, mobilization and sensitization plans									
3.7	Community/Municipality Communications strategy for prior to implementation of surveys									
3.8	Field survey report for Supsa river basin									
3.9	Field survey report for Natanebi river basin									
3.10	Field survey report for Kintrishi river basin									
3.11	Technical field reports: a full technical report discussing the results of the analysis of the socio-economic survey for three river basins (including survey data)									
A	Total estimated input (man-days) per each expert**									
B	Daily Consultancy rate (USD) (For each Expert)									
	Sub-TOTAL Personnel Services	A*B	A*B	A*B	A*B	A*B	A*B	A*B	A*B	A*B

2. Other related Costs ***

#	Description of Cost	Unit	Number of units	Unit rate USD	Total USD
1	Transportation to the site and back	KM			
2	Communication Cost	1 Month			
3	Accommodation	Man/day			
4	Daily Allowance	Man/day			
5	Translation Cost	Per page			
6...	Other as applicable				
	Sub-TOTAL other costs				

GRAND TOTAL USD (personnel services and other costs) (00+00=00)

*Please indicate number of days required for each expert to be engaged in the specific task

** Total number of days should be summed for each expert

*** 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 Services

1.0 LEGAL STATUS:

The Contractor shall be considered as having the legal status of an independent contractor vis-à-vis the United Nations Development Programme (UNDP). The Contractor's personnel and sub-contractors shall not be considered in any respect as being the employees or agents of UNDP or the United Nations.

2.0 SOURCE OF INSTRUCTIONS:

The Contractor shall neither seek nor accept instructions from any authority external to UNDP in connection with the performance of its services under this Contract. The Contractor shall refrain from any action that may adversely affect UNDP or the United Nations and shall fulfill its commitments with the fullest regard to the interests of UNDP.

3.0 CONTRACTOR'S RESPONSIBILITY FOR EMPLOYEES:

The Contractor shall be responsible for the professional and technical competence of its employees and will select, for work under this Contract, reliable individuals who will perform effectively in the implementation of this Contract, respect the local customs, and conform to a high standard of moral and ethical conduct.

4.0 ASSIGNMENT:

The Contractor shall not assign, transfer, pledge or make other disposition of this Contract or any part thereof, or any of the Contractor's rights, claims or obligations under this Contract except with the prior written consent of UNDP.

5.0 SUB-CONTRACTING:

In the event the Contractor requires the services of sub-contractors, the Contractor shall obtain the prior written approval and clearance of UNDP for all sub-contractors. The approval of UNDP of a sub-contractor shall not relieve the Contractor of any of its obligations under this Contract. The terms of any sub-contract shall be subject to and conform to the provisions of this Contract.

6.0 OFFICIALS NOT TO BENEFIT:

The Contractor warrants that no official of UNDP or the United Nations has received or will be offered by the Contractor any direct or indirect benefit arising from this Contract or the award thereof. The Contractor agrees that breach of this provision is a breach of an essential term of this Contract.

7.0 INDEMNIFICATION:

The Contractor shall indemnify, hold and save harmless, and defend, at its own expense, UNDP, its officials, agents, servants and employees from and against all suits, claims, demands, and liability of any nature or kind, including their costs and expenses, arising out of acts or omissions of the Contractor, or the Contractor's employees, officers, agents or sub-contractors, in the performance of this Contract. This provision shall extend, inter alia, to claims and liability in the nature of workmen's compensation, products liability and liability arising out of the use of patented inventions or devices, copyrighted material or other intellectual property by the Contractor, its employees, officers, agents, servants or sub-contractors. The obligations under this Article do not lapse upon termination of this Contract.

8.0 INSURANCE AND LIABILITIES TO THIRD PARTIES:

8.1 The Contractor shall provide and thereafter maintain insurance against all risks in respect of its property and any equipment used for the execution of this Contract.

- 8.2** The Contractor shall provide and thereafter maintain all appropriate workmen's compensation insurance, or the equivalent, with respect to its employees to cover claims for personal injury or death in connection with this Contract.
- 8.3** The Contractor shall also provide and thereafter maintain liability insurance in an adequate amount to cover third party claims for death or bodily injury, or loss of or damage to property, arising from or in connection with the provision of services under this Contract or the operation of any vehicles, boats, airplanes or other equipment owned or leased by the Contractor or its agents, servants, employees or sub-contractors performing work or services in connection with this Contract.
- 8.4** Except for the workmen's compensation insurance, the insurance policies under this Article shall:
- 8.4.1** Name UNDP as additional insured;
 - 8.4.2** Include a waiver of subrogation of the Contractor's rights to the insurance carrier against the UNDP;
 - 8.4.3** Provide that the UNDP shall receive thirty (30) days written notice from the insurers prior to any cancellation or change of coverage.
 - 8.5** The Contractor shall, upon request, provide the UNDP with satisfactory evidence of the insurance required under this Article.

9.0 ENCUMBRANCES/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 the UNDP against any monies due or to become due for any work done or materials furnished under this Contract, or by reason of any other claim or demand against the Contractor.

10.0 TITLE TO EQUIPMENT:

Title to any equipment and supplies that may be furnished by UNDP shall rest with UNDP and any such equipment shall be returned to UNDP at the conclusion of this 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. The Contractor shall be liable to compensate UNDP for equipment determined to be damaged or degraded beyond normal wear and tear.

