

### REQUEST FOR PROPOSAL (RFP) - Re-Advertised

	DATE: September 25, 2020
NAME & ADDRESS OF FIRM	REFERENCE: UNDP-RFP-2020-215
	ORPS: 2707

#### Dear Sir / Madam:

We kindly request you to submit your Proposal for Conducting "Hiring of Firm for Establishment of GLOF/Climate Change Integrated Digital Platform". Please be guided by the form attached hereto as Annex 2, in preparing your Proposal.

Your proposal should be submitted through e-Tendering online system by or before the deadline of **Monday, 9<sup>th</sup> October 2020 12:30 PM PST OR 3:30 AM EDT** indicated in <a href="https://etendering.partneragencies.org">https://etendering.partneragencies.org</a>.

Detailed instructions on how to register, submit, modify or cancel a bid in the e-Tendering system are provided in the eTendering system Bidder User Guide and Instructional videos available on this link: <a href="http://www.undp.org/content/undp/en/home/operations/procurement/business/procurement-notices/resources/">http://www.undp.org/content/undp/en/home/operations/procurement/business/procurement-notices/resources/</a>

Your Proposal must be expressed in the English, and valid for a minimum period of 90 days.

You are kindly requested to indicate whether your company intends to submit a Proposal by clicking on "Accept Invitation" button no later than **Monday**, 5<sup>th</sup> **October 2020 [12:30 PM Pakistan Standard Time OR 3:30 AM EDT].** If that is not the case, UNDP would appreciate your indicating the reason, for our records.

In the course of preparing your Proposal, it shall remain your responsibility to ensure that it is submitted through the e-Tendering system 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. If there is requirement of any clarification related to this RFP, kindly send queries to <a href="mailto:pakistan.procurement.info@undp.org">pakistan.procurement.info@undp.org</a>.

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.

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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 4.

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: <a href="http://www.un.org/depts/ptd/pdf/conduct\_english.pdf">http://www.un.org/depts/ptd/pdf/conduct\_english.pdf</a>

Thank you and we look forward to receiving your Proposal.

Sincerely yours,

26-Sep-2020

(For) Aliona Niculita Resident Representative a.i

### **Annex 1**

### **Description of Requirements**

# Requirement Brief Description of the Required Services

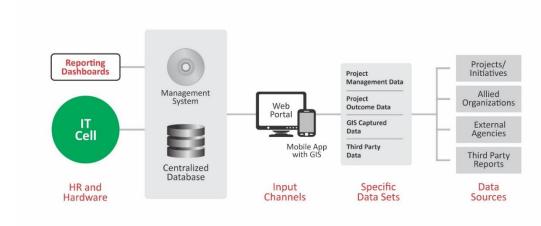
Context of the

### Hiring of firm/organization/ company for Establishment of GLOF/CC integrated Digital platform

The Government of Pakistan has recognized the threat from GLOFs in its National Climate Change Policy and its national determined contribution to monitor changes in glacier volumes and related GLOFs. Currently 58.7 million people in Pakistan are living in poverty, with 46 per cent of the rural population and 18 per cent of urban households below the poverty line. To be able to strengthen capacities of vulnerable communities to address the GLOF issue urgently in the scale that is needed, the Government of Pakistan needs financial support from international donors. Flood hazards are already greater than what national public finance can manage. As a result, it has secured GCF resources to upscale ongoing initiatives on early warning systems and small, locally-sourced infrastructure to protect communities from GLOF risks.

The advancement in the development of Information and Communication Technology (ICT) created by the invention of internet and related telecommunication infrastructure is impacting virtually all spheres of human endeavor. Computers usually top the list of equipment used in various research fields such as science, engineering and humanities has also fundamentally altered the ways libraries accomplish their traditional missions of selecting, organizing, preserving, and providing access to information. An integrated digital platform defined as an electronic or virtual system where information is selected, acquired, processed, organized, stored and retrieved in digital form is a very important step in accessing such requisite information.

