



REQUEST FOR PROPOSAL (RFP)
(For Low-Valued Services)

	DATE: October 15, 2021
	REFERENCE: RFP/PNG/014-2021

Dear Sir / Madam:

We kindly request you to submit your Proposal for **Hiring the firm for the expansion of the mobile app LUKIM GATHER for collecting protected area and conservation data.**

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

Proposals shall be submitted on or before 5.00 p.m. (local time) on Thursday, November 04, 2021

Proposals may be submitted on or before the deadline indicated by UNDP in the e-Tendering system. Bids must be submitted in the online e-Tendering system in the following link:

<https://etendering.partneragencies.org>; using your username and password. If you have not registered in the system before, you can register now by logging in using

Username: event.guest | **Password:** why2change

and follow the registration steps as specified in the system user guide. 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" in the system.

In the course of preparing and submitting your proposal, it shall remain your Responsibility to ensure that it submitted into the system by the deadline. The system will automatically block and not accept any bid after the deadline. Kindly ensure attaching the required supporting documents (*with file name less than 60 characters*) in pdf, word or excel format, which must be free from any virus or corrupted files. Proposals that are received by UNDP after the deadline indicated above, for whatever reason, shall not be considered for evaluation.

The Financial Proposal and the Technical Proposal files **MUST BE COMPLETELY SEPARATE** and uploaded separately in the system and clearly named as either "TECHNICAL PROPOSAL" or "FINANCIAL PROPOSAL", as appropriate. Each document shall include the Proposer's name and address. **The file with the "FINANCIAL PROPOSAL" must be encrypted with a password so that it cannot be opened nor viewed until the proposal has been found to pass the technical evaluation stage.** Once a Proposal has been found to be responsive by passing the technical evaluation stage, UNDP shall request via email the Proposer to submit the password to open the Financial Proposal. The Proposer shall assume the Responsibility for not encrypting the financial proposal. It is strongly suggested that Bidders make a note of the passwords and keep them in a safe place. If we are unable to open the file because of forgotten password (s), the proposal will be disqualified. The Proposer should not put amount of financial proposal in the eTendering system, but indicate "1".

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

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

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

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

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

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

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

<http://www.undp.org/content/undp/en/home/operations/procurement/business/protest-and-sanctions.html>

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 zero tolerance on fraud and other proscribed practices and is committed to preventing, identifying, and addressing all such acts and practices against UNDP and third parties involved in UNDP activities. UNDP expects its Service Providers to adhere to the UN Supplier Code of Conduct found in this link :

https://www.un.org/Depts/ptd/sites/www.un.org.Depts.ptd/files/files/attachment/page/pdf/unscc/conduct_english.pdf

Thank you and we look forward to receiving your proposal.

Sincerely yours,

Milla Bisy

Operations Manager

10/15/2021



Annex 1**Description of Requirements**

Context of the Requirement	<u>THE EXPANSION OF THE MOBILE APP LUKIM GATHER FOR PROTECTED AREA AND CONSERVATION DATA</u>
Implementing Partner of UNDP	UNDP/Project: Expanding the Lukim Gather Application for Protected Areas Management and Monitoring
Brief Description of the Required Services	The expansion of the mobile app Lukim Gather for protected area and conservation data
List and Description of Expected Outputs to be Delivered	As indicated in the TOR (Annex 3)
Person to Supervise the Work/Performance of the Service Provider	Chief Technical Advisor
Frequency of Reporting	As indicated in the TOR (Annex 3)
Progress Reporting Requirements	As indicated in the TOR (Annex 3)
Location of work	As indicated in the TOR (Annex 3)
Expected duration of work	7 months
Target start date	December 2021 (Expected)
Latest completion date	July 2022
Travels Expected	No
Special Security Requirements	<input type="checkbox"/> Security Clearance from UN prior to traveling <input type="checkbox"/> Completion of UN's Basic and Advanced Security Training <input type="checkbox"/> Comprehensive Travel Insurance <input checked="" type="checkbox"/> Others Responsibility at the bidder's end. UNDP will facilitate if specific support required during the implementation of the assignment
Facilities to be Provided by UNDP (i.e., must be excluded from Price Proposal)	<input type="checkbox"/> Office space and facilities <input type="checkbox"/> Land Transportation <input checked="" type="checkbox"/> Others - As indicated in the TOR (Annex 3)
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, or <input type="checkbox"/> Euro <input type="checkbox"/> Local Currency
Value Added Tax on Price Proposal	<input checked="" type="checkbox"/> must be inclusive of VAT and other applicable indirect taxes <input 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 <p>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.</p>
Partial Quotes	<input checked="" type="checkbox"/> Not permitted <input type="checkbox"/> Permitted
Payment Terms	As indicated in the TOR
Person(s) to review/inspect/ approve outputs/completed services and authorize the disbursement of payment	Chief Technical Advisor
Type of Contract to be Signed	<input checked="" type="checkbox"/> Purchase Order <input type="checkbox"/> Institutional Contract <input checked="" type="checkbox"/> Contract for Professional Services <input type="checkbox"/> Long-Term Agreement (Purchase Order for call-off contracts) <input type="checkbox"/> Other Type of Contract <i>[pls. specify]</i>
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). <p>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.</p>
Criteria for the Assessment of Proposal	<p>Combined Scoring Method, using the 70%-30% distribution for technical and financial proposals, respectively. The minimum technical score required to pass is 70%.</p> <p>Evaluation matrix and minimum requirements are provided in the Annex 3.</p>