11.0 COPYRIGHT, PATENTS AND OTHER PROPRIETARY RIGHTS:

- 11.1** Except as is otherwise expressly provided in writing in the Contract, the 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 the 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, and the Contractor acknowledges and agrees that such products, documents and other materials constitute works made for hire for the UNDP.
- 11.2** 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, the UNDP does not and shall not claim any ownership interest thereto, and the Contractor grants to the 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.
- 11.3** At the request of the 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 the UNDP in compliance with the requirements of the applicable law and of the Contract.
- 11.4** 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 the UNDP, shall be made available for use or inspection by the 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.

12.0 USE OF NAME, EMBLEM OR OFFICIAL SEAL OF UNDP OR THE UNITED NATIONS:

The Contractor shall not advertise or otherwise make public the fact that it is a Contractor 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 United Nations in connection with its business or otherwise.

13.0 CONFIDENTIAL NATURE OF DOCUMENTS AND INFORMATION:

Information and data that is considered proprietary by either Party and 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:

13.1 The recipient ("Recipient") of such information shall:

13.1.1 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,

13.1.2 use the Discloser's Information solely for the purpose for which it was disclosed.

13.2 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 13, the Recipient may disclose Information to:

13.2.1 any other party with the Discloser's prior written consent; and,

13.2.2 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:

13.2.2.1 a corporate entity in which the Party owns or otherwise controls, whether directly or indirectly, over fifty percent (50%) of voting shares thereof; or,

13.2.2.2 any entity over which the Party exercises effective managerial control; or,

13.2.2.3 for the UNDP, an affiliated Fund such as UNCDF, UNIFEM and UNV.

13.3 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 the UNDP sufficient prior notice of a request for the disclosure of Information in order to allow the UNDP to have a reasonable opportunity to take protective measures or such other action as may be appropriate before any such disclosure is made.

13.4 The UNDP may disclose Information to the extent as required pursuant to the Charter of the UN, resolutions or regulations of the General Assembly, or rules promulgated by the Secretary-General.

13.5 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.

13.6 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.

14.0 FORCE MAJEURE; OTHER CHANGES IN CONDITIONS

14.1 In the event of and as soon as possible after the occurrence of any cause constituting force majeure, the Contractor shall give notice and full particulars in writing to the UNDP, of such occurrence or change if the Contractor is thereby rendered unable, wholly or in part, to perform its obligations and meet its responsibilities under this Contract. The Contractor shall also notify the UNDP of any other changes in conditions or the occurrence of any event that interferes or threatens to interfere with its performance of this Contract. On receipt of the notice required under this Article, the UNDP shall take such action as, in its

sole discretion; it considers to be appropriate or necessary in the circumstances, including the granting to the Contractor of a reasonable extension of time in which to perform its obligations under this Contract.

- 14.2** If the Contractor is rendered permanently unable, wholly, or in part, by reason of force majeure to perform its obligations and meet its responsibilities under this Contract, the UNDP shall have the right to suspend or terminate this Contract on the same terms and conditions as are provided for in Article 15, "Termination", except that the period of notice shall be seven (7) days instead of thirty (30) days.
- 14.3** Force majeure as used in this Article means acts of God, war (whether declared or not), invasion, revolution, insurrection, or other acts of a similar nature or force.
- 14.4** The Contractor acknowledges and agrees that, with respect to any obligations under the Contract that the Contractor must perform in or for any areas in which the 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 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..

15.0 TERMINATION

- 15.1** Either party may terminate this Contract for cause, in whole or in part, upon thirty (30) days notice, in writing, to the other party. The initiation of arbitral proceedings in accordance with Article 16.2 ("Arbitration"), below, shall not be deemed a termination of this Contract.
- 15.2** UNDP reserves the right to terminate without cause this Contract at any time upon 15 days prior written notice to the Contractor, in which case UNDP shall reimburse the Contractor for all reasonable costs incurred by the Contractor prior to receipt of the notice of termination.
- 15.3** In the event of any termination by UNDP under this Article, no payment shall be due from UNDP to the Contractor except for work and services satisfactorily performed in conformity with the express terms of this Contract.
- 15.4** Should the Contractor be adjudged bankrupt, or be liquidated or become insolvent, or should the Contractor make an assignment for the benefit of its creditors, or should a Receiver be appointed on account of the insolvency of the Contractor, the UNDP may, without prejudice to any other right or remedy it may have under the terms of these conditions, terminate this Contract forthwith. The Contractor shall immediately inform the UNDP of the occurrence of any of the above events.

16.0 SETTLEMENT OF DISPUTES

- 16.1 Amicable Settlement:** The Parties shall use their best efforts to settle amicably any dispute, controversy or claim arising out of this 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 UNCITRAL Conciliation Rules then obtaining, or according to such other procedure as may be agreed between the parties.
- 16.2 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 16.1, 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. For all evidentiary questions, the arbitral tribunal shall be guided by the Supplementary Rules Governing the Presentation and Reception of Evidence in International Commercial Arbitration of the International Bar Association, 28 May 1983 edition. 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, 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 of Protection") and Article 32 ("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.