### A Sketch of High-level Digitization initiation of MoCC:



UNDP GLOF-II project intends to hire services of a well reputed Information Technology Firm/Organization/Company, that can innovatively establish integrated digital platform including digital library and knowledge repository of Ministry of Climate Change projects and activities focusing to Glacial Lake Outburst Floods and Climate Change at national, provincial and district level offices connected to national GIS system and database of all

	MoCC projects and relevant line depar and GBEPA, etc.).	ments (MoCC, PN	ID, NDMA, KPE	DMA, GBDMA, KPEPA,
List and Description of Expected Outputs to be Delivered	Deliverables/ Outputs	Estimated Duration to Complete	Target Due Dates	Review and Approvals Required (Indicate designation of person who will review output and confirm acceptance)
	Prepare and submit the final     project plan	10 days (after signing the contract)	28 Oct 2020	Advisor on digitization /DD/AD IT/NPD
	Conduct review and prepare and submit Requirement Gathering Document.		8 Dec 2020	Advisor on digitization /AD IT
	a) Finalize the list of specification and equipment including the cloud hosting, resource material and fixture required for the operation of integrated digital platform.			
	b) Purchasing of cloud hosting servers for one year			
	3. Design solution architecture and layout of the integrated digital platform and web site	60 days (after signing the contract)	20 Jan 2021	Advisor on digitization /AD IT
	4. Mockup of each module and Software development and testing and UAT.	120 days (after signing the contract)	16 April 2021	Advisor on digitization /AD IT
	a) Data Integration of existing national and provincial information systems.			
	b) Integration with the national / provincial GIS labs/system, if any c) Finalize List of various studies,			
	publications, surveys and documentaries available in hard			

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	and soft form and uploading in			
	the system			
	d) Improvement and Launching of MoCC and TBTTP website			
	5. a) Provision of training material b) Conduct Training of Master trainers on platform	140 days (after signing the contract)	17 May 2021	Advisor on digitization /AD IT
	<ul> <li>6. a) Operation and maintenance support services for digital platform after go-live.</li> <li>b) Proper handing over of the digital Platform to MoCC IT Dept.</li> </ul>	180 days after signing the contract	9 July 2021	Advisor on digitization /AD IT
Person to Supervise the Work/Performan ce of the Service Provider	National Project Manager (GLOF-II) and	National Project	Director GLOF	:-II.
Frequency of Reporting	Bi-monthly			
Progress Reporting Requirements	Deliverables based.			
Location of work	☑ The consulting firm will base its to consultation with the project team to enthe project areas.		, , ,	•
Expected duration of work	08 Months			
Target start date	20 October 2020			
Latest completion date	June 2021			
Travels Expected	Not required			
Special Security	<b>Note:</b> UNDP will not be liable to prov	ide the security	to the selecte	ed firm and it is the
Requirements	responsibility of the selected firm to arra			
Facilities to be	Not Applicable		1 /	
Provided by				
UNDP (i.e., must				
be excluded				
from Price				
Proposal)				
Implementation Schedule indicating	⊠ Required			

breakdown and			
timing of			
activities/sub- activities			
Names and	N Da maine d		
curriculum vitae	☑ Required		
of individuals			
who will be			
involved in			
completing the			
services			
Currency of Proposal	☑ Local Currency [PAK RUPEES]		
Value Added Tax	M must be inclusive of VAT and other applicable indirect taxes		
on Price	☐ must be inclusive of VAT and other applicable indirect taxes (the invoice submitted should indicate the price and tax portion separate	alv)	
Proposal	the invoice submitted should indicate the price and tax portion separate	=iy).	
'			
	Further, United Nations, including its subsidiary organs, is exempt fro	m all direct taxes,	
	except charges for public utility services, and is exempt from customs du		
	a similar nature in respect of articles imported or exported for its official us		
	governmental authority refuses to recognize the United Nations exemption		
	duties or charges, the Contractor shall immediately consult with the UN	DP to determine a	
	mutually acceptable procedure.		
Validity Period of	⊠ 90 days		
Proposals	,		
(Counting for the	In exceptional circumstances, UNDP may request the Proposer to extend the validity of the		
last day of	Proposal beyond what has been initially indicated in this RFP. The F		
submission of	confirm the extension in writing, without any modification whatsoever of	on the Proposal.	
<i>quotes)</i> Partial Quotes	■ Not permitted		
Payment Terms	Deliverables and Payment Schedule		
<b>'</b>	•		
	Deliverable	Payment Plan	
	1. Prepare and submit the final project plan		
		5%	
	2. Conduct review and prepare and submit high level Requirement		
	Gathering Document	10%	
	3. a) Finalize the list of specification and equipment including the		
	cloud hosting, resource material and fixture required for the	5%	
	operation of integrated digital platform.		
	b) Purchasing of cloud hosting servers for one year		
	4. Design solution architecture and layout of the integrated digital		
	platform and web site	10%	

	5. Mockup of each module and Software development and testing	20%	
	and UAT		
	6. a) Data Integration of existing national and provincial information	15%	
	systems.		
	b) Integration with the national / provincial GIS labs/system (if		
	any)		
	7. Finalize List of various studies, publications, surveys and	10%	
	documentaries available in hard and soft form and uploading in		
	the system		
	8. Improvement and Launching of MoCC and TBTTP website	5%	
	9. a) Provision of training material	10%	
	b) Conduct Training for the master trainers		
	10. Operation and maintenance services for digital platform during	5%	
	the contract period		
	11. Proper handing over of the digital Platform to MoCC IT Dept.	5%	
	Total	100%	
	<b>Note:</b> In case of delays due to unforeseen circumstances the contract co without cost upon mutual understanding.	uld be extended	
Person(s) to	minout east apon mataur arracistarium.		
review/inspect/	National Project Manager (GLOF-II Project) & National Project Director-Gl	LOF-II	
approve outputs/complet			
ed services and			
authorize the			
disbursement of			
payment Type of Contract	☑ Purchase Order		
to be Signed	☑ Contract for Professional Services		
Criteria for Contract Award	☑ Highest Combined Score (based on the 70% technical offer and 30% pr	ice weight	
Contract Award	distribution) Where the minimum passing score of technical proposal is 70%.		
	✓ Full acceptance of the UNDP Contract General Terms and Conditions (C	GTC) This is a	
	mandatory criterion and cannot be deleted regardless of the nature of ser	vices required.	
	Non- acceptance of the GTC may be grounds for the rejection of the Prop	osal.	
Criteria for the	Technical Proposal (70%)		
Proposal	ssessment of  Expertise of the Firm 30% with 210 Marks out of 700		
11000301	Methodology, Its Appropriateness to the Condition and Timeliness of the Plan 45% with 315 marks out of 700	e implementation	
	☑ Management Structure and Qualification of Key Personnel <b>25% with 700</b>	175 marks out of	

### **Financial Proposal (30%)**

To be computed as a ratio of the Proposal's offer to the lowest price among the proposals received by UNDP. (*Financial Score*= (*Lowest Offer/Offer\*100*)

Sum	mary of Technical Proposal Evaluation	Score Weight	Points Obtainable
1.	Expertise of Firm/ Organization submitting Proposal	30%	210
2.	Proposed Methhodology/ Approach / Technical proposal	45%	315
3.	Personnel	25%	175
		Total	700

Form	n 1: Technical Proposal Evaluation	Points Obtainable
	Expertise of Firm / organization	
1.1	Duly registered in Pakistan under the relevant Law.	20
1.2	Financial Stability: Last two years Audited Statements (2017-18 and 20118-19) Current ratio should be more than 1 (15 marks for each year)	30
1.3	Five (5) years of experience and proven expertise in information technology, cloud based digital platform and management information system development  3 Years Experience: 30 Marks 4 Years of Experience: 40 Marks 5 and above: 50 Marks	50
	Relevant Experience: Past experience working on similar projects with strong and innovative design and ideas. Expertise in development of similar scale integrated digital platform (submit 1 sample of work for reference);	60
1.4	Working with large scale client or government counterpart: Demonstrate at least 2 similar large scale projects on desired technologies and deliveryc– <b>Please provide the evidence</b> . Each Project carries (25 Mark)	50
	Total Part 1	210