17.0 PRIVILEGES AND IMMUNITIES:

Nothing in or relating to this Contract shall be deemed a waiver, express or implied, of any of the privileges and immunities of the United Nations, including its subsidiary organs.

18.0 TAX EXEMPTION

18.1 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 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 United Nations exemption from such taxes, duties or charges, the Contractor shall immediately consult with the UNDP to determine a mutually acceptable procedure.

18.2 Accordingly, the Contractor authorizes UNDP to deduct from the Contractor's invoice any amount representing such taxes, duties or charges, unless the Contractor has consulted with the UNDP before the payment thereof and the UNDP has, in each instance, specifically authorized the Contractor to pay such taxes, duties or charges under protest. In that event, the Contractor shall provide the UNDP with written evidence that payment of such taxes, duties or charges has been made and appropriately authorized.

19.0 CHILD LABOUR

19.1 The Contractor represents and warrants that neither it, nor any of its suppliers 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.

19.2 Any breach of this representation and warranty shall entitle UNDP to terminate this Contract immediately upon notice to the Contractor, at no cost to UNDP.

20.0 MINES:

20.1 The Contractor represents and warrants that neither it nor any of its suppliers is actively and directly engaged in patent activities, development, assembly, production, trade or manufacture of mines or in such activities in respect of components primarily utilized in the manufacture of Mines. The term "Mines" means those devices defined in Article 2, Paragraphs 1, 4 and 5 of Protocol II annexed to the Convention on Prohibitions and Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects of 1980.

20.2 Any breach of this representation and warranty shall entitle UNDP to terminate this Contract immediately upon notice to the Contractor, without any liability for termination charges or any other liability of any kind of UNDP.

21.0 OBSERVANCE OF THE LAW:

The Contractor shall comply with all laws, ordinances, rules, and regulations bearing upon the performance of its obligations under the terms of this Contract.

22.0 SEXUAL EXPLOITATION:

22.1 The Contractor shall take all appropriate measures to prevent sexual exploitation or abuse of anyone by it or by any of its employees or any other persons who may be engaged 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 appropriate measures to prohibit its employees or other persons engaged by it from, exchanging any money, goods, services, offers of employment or other things of value, for sexual favors or activities, or from engaging in any sexual

activities that are exploitive or degrading to any person. The Contractor acknowledges and agrees that the provisions hereof constitute an essential term of the Contract and that any breach of this representation and warranty shall entitle UNDP to terminate the Contract immediately upon notice to the Contractor, without any liability for termination charges or any other liability of any kind.

- 22.2** The 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.

23.0 AUTHORITY TO MODIFY:

Pursuant to the Financial Regulations and Rules of UNDP, only the UNDP Authorized Official possesses the authority to agree on behalf of UNDP to any modification of or change in this Contract, to a waiver of any of its provisions or to any additional contractual relationship of any kind with the Contractor. Accordingly, no modification or change in this Contract shall be valid and enforceable against UNDP unless provided by an amendment to this Contract signed by the Contractor and jointly by the UNDP Authorized Official.

TERMS OF REFERENCE

Projects: **“Scaling-up Multi-Hazard Early Warning System and the Use of Climate Information in Georgia”**

Proposal Title: **Introduction and implementation of methods and tools for the systematic gender-sensitive socio-economic vulnerability assessment for decision-making for prioritization of resilience investments.**

Duration of 13 months

Contract:

1. BACKGROUND

Georgia is exposed to various climate-induced hazards including floods and flash floods, climate-induced geological hazards (including landslides, mudflow, debris flows), droughts, soil erosion, severe winds, hailstorms and avalanches, predominately due to the diverse and complex terrain of the Caucasus mountains, its significant influence and the influence of the Black Sea and Caspian Sea on the climate and weather of the region, Georgia is exposed to various climate-induced hazards including floods and flash floods, climate-induced geological hazards (including landslides, mudflow, debris flows), droughts, soil erosion, severe winds, hailstorms and avalanches. Furthermore, according to Georgia's the 2nd and the 3rd National Communications, the frequency, intensity and geographical spread of extreme hydro meteorological hazards will increase under climate change and may result in significant impacts on key sectors including agriculture, critical infrastructure (transportation networks, buildings, roads, water supply, energy installations), natural resources and ecosystems, glaciers and forests.

To address the existing development challenges, UNDP Georgia designed a program aimed at reducing 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 achieve transformative change in disaster risk reduction and risk management in Georgia through provision of critical climate risk information that would enable the Government of Georgia to implement number of nation-wide transformative policies and actions for reducing exposure and vulnerability of the population to climate-induced hazards. To this end, the project will rehabilitate the national hydrometric network to systematically collect data on climate-induced hazards. The project will undertake relevant technical studies to model and map all relevant climate induced natural hazards for Georgia to provide a single source of definitive hazard mapping of the appropriate technical specification and level of detail for all uses, building upon modern modelling methods and software. The project will address the lack of gender-sensitive socio-economic data and relevant capacities for risk, damages, losses, exposure and vulnerability assessments by developing and harmonising methodologies and technologies for the systematic collection of socioeconomic information required to assess climate induced hazard damages, losses, exposure and vulnerability.

AIM OF THE ASSIGNMENT

The assignment has three main aims:

- a) Review and assess the existing socio-economic model developed for the Rioni project, including 'lessons learned' and comparison against International Vulnerability models.
- b) Upscaling of the existing socio-economic model to include risk modelling, and mapping for 7 hazards (floods and flashfloods, hail, drought, landslide, mudflow, avalanche and wind), the calculation of economic damages and losses for all receptor sectors including Property, Agriculture, Utilities – water supply and disposal and energy - and communications – road, rail and telecoms, Commercial activities, Cultural heritage, environment, Education and health (the current model only includes economic damages and losses calculation for property and agriculture. Data for the model can be obtained from secondary source Geostat or Census data at an appropriate level of disaggregation (community, Municipality or Region), or collected via discussions with Municipalities or appropriate Ministries.
- c) Under guidance of the project environmental economist expert, develop an appropriate sampling framework within defined hazard intensity areas (to be provided to the consultant), for the collection of data for development of socio-economic vulnerability indicators for the model and for the longer-term updating of such indicators in the

future. The company will work closely with the UNDP environmental economist expert to define the attributes of the indicators of economic vulnerability. Undertake field surveys based on the survey strategy.

2. **SCOPE OF WORK, RESPONSIBILITIES AND DESCRIPTION OF THE PROPOSED ANALYTICAL WORK**

The company is expected to work closely with EMS, the international Environmental Economics Expert and international Systems and Technology Expert to develop a socio-economic risk modelling and assessment tool for multi-hazard risk mapping.

Duties and Responsibilities

- 1) Review and assessment of the existing socio-economic model
 - a. Undertake a review and assessment of the existing socio-economic model and document all functional and non-functional aspects of the model
 - b. Undertake a comparative review and assessment of existing off-the-shelf socio-economic models
- 2) Upscaling up of the existing socio-economic model to include risk modelling, and mapping for 7 hazards and calculation of economic damages of all receptor sectors
 - a. **Requirements Engineering** - Develop requirements specification based on the proposed upscaled model technical methodology (to be prepared by environmental economist) and the user requirements gathering exercise of the key stakeholders – EMS. Undertake analysis and assessment of requirements to determine prioritization (applying MoSCoW), validity and organization of functional and non-functional requirements of the proposed upscale model
 - b. **Planning** - Develop a formal project plan outlining the development phases and key milestones to successfully deliver the tool, with agreement on the scope of requirements to be addressed. With a preference for use of an agile delivery approach with frequent stakeholder engagement and review stages.
 - c. **Design** – Develop the model architecture to be implemented based on the detailed plan
 - d. **Development and implementation.**
 - i. Develop and codify the changes to the exiting GIS-based socio-economic model. Revise the code of the Rioni model to enhance functionality (implementing the update based on the technical specific and logic for the model). This should include updating of the coding of the model to reflect any changes in model is calculations. Model will cover socio-economic risk, for all 7 hazards and all risk receptor listed above, and a sectoral damage and assessment module to calculate damage and loss for all receptors and all 7 hazards.
 - ii. Develop and codify the user interface and other aspects of the model based on the user requirements
 - iii. The bidder should identify all of the relevant and up-to-date hardware and software to be used in the assignment in their proposed technical methodology and is expected to have access to these undertaking the assignment.
 - e. **Testing and calibration –**
 - i. Calibrate the revised and updated socio-economic risk model
 - ii. Undertake technical testing to assess model and software bugs if any. Implement a user acceptance testing (UAT) regime
 - f. **Maintenance –**
 - i. Liaise with Emergency Management Service and develop a strategy long-term for updates, maintenance and management of model datasets and model, with appropriate training.
- 3) Develop and undertake a data sampling strategy
 - a. Review the existing outline taxonomy of indicator attributes within all receptor sectors
 - b. Develop scope of work for data collection in each receptor sector
 - c. Determine the sample size of confirmatory field surveys in the 3 initial basins (Supsa, Kintrishi, Natanebi) in SW Georgia (see map).
 - d. Develop appropriate survey strategy and sampling for all other basins in Georgia
 - e. Review the data quality of data extracted from secondary sources or provided during data sampling
 - f. Access and combine all digital geo spatial datasets, e.g. Public Registry Orthophotos; 112 data; Geostat data; Open street map
 - g. Develop the GIS layers for and create mosaics of, spatial data for all sector receptors within communities, Municipalities and Regions for all modelled hazard intensities for Flood, Wind, Hail, Drought, Landslide, Mudflow and Avalanche hazards. Modelled intensity hazards will be provided to the consultant.
 - h. Design or access an appropriate data collection and analysis application for indicators in each receptor

- sector
- i. Establishment of GIS-based multi-hazard socio-economic vulnerability database for integration of all relevant socio-economic, receptor, and other datasets
- j. Develop vulnerability survey tools including participatory Geographical Information Systems (PGIS) methods. PGIS will be a tool included in the GIS-based socio-economics tool (or a separate tool to be used alongside it).
- k. Develop Community/Municipality engagement, mobilization and sensitization plans
- l. Develop Community/Municipality Communications strategy for prior to implementation of surveys

Data collection and sampling Approach

Geographical scope

Data is to be collected in the following river basins: Natanebi, Kintrishi and Supsa. Because detailed modelling has not been completed yet, the CENN high level risk intensity modelling will be used to define approximate hazard areas as well as supplemented with data from NEA on recent work on mudflows and avalanches/landslides and an approximate maximum flood area as defined by NEA. After completion of detailed modelling for the three basins by the project (under Activity 1.2), the company will update hazard areas for these three river basins.