Forn	n 2: Technical Proposal Evaluation	Points Obtainable
Prop	oosed Work Plan and Approach	
2.1	Is the methodology of project implementation clearly linked to deliverables?  Methodology and approach for carrying out the project	25
2.2	Have the important aspects of the task been addressed in sufficient detail and do they correspond to the Terms of References?  Understanding of the project scope, requirement analysis and	40
	deliverables	
2.3	To what degree does the proposer understand the objectives, target audience/task and main outcomes of the assignment?	30
2.3	<ul> <li>Is the proposal well defined and corresponds to the Terms of Reference? Suggested methodology should include:</li> <li>Tools and techniques to be used</li> <li>Proposed project activity plan mapped on deliverables</li> <li>Propose cloud based infrastructure plan for the digital plan</li> </ul>	90
2.4	Work plan: Clarity of presentation & sequencing of activity are logical, timely and technically realistic. Does it promise efficient implementation of the proposed tasks and demonstrates flexibility?  Project communication plan Deliverables acceptability criteria Project risk management Project support and maintenance plan	50
2.5	<ul> <li>Compliance to technology Stack:         <ul> <li>Offered development stack: Dotnetcore Blazor and should be backed by:</li></ul></li></ul>	80
	Total Part 2	315

**Form 3: KEY PERSONNEL PROFILE – (**Names and curriculum vitae of individuals who will be involved in completing the services)

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	<b>Project Manager (01)</b> – Minimum BSC/BS Qualification (10	
	Marks)	
	Minimum 06 years of experience in handing the large scale	
	software design and development projects on similar	
	technologies stacks:	50
	l technologies stacks.	30
	6-8 Year Experience: 15 Marks	
	8-10 Years Experience: 30 Marks	
	10 and more Years: 40 Marks	
	TO and more rears. 40 Marks	
	System Analysis (01) - BSC/BS Qualification (10 Marks)	
	Minimum 7 years of experience for system review and design of	
	software projects	
	Software projects	2.0
		30
	7 Years Experience: 10 Marks	
	8-9 Years Experience: 20 Marks	
	10 and above Years: 30 Marks	
	Senior Information Architect (01) - BSC/BS Qualification (10	
	Marks)	
	Minimum 5 years experience in design and development of	
	cloud base similar nature platforms;	25
	5.7 Verse 40 Med e	
	5-7 Years: 10 Marks	
	7 and above: 15 Marks	
	Senior cloud Infrastructure /DB expert (01) - BSC/BS	
	Qualification (05 Marks)	
	Qualification (03 Marks)	
		20
	Minimum of 5 years of experience in proposed techonoly stacks	
	F 7 Vacua 10 Mayles	
	5-7 Years: 10 Marks	
	7 and above: 15 Marks	
	Senior Native Mobile Apps developer - (01) - BSC/BS	
	Qualification (05 Marks)	
	Minimum 5 years of experience in proposed techonoly stacks	20
	5-7 Years Experience: 10 Marks	
	7 and above: 15 Marks	
	Dotnet Core / MVC / Blazor developers (03 – 10 Marks for	
	<b>Each Individual)</b> - BSC/BS Qualification (3 Marks)	30
	Minimum 3 years of experience in similar projects Excellent analytical,	
	presentation and report writing skills;	
	(7 Marks each)	
	Total David	175
	Total Part 3	175
UNDP will award	M One and anhuma Comine Durait	
	☑ One and only one Service Provider	
the contract to:		