Data collection and field work

Secondary data from open source maps and Geostat data will allow the consultant to assess the scale of sampling within intensity hazard areas. Sampling within a maximum of 5,000 properties is estimated within the Flood Hazard and Landslide/Mudflow hazard severity zones of the initial 3 river basins.

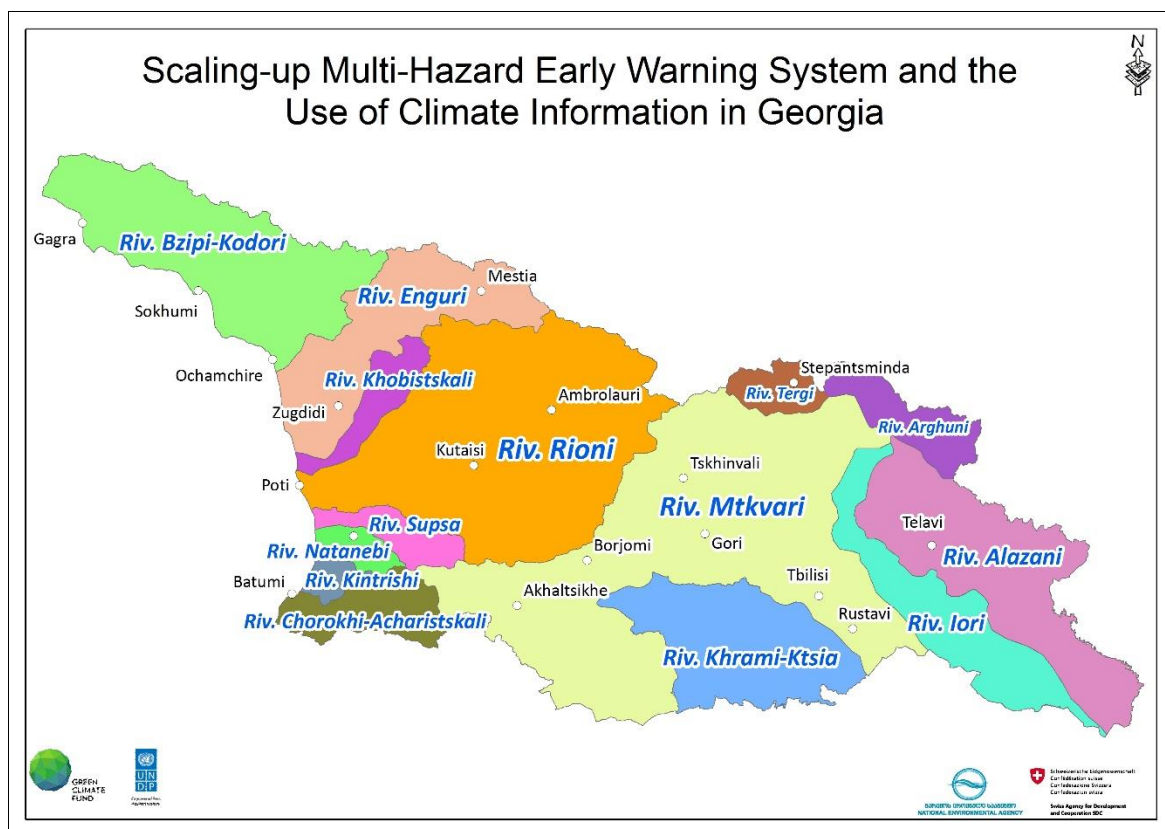
Primary data will need to be collected from different central institutions, Ministries, Geostat, Ministry of Justice (Public Registry). Based on the existing information the hired company will need to collect additional information from local authorities of four municipalities located in Kintrishi, Natanebi and Supsa river basins.

Survey

The survey should apply the survey method to be elaborated by the project's Environmental Economist. Based on this methodology, the company will be responsible to develop the sampling approach for surveying the attributors for development of the receptor socio-economic vulnerability indicators for the model, in close collaboration with the project's environmental economist.

Data collection and surveys will be concentrated in the three initial basins in Year 1 with roll out to the other 11 river basins in years 2 and 3. The Table below illustrates the scale of Year 1 activities

The initial data gathering and sampling will be conducted to communities within 4 Municipalities (Kobuleti – Adjara region; Lanchkhuti, Ozurgeti and Chokhatauri – Guria region) covering the majority of three basins (Kintrishi, Natanebi and Supsa) in SW Georgia.



3. PROJECT EXPECTED OUTPUTS AND DELIVERABLES

Contractor is expected to produce the following deliverables:

Review and assessment of the existing socio-economic model

- a) Report on review and assessment of the existing socio-economic and comparative review and assessment of existing off-the-shelf socio-economic models against technical specification

Upscaling up of the existing socio-economic model

- b) Requirements specification for modelling tool (covering functional and non-functional requirements);
- c) System design specification for modelling tool;
- d) Draft of updated socio-economic model tool;
- e) Draft technical manual, draft user manual for socio economic model;
- f) User acceptance testing results and report;
- g) Socio-economic model for Supsa river basin (with Multi-hazard maps);
- h) Socio-economic model for Natanebi river basin (with Multi-hazard maps);
- i) Socio-economic model for Kintrishi river basin (with Multi-hazard maps);
- j) Final GIS-based multi-hazard socio-economic vulnerability modelling tool delivered to UNDP and EMS.

Data collection and survey

- a) Survey strategy (February); Survey preparation (logistical plan);
- b) Report reviewing data quality of data extracted from secondary sources (Public Registry Orthophotos; 112 data; Geostat data; Open street map) or provided during data sampling to include mosaic of GIS layers for all sector receptors within communities, Municipalities and Regions for all modelled hazard intensities for Flood, Wind, Hail, Drought, Landslide, Mudflow and Avalanche hazards. Modelled intensity hazards will be provided to the consultant ;
- c) Established GIS-based multi-hazard socio-economic vulnerability database for integration of all relevant socio-economic, receptor, and other datasets;
- d) Developed vulnerability survey tools including participatory Geographical Information Systems (PGIS) methods;
- e) Designed/identified data collection and analysis application for indicators in each receptor sector ;
- f) Community/Municipality engagement, mobilization and sensitization plans ;
- g) Community/Municipality Communications strategy for prior to implementation of surveys ;
- h) Field survey report for Supsa river basin ;

- i) Field survey report for Natanebi river basin ;
- j) Field survey report for Kintrishi river basin ;
- k) Technical field reports: a full technical report on the survey and sampling shall be provided to the UNDP by the contractor including but not limited to the following:

INTRODUCTION

SURVEY METHODOLOGY

- *Sampling Design and Procedure – Built environment*
- *Sampling Design and Procedure – Agricultural land Use*
- *Procedure for location of linear and point receptors and their attributes (e.g. roads, power plants etc.)*
- *Survey Implementation and timeline*
- *Delivery media (database, GIS spatial orthophotos, digital photos)*

RESULTS AND DISCUSSION, including any outstanding issues

- *Basin 1*
- *Basin 2*
- *Basin 3*

APPENDICES

- *Raw Data*
- *Photos of Built environment including infrastructure*
- *Digital Maps of surveyed areas referenced by receptor type*

- l) Data processing, analysis and reporting. Based on the survey results, the contractor shall produce the report discussing the results of the analysis of the socio-economic survey for three river basins (including survey data) ;
- m) Socio-economic modelling. The obtained data should be processed in the updated GIS based socio-economic model. The socio-economic modelling tool (including all software code) and data files should be provided to the UNDP. Updated GIS based modelling tool with all datasets should be delivered to UNDP and Emergency Management Services. The socio-economic modelling reports shall present outputs of socio-economic modeling for three river basins;

All main reports should be prepared in both languages Georgian and English.

The draft strategy and reports shall be presented to UNDP before finalization for feedback and comments.

Note: The completed model, all raw and processed data and the data base shall be property of UNDP, and the company will have no rights to use its results, other than for the current assignment. Neither, the company will have the right to transfer it to anyone without a prior written consent of UNDP.

TIMETABLE OF ACTIVITIES

No.	Deliverables	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-20	Feb-20	Mar-20	Apr-21
	Review and assessment of the existing socio-economic model													
1	Report on review and assessment of the existing socio-economic and comparative review and assessment of existing off-the-shelf socio-economic models against technical specification													
	Upscaling up of the existing socio-economic model													
2	Requirements specification for modelling tool (covering functional and non-functional requirements)													
3	System design specification for modelling tool													
4	Draft of updated socio-economic model tool													
5	Draft technical manual, draft user manual for socio economic model													
6	User acceptance testing results and report													
7	Socio-economic model for Supsa river basin (with Multi-hazard maps)													
8	Socio-economic model for Natanebi river basin (with Multi-hazard maps)													
9	Socio-economic model for Kintrishi river basin (with Multi-hazard maps)													
10	Updated GIS-based multi-hazard socio-economic vulnerability modelling tool (including all software code) and data files delivered to UNDP and EMS													
	Data collection and survey													
11	Survey strategy (February); Survey preparation (logistical plan)													
12	Report reviewing data quality of data extracted from secondary sources													
13	Established GIS-based multi-hazard socio-economic vulnerability database for integration of all relevant socio-economic, receptor, and other datasets (April)													
14	Developed vulnerability survey tools including participatory Geographical Information Systems (PGIS) methods.													
15	Designed/identified data collection and analysis application for indicators in each receptor sector													
16	Community/Municipality engagement, mobilization and sensitization plans													
17	Community/Municipality Communications strategy for prior to implementation of surveys													
18	Field survey report for Supsa river basin													
19	Field survey report for Natanebi river basin													
20	Field survey report for Kintrishi river basin													
21	Technical field reports: a full technical report discussing the results of the analysis of the socio-economic survey for three river basins (including survey data)													