Annexes to this RFP	<ul> <li>☑ Form for Submission of Proposal (Annex 2)</li> <li>☑ Form for Submission of Financial Proposal (Annex 3)</li> <li>☑ General Terms and Conditions / Special Conditions (Annex 4)</li> <li>☑ Detailed TOR [Annex-5]</li> </ul>		
Contact Person for Inquiries (Written inquiries only) Minimum Eligibility Criteria	Any delay in UNDP's response shall be not used as a reason for extending the deadline for		
Englishity Chiceha	<ol> <li>(please attach copies of contracts).</li> <li>Profile of the company/firm along with details of employee, CVs of key professionals and available facilities/expertise.</li> <li>At least two satisfactory performance certificates along with duration of each assignment</li> <li>Proof of financial stability such as Audited Financial Statements along with the auditor's report for the last two years (2017-18 &amp; 2018-19) along with Bank statements/certificates indicating financial standing.</li> <li>Firm's valid registration with Income Tax/Sales Tax Department.</li> <li>An affidavit on stamp paper that the company/firm has never been black listed by any institution / department / agency and that it has not been involved in litigation with any of its clients.</li> <li>Copy of business registration certificate along with the articles and memorandum of association or SECP Registration.</li> </ol>		
Deadline for Submission	<ol> <li>Friday, 9st Oct 2020 (12:30 PM Pakistan standard Time or 3:30 AM EDT)</li> <li>Please note:         <ol> <li>Date and time visible on the main screen of event (on e-tendering portal) will be final and prevail over any other closing time indicated elsewhere, in case they are different. Please also note that the bid closing time shown in the PDF file generated by the system is not accurate due to a technical glitch that we will resolve soon. The correct bid closing time is as indicated in the e-tendering portal and system will not accept any bid after that time. It is the responsibility of the bidder to make sure bids are submitted within this deadline. UNDP will not accept any bid that is not submitted directly in the system.</li> </ol> </li> <li>Try to submit your bid a day prior or well before the closing time. Do not wait until last minute. If you face any issue in submitting your bid at the last minute, UNDP may not be able to assist.</li> </ol>		

Electronic submission (eTendering) requirements	<ul> <li>Technical and financial proposals should be submitted in separate PDF files</li> <li>File names must be maximum 60 characters long and must not contain any letter or special character other than from Latin alphabet/keyboard.</li> <li>All files must be free of viruses and not corrupted.</li> <li>Password for financial proposal must not be provided to UNDP until requested by UNDP ( see notes below)</li> </ul>
	Important Notes for financial proposal:
	The proposer is required to prepare and submit the financial proposal in a password protected PDF file separate from the rest of the proposal submission as indicated in the instructions to proposers.
	<ul> <li>Password for financial proposal must not be provided to UNDP until it is formally requested by UNDP focal point indicated below: <u>ali.saeed@undp.org</u></li> </ul>
	<ul> <li>While entering financial proposal in the e-tendering system, always mention your bid price as PKR 1. Please do not mention the value of your financial</li> </ul>
	proposal in the e-tendering system. It should only be mentioned in the password protected file/ attachment of financial proposal. The proposals of those organizations who would reveal their financial proposal value in the e-tendering system will be considered as disqualified.
Pre-proposal conference	N/A

Annex 2

### 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: [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 [specify date], 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, licenses, certifications, accreditations;
- b) Business Licenses Registration Papers, Tax Payment Certification, etc.
- c) Latest Audited Financial Statement income statement and balance sheet to indicate Its financial stability, liquidity, credit standing, and market reputation, etc.;
- d) Track Record list of clients for similar services as those required by UNDP, indicating description of contract scope, contract duration, contract value, contact references;
- e) Certificates and Accreditation including Quality Certificates, Patent Registrations, Environmental Sustainability Certificates, etc.
- f) 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.
- g) Include all the documents mentioned in the **Minimum Eligibility Criteria** mentioned in Annex 1.

### 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.

### C. Qualifications of Key Personnel

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

- a) Names and qualifications of the key personnel that will perform the services indicating who is Team Leader, who are supporting, etc.;
- b) CVs demonstrating qualifications must be submitted if required by the RFP; and
- c) Written confirmation from each personnel that they are available for the entire duration of the contract.

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

### Annex 3

### FORM FOR SUBMITTING SERVICE PROVIDER'S FINANCIAL PROPOSAL

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

### A. Cost Breakdown per Deliverable\*

	Deliverable	Payment Plan	Amount (PKR)
1.	Prepare and submit the final project plan	F0/	
2.	Conduct review and prepare and submit high level Requirement	5%	
	Gathering Document	10%	
2	-		
3.	a) Finalize the list of specification and equipment including the	5%	
	cloud hosting, resource material and fixture required for the	370	
	operation of integrated digital platform.		
	b) Purchasing of cloud hosting servers for one year		
4.	Design solution architecture and layout of the integrated digital		
	platform and web site	10%	
5.	Mockup of each module and Software development and testing	20%	
	and UAT		
6.	a) Data Integration of existing national and provincial information	15%	
	systems.		
	b) Integration with the national / provincial GIS labs/system (if		
	any)		
7.	Finalize List of various studies, publications, surveys and	10%	
	documentaries available in hard and soft form and uploading in		
	the system		
8.	Improvement and Launching of MoCC and TBTTP website	5%	
9.	a) Provision of training material	10%	
	b) Conduct Training for the master trainers		
10	. Operation and maintenance services for digital platform during	5%	
	the contract period		
11	11. Proper handing over of the digital Platform to MoCC IT Dept. 5%		
Total 100%			
<b>No</b> wit			

<sup>\*</sup>This shall be the basis of the payment tranches

Description of Activity	No. of Personnel	Total Period of Engagement (Days)	Remuneration per Day in Rs.	Total Price in Rs.
I. Personnel Services				
1. Project Manager (01)	1			
2. System Analysis (01)	1			
3. Senior Information Architect (01)	1			
4. Senior cloud infrastructure /DB expert (01)	1			
5. Senior Native Mobile Apps developer - (01)	1			
6. Dotnet core / MVC / Blazor developers (03)	3			
Operation and maintenance of the digital platform for 6 months after go-live.	06 Months			
II. Out of Pocket Expenses				
(If Any)				
1. Travel Costs				
2. Daily Allowance				
3. Communications				
4. Training				
5. Others				
III. Other Related Costs				

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

DocuSign Envelope ID: DD815F58-59C3-4F1F-BE19-EE446D01AB86	

Annex 4

General Terms and Conditions for Services
Separately attached

Annex-5

## Hiring of firm/organization/ company for Establishment of GLOF/CC integrated Digital platform

### **Terms of Reference (TOR)**

### A. Project Title

Scaling-up of Glacial Lake Outburst Flood (GLOF) risk reduction in Northern Pakistan (GLOF II)

### B. Project Description

### **Background:**

The Government of Pakistan has recognized the threat from GLOFs in its National Climate Change Policy and its national determined contribution to monitor changes in glacier volumes and related GLOFs. Currently 58.7 million people in Pakistan are living in poverty, with 46 per cent of the rural population and 18 per cent of urban households below the poverty line. To be able to strengthen capacities of vulnerable communities to address the GLOF issue urgently in the scale that is needed, the Government of Pakistan needs financial support from international donors. Flood hazards are already greater than what national public finance can manage. As a result, it has secured GCF resources to upscale ongoing initiatives on early warning systems and small, locally-sourced infrastructure to protect communities from GLOF risks.

The advancement in the development of Information and Communication Technology (ICT) created by the invention of internet and related telecommunication infrastructure is impacting virtually all spheres of human endeavor. Computers usually top the list of equipment used in various research fields such as science, engineering and humanities has also fundamentally altered the ways libraries accomplish their traditional missions of selecting, organizing, preserving, and providing access to information. An integrated digital platform defined as an electronic or virtual system where information is selected, acquired, processed, organized, stored and retrieved in digital form is a very important step in accessing such requisite information.