5 QUALIFICATIONS OF THE SUCCESSFUL SERVICE PROVIDER AT VARIOUS LEVELS

5.1 Expertise of the Service Provider

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) Profile – describing the nature of business, field of expertise, certification (if any) etc.;
- b) Business License – Registration Paper.
- c) Minimum 7 (seven) years of experience, starting from 2000 year, related to GIS consultancy, including field data collection and spatial data analysis projects **(Minimum Requirement);**
- d) At least one successfully executed project (contract) with GIS based similar complexity within the last 5 (five) years **(Minimum Requirement);**
- e) At least 1 (one) reference letter confirming successfully implemented GIS projects **(Minimum Requirement);**
- f) The bidder must have a local office in Georgia, which is a registered company in Georgia – Registration paper or tax payment certification **(Minimum Requirement);**
- g) The bidder must be equipped with at least 4 (four) units of Survey Grade GPS receivers **(Minimum Requirement);**
- h) A Bank letter certifying annual turnover not less than 350 000 GEL (per year) during last 3 years **(minimum requirement);**
- i) The experience in the area of GIS development (programming custom, advanced analytical solutions) is considered as an asset;
- j) Written Self-Declaration that the company is not in the UN Security Council 1267/1989 List, UN Procurement Division List or Other UN Ineligibility List.

F. Qualifications of Key Personnel

Service Provider must provide:

1. Names and qualifications of the key personnel that will perform the services indicating who is Project Manager, who are supporting, etc.
2. CVs demonstrating qualifications defined as per ToR must be submitted as given in Annex N5.
3. Written confirmation from each personnel that they are available for the entire duration of the contract.

Company must propose: Project Manager/GIS Analyst (PM); Developer (Programmer) (Dev) – minimum one expert; Field Survey Manager (FSM) – minimum one expert; Field Surveyor – minimum four experts; GIS Operator – minimum two operators.

At minimum:

Project Manager /GIS Analyst (PM) – one expert:

The PM shall be responsible for the coordination of all consultancy services and ensuring the quality of the project deliverables. The proposed Project Manager will be evaluated according to the following criteria:

1	Project Manager/GIS Analyst
	Master's degree in the field related to Geography or Computer Science. (minimum requirement).
	at least 10 years of experience in GIS consultancy and GIS project management (minimum requirement)
	Participation in at least one project specifically in socio-economic analysis; (minimum requirement).
	must possess an internationally accepted GIS certificate (minimum requirement)

Developer (Programmer) (Dev) – one expert

The proposed Developer (Programmer) will be evaluated according to the following criteria:

2.	Developer (Programmer)
	Master's degree in the field related to Computer Science; (minimum requirement)
	At least 7 years of experience in developing custom analytical GIS solutions and conducting spatial analysis. (minimum requirement)

Field Survey Manager (FSM) – one expert

The proposed Field Survey Manager will be evaluated according to the following criteria:

3.	Field Survey Manager
	Master's degree in the field related to Geography (minimum requirement)
	At least 4 years of experience managing field survey and data collection activities (minimum requirement)
	Must possess a certificate related to field survey and GPS operation (minimum requirement)

Field Surveyor– Minimum four experts

The proposed Field Surveyor will be evaluated according to the following criteria:

4.	Field Surveyor
	Bachelor's degree in the field related to Geography (minimum requirement)
	A certificate related to field survey and GPS operation (minimum requirement)
	Experience in field survey are considered as an asset

GIS Operator– Minimum two experts

The proposed GIS Operator will be evaluated according to the following criteria:

5.	GIS Operator
	Bachelor's degree in the field related to Geography or Computer Science (minimum requirement)
	At least 2 (two) years of experience in inputting/editing spatial and attributive data using GIS software (minimum requirement)

5.2 Recommended Presentation of Proposal

The Proposal should be submitted according to the forms and instructions given in the RFP in English language.

5.3 Criteria and formula for Selecting the Best Offer

Selection of service provider will be based on Combined Scoring method – where the qualifications and methodology (Technical Proposal) will be weighted a maximum of 70% and combined with the price offer (Financial Proposal) which will be weighted a maximum of 30%.

The cumulative/final evaluation of the bids will be performed based on the scoring method and the formula provided below:

Rating the Technical Proposal (TP):

TP Rating = (Total Score Obtained by the offer / Max. Obtainable Score for TP)X100 Rating the Financial Proposal (FP);

FP Rating = (Lowest Priced offered/Price of the Offer Being Reviewed) X100 Total Combined Score:

Combined Score = (TP Rating) x (Weigh of TP. E.b 70%)+(FP Rating) x (Weigh of Tp, e.g, 30%)

5.5 Payment modality

Contractor will be paid in instalments upon satisfactory accomplishment of each of the above-mentioned phase and according to the following scheme:

Deliverables	Amount to be paid
Deliverables, 2, 11, 12	10%
Deliverables 1, 3, 13, 15	20%
Deliverables 14, 16, 17, 18, 19, 20, 21	20%
Deliverables 4, 5,6	25%
Deliverables 7, 8, 9	15%
Deliverable 10	10%

Annex 5

CV Forms for the proposed Personnel

Name of Personnel	[Insert]
Position for this assignment	[Insert]
Nationality	[Insert]
Language proficiency	[Insert]
Education/ Qualifications	<i>[Summarize college/university and other specialized education of personnel member, giving names of schools, dates attended, and degrees/qualifications obtained.]</i> [Insert]
Professional certifications	<i>[Provide details of professional certifications relevant to the scope of services]</i> ■ Name of institution: [Insert] ■ Date of certification: [Insert]
Employment Record/ Experience	<i>[List all positions held by personnel (starting with present position, list in reverse order), giving dates, names of employing organization, title of position held and location of employment. For experience in last five years, detail the type of activities performed, degree of responsibilities, location of assignments and any other information or professional experience considered pertinent for this assignment.]</i> [Insert]
References	<i>[Provide names, addresses, phone and email contact information for two (2) references]</i> Reference 1: [Insert] Reference 2: [Insert]

I, the undersigned, certify that to the best of my knowledge and belief, these data correctly describe my qualifications, my experiences, and other relevant information about myself.

I also confirm my availability for the entire duration of the contract.

Signature of Personnel

Date (Day/Month/Year)

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	400
2.	Proposed Methodology, Approach and Implementation Plan	200
3.	Management Structure and Key Personnel	400
	Total	1000

Section 1. Bidder's qualification, capacity and experience			Points MAX obtainable
1.1	<i>Minimum 7 (seven) years of experience, starting from 2000 year, related to GIS consultancy, including field data collection and spatial data analysis projects (Minimum Requirement);</i>		100
	<i>7 years (Minimum Requirement);</i>	70	
	<i>More than 7 years;</i>	100	
1.2	At least one successfully executed project (contract) with GIS based similar complexity within the last 5 (five) years (Minimum Requirement)		80
	1 contract/project (Minimum requirement)	50	
	More than 1 contract/project	80	
1.3	At least 1 (one) reference letter confirming successfully implemented GIS project (Minimum Requirement);		80
	1 reference (Minimum requirement)	50	
	More than 1 references	80	
1.4	The bidder must have a local office in Georgia, which is a registered company in Georgia – Registration paper or tax payment certification (Minimum Requirement)	30	30
1.5	The bidder must be equipped with at least 4 (four) units of Survey Grade GPS receivers (Minimum requirement)	30	30
1.6	The experience in the area of GIS development (programming custom, advanced analytical solutions) is considered as an asset .		30
1.7	annual turnover not less than 350 000 GEL (per year) during last 3 years (minimum requirement);	50	50
Total Section 1			400

Section 2. Proposed Methodology, Approach and Implementation Plan			Points MAX obtainable
2.1	Understanding of the requirement: Have the important aspects of the task been addressed in sufficient detail? Are the different components of the project adequately weighted relative to one another?		50
	Important aspects of the task have been addressed in sufficient detail. Different components of the project are adequately weighted relative to one another (minimum requirement)	50	
2.2	Description of the Offeror's approach and methodology for meeting or exceeding the requirements of the Terms of Reference		100
	Approach and methodology meet the requirements of the Terms of Reference (minimum requirement)	40	
	Approach and methodology exceed requirements of the Terms of Reference	100	
2.3	Assessment of the implementation plan proposed including whether the activities are properly sequenced and if these are logical and realistic		50
	Activities are properly sequenced, are logical and realistic (minimum requirement)	50	
Total Section 2			200

Section 3. Management Structure and Key Personnel			Points MAX obtainable
3.1	Project Manager/GIS Analyst		100
	Master's degree in the field related to Geography or Computer Science. (minimum requirement).	20	
	PhD in the field related to Geography or Computer Science	35	
	at least 10 years of experience in GIS consultancy and GIS project management (minimum requirement)	20	
	More than 10 years of experience in GIS consultancy and GIS project management	35	
	Participation in at least one project specifically in socio-economic analysis (minimum requirement)	20	
	possession an internationally accepted GIS certificate (minimum requirement)	10	

3.2	Developer (Programmer)		
	Master's degree in the field related to Computer Science (minimum requirement)	30	80
	PhD degree in the field related to Computer Science	40	
	At least 7 years of experience in developing custom analytical GIS solutions and conducting spatial analysis. (minimum requirement)	26	
	More than 7 years of experience in developing custom analytical GIS solutions and conducting spatial analysis	40	
3.3	Field Survey Manager		
	Master's degree in the field related to Geography (minimum requirement)	20	80
	PhD degree in the field related to Geography	34	
	At least 4 years of experience in managing field survey and data collection activities (minimum requirement)	20	
	More than 4 years of experience in managing field survey and data collection activities	30	
	Must possess a certificate related to field survey and GPS operation (minimum requirement)	16	
3.4	Field Surveyor		
	Bachelor's degree in the field related to Geography (minimum requirement);	24	70
	Master's degree in the field related to Geography	30	
	Possess a certificate related to field survey and GPS operation (minimum requirement)	25	
	Experience in field survey are considered as an asset	15	
3.5	GIS Operator		
	Bachelor's degree in the field related to Geography or Computer Science (minimum requirement);	25	70
	Master's degree in the field related to Geography or Computer Science	35	
	At least 2 years of experience in inputting/editing spatial and attributive data using GIS software (minimum requirement)	24	
	More than 2 years of experience in inputting/editing spatial and attributive data using GIS software	35	
Total Section 3			400