#### Reporting Projects/ Dashboards Initiatives Project Management Data Management Project System Organizations Web Outcome Data Portal IT GIS Captured External Data Cell Agencies Mobile App with GIS Third Party Data Third Party Reports Centralized Database Specific HR and Input Data Data Sets Hardware Channels Sources

### A Sketch of High-level Digitization initiation of MoCC:

UNDP GLOF-II project intends to hire services of a well reputed Information Technology Firm/Organization/Company, that can innovatively establish integrated digital platform including digital library and knowledge repository of Ministry of Climate Change projects and activities focusing to Glacial Lake Outburst Floods and Climate Change at national, provincial and district level offices connected to national GIS system and database of all MoCC projects and relevant line departments (MoCC, PMD, NDMA, KPDMA, GBDMA, KPEPA, and GBEPA, etc.).

### C. Scope of Work

The main objective of the assignment is to design and develop an online integrated digital platform with access to all GLOF/CC related information available for easy digital access for all key stakeholders at national and provincial levels. Under the overall guidance of the National Project Director and supervision of the National Project Manager, in consultation with the Communication and Reporting Officer GLOF II, National Consultant Advisor on Digitization, National Technical Expert, and International Technical Advisor, Provincial Project Coordinators and Field Officers the consulting firm/ organization/company will perform the following tasks but not limited to:

- 1. Analyze requirements and prepare high level Requirement Document of the existing processes and IT systems being used by the Ministry for information gathering and sharing and prepare a detail.
- 2. Determine information technology (IT) infrastructure and engage cloud hosting platform for configuration and maintenance of integrated digital platform
- 3. Design, develop and implement following technology platforms for managing the overall digitization, coordination, data gathering & integration, monitoring, reporting and analysis as per needs of MoCC's projects and attached departments;
  - a. Multi-Level/Multi-Dimension Dynamic Category Management Framework, integrated with GIS MAPS/Google Maps.

- b. The datasets shall be managed centrally with attached semantic for system-based automation/intelligence.
- c. Comprehensive framework for managing organizations, sub-organizations, teams and tasks to manage organizational hierarchy from top management to on-ground informal teams, their dynamic relationships
- d. Tasks assignment and tracking with proofing datasets along with maximum attached information for improved semantics.
- e. The solution may require sub-system development for Forests and Wildlife components for information flow and reporting.
- f. Design and develop dashboard and various reports for different stakeholders
- g. Following Technology Stack is anticipated for the proposed digital solution, however, alternate technology stack with the detail description can be offered:
  - i. The solution shall be developed using Dotnetcore Blazor and should be backed by:
    - 1. SQL server for Relational Data,
    - 2. Cassandra for Bulk Data and imagery,
    - 3. Redis for performance,
    - 4. Micro-services for scalability.
  - ii. API integration of the following GIS visualization:
    - 1. ARCGIS/ OpenMaps
    - 2. GoogleMaps.
- 4. Design and develop native mobile apps integrated with digital solution for internal use and for general public information dissemination
- 5. Integration and reporting of existing available information system and data sets on MoCC's projects;
- 6. For establishment of digital library under the digital platform, following are the expectation:
  - a. Design the layout for storage and retrieval of information and data for various stakeholders.
  - Prepare list of various studies, publications, surveys and documentaries available in hard and soft form for establishment of digital library and knowledge repository of MoCC;
  - c. Uploading of data / information available in soft form.
  - d. List down the data available in hard copies to be digitized.
- 7. Suggest Improvement for revamping of existing MoCC web site and integrate with the digital platform for real-time information updates
- 8. Prepare detailed training plan and training materials for system and end users and readiness of master trainers for national and provincial levels.
- 9. Provide operational and maintenance support services for the time specified in the section (D)

### D. Expected Outputs and Deliverables

The establishment of the GLOF/CC integrated digital platform will involve the following steps:

- 1. Preparation of high-level requirement gathering document for digital platform
- 2. Provide list of specification and equipment including the cloud hosting, resource material and fixture required for the operation of integrated digital platform.
- 3. Design, develop and implement the digital platform for the MoCC
- 4. Data Integration of MoCC and TBTTP provincial information systems
- 5. Integration with the national / provincial GIS labs/system, where necessary
- 6. List of various studies, publications, surveys and documentaries available in hard and soft form and uploading in the system
- 7. Improvement & Launching of MoCC and TBTTP website
- 8. Provision of training material and Conduct Training of the master trainers for various modules
- 9. Proper handing over of the final product of digital platform including web portal, mobile apps, web site etc. to the concerned departments and stakeholders.
- 10. Operation and maintenance support for digital platform during the contract period.

The Firm/organization/company will be expected to deliver a comprehensive and in-depth proposal that should include and address the following components:

- 1. Detail methodology and approach to address each scope item and deliverables.
- 2. Detailed timelines on each deliverable
- 3. Detail project plan linked with the deliverables
- 4. Detail of professional teams to be engaged with the required technical stacks.
- 5. Detail communication plan
- 6. Detail training plan

Deliverables/ Outputs	Estimated Duration to Complete	Target Due Dates	Review and Approvals Required (Indicate designation of person who will review output and confirm acceptance)
Prepare and submit the final     project plan	10 days (after signing the contract)	28 Oct 2020	Advisor on digitization /DD/AD IT/NPD

2.	Conduct review and prepare and submit Requirement Gathering Document.  a) Finalize the list of specification and equipment including the cloud hosting, resource material and fixture required for the operation of integrated digital platform. b) Purchasing of cloud hosting	30 days (after signing of the Contract	8 Dec 2020	Advisor on digitization /AD IT
	servers for one year			
3.	Design solution architecture and	60 days (after signing	20 Jan 2021	Advisor on
	layout of the integrated digital	the contract)		digitization /AD IT
	platform and web site			
4.	Mockup of each module and	120 days (after signing	16 April	Advisor on
	Software development and testing	the contract)	2021	digitization /AD IT
	and UAT.			
	a) Data Integration of existing national and provincial information systems. b) Integration with the national / provincial GIS labs/system, if any c) Finalize List of various studies, publications, surveys and documentaries available in hard and soft form and uploading in the system d) Improvement and Launching of MoCC and TBTTP website			
5.	a) Provision of training material b) Conduct Training of Master trainers on platform	140 days (after signing the contract)	17 May 2021	Advisor on digitization /AD IT

6.	a) Operation and maintenance	180 days after signing	9 July 2021	Advisor on
	support services for digital	the contract		digitization /AD IT
	platform after go-live.			
	b) Proper handing over of the			
	digital Platform to MoCC IT Dept.			
I			I	

### E. Institutional Arrangement

Under the overall guidance from the National Project Director the Contractor will report to the Advisor on Digitization for the approval of the methodology and acceptance of the final deliverable. The contractor will work under coordination of Communication and Reporting Officer of GLOF II, with inputs from National Technical Expert, Technical specialist, Provincial Project Coordinators and UNDP focal point.

### F. Duration of the Work

Duration of the assignment is one hundred & eighty (180) working days

### **G.** Duty Station

The consulting firm will base its team in Islamabad to ensure liaison with the project team and coverage of the project areas. The consultancy foresees visits of the team to the target provinces / districts as and when required and in consultation with the project team. The logistics of the said visits will be the responsibility of the GLOF-II.

### I. Scope of Price Proposal and Schedule of Payments

Deliverable	Payment Plan
12. Prepare and submit the final project plan	
	5%
13. Conduct review and prepare and submit high level Requirement Gathering	
Document	10%
14. a) Finalize the list of specification and equipment including the cloud	
hosting, resource material and fixture required for the operation of	5%
integrated digital platform.	
b) Purchasing of cloud hosting servers for one year	
15. Design solution architecture and layout of the integrated digital platform	
and web site	10%
16. Mockup of each module and Software development and testing and UAT	20%
17. a) Data Integration of existing national and provincial information systems.	15%

10%
5%
10%
5%
5%
100%

**Note:** In case of delays due to unforeseen circumstances the contract could be extended without cost upon mutual understanding.

### K. Criteria for Selection of the Best Offer

Combined Scoring method – where the qualifications and methodology will be weighted a max. of 70%, and combined with the price offer which will be weighted a max of 30%;