UNDP will award the contract to:	<input checked="" type="checkbox"/> One and only one Service Provider <input type="checkbox"/> One or more Service Providers, depending on the following factors: It is anticipated to award the contract to up to 3 qualified suppliers as a result of this RFP. To ensure cost efficiency, value-for-money principle and transparent competition among LTA holders secondary competition will be applied.
Contract General Terms and Conditions	<input checked="" type="checkbox"/> General Terms and Conditions for contracts (goods and/or services) <input type="checkbox"/> General Terms and Conditions for de minimis contracts (services only, less than \$50,000) Applicable Terms and Conditions are available at: http://www.undp.org/content/undp/en/home/procurement/business/how-we-buy.html
Annexes to this RFP	<input checked="" type="checkbox"/> Form for Submission of Proposal (Annex 2) <input checked="" type="checkbox"/> Detailed TOR (Annex 3) with Attachment
Contact Person for Inquiries (Written inquiries only)	procurement.pg@undp.org <i>Please mention the following in the subject while sending any query to UNDP regarding this RFP on or before October 28, 2021, 4.30 PM (PNG Time)</i> <i><u>"Queries on RFP/PNG/014-2021"</u></i> 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.
Other Information [pls. specify]	A pre-bid meeting will be held on October 25, 2021, 4.30 PM (PNG Time) Through Zoom Meeting ID: https://undp.zoom.us/j/89186669909

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.*

The proposed draft is below:

Dear Sir,

I declare that is not in the UN Security Council 1267/1989 List, UN Procurement Division List or Other UN Ineligibility List.

Yours Sincerely,

g) Please describe the following experience:

- experience in developing mobile-friendly websites and apps which integrate geospatial data visualizations*
- track record of developing open source software solutions is essential, such as prolific GitHub contribution history or repositories*
- experience in supporting governments, organizations, UN agencies, academic institutions in database - development, data visualization, training and translation of data into actionable insights*
- experience in developing offline mobile data collection apps which integrate geospatial data*
- GEF project experience*
- experience and certification in AWS administration*

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

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.*

D. Financial Proposal

The financial proposal shall be in a password-protected archive and separate from the technical proposal. The password to the financial proposal archive shall not be provided unless requested and shall not be included with the original submission – in the cover letter or any other submission part.

A. Cost Breakdown per Deliverables

The bidders are requested not to modify/alter lines but keep them in their financial proposal

Phase	Summary of deliverables	Deadline	Payment Percentage	Amount including taxes, USD
0: Inception	<ul style="list-style-type: none"> Inception meeting and workplan, including anticipated challenges 	15-Dec-21	20%	
1: Research	<ul style="list-style-type: none"> Desktop Review including user interview and comparative analysis Report detailing recommendations for app development Lukim Gather phase 1 scripts published on GitHub 	31-Jan-22	20%	
2: Minimum Viable Product	<ul style="list-style-type: none"> Preliminary Lukim Gather 2 App version Methodology for utilizing app results such as dashboard, mobile-friendly is functional 	31-Mar-22	20%	
3: Pilot and User Testing	<ul style="list-style-type: none"> Training manual and videos on use of App Report that includes feedback on app experiences and updates based on user feedback 	31-May-22	20%	
4: Refine and release	<ul style="list-style-type: none"> Updated App All scripts updated on GitHub, no outstanding issues that should be covered within the scope of this contract 	31-Jul-22	20%	
Total				

B. Cost Breakdown by Cost Component:

The Proposers are requested to provide the cost breakdown for the above given prices for each deliverable based on the following format. UNDP shall use the cost breakdown for the price reasonability assessment purposes as well as the calculation of price in the event that both parties have agreed to add new deliverables to the scope of Services.

The bidders are requested not to modify/alter lines but keep them in their financial proposal

No	Activity/Costs	Unit	Number	Cost per unit, USD	Amount including taxes, USD
1	Personnel				
1.1	Team Leader		7 months		
1.2	IT Specialist		7 months		
1.3	IT Specialist or other expert (optional)		7 months		
2	Administration Costs (if necessary)				
2.1	Communication (Internet/Phone/etc.)				
2.2	Other (if any – to define clearly activities/costs)				
3	Technical Costs				
3.1	Provision of unique domain for accessing Lukim Gather				
3.2	Provision for administering and managing the app on the UNDP cloud environment*				
3.3	Training manual and videos on use of App				
3.4	...(please specify if necessary)				
4	Other costs (if any - to define clearly activities/costs)				
4.1	...				
4.2	...				
	Total, USD				

**) The fee does not need to include a provision for the cloud computing infrastructure itself, which will be provided by UNDP. However, the fee should include provision for administering and managing the app on the UNDP cloud environment, to which the vendor will have full access during the contracting period.*

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

[Designation][Date]



Annex 3

TERMS OF REFERENCE FOR THE EXPANSION OF THE MOBILE APP *LUKIM GATHER* FOR PROTECTED AREA AND CONSERVATION DATA

Location:	Remote
Type of contract:	Contract for Professional Service
Project:	Expanding the Lukim Gather Application for Protected Areas Management and Monitoring
Starting Date:	1 December 2021
Duration of Initial Contract:	7 months

1. Project Background:

Papua New Guinea (PNG) is a country blessed with tremendous natural resources. PNG is home to an estimated five percent of the world's biodiversity, despite covering just one percent of its surface area. There are 293 species of mammal (of which 80% are endemic), 813 bird species (more than 50% endemism), 346 species of reptiles and 371 species of amphibians. PNG also contains the world's 3rd largest rainforest, after the Amazon and Congo Basin.¹

This natural wealth brings vital benefits to the country. An estimated 80% of PNG's rural population depends on the terrestrial environment for their livelihoods – the majority working informally in agricultural, forestry, mining, or energy sectors.² Furthermore, these areas have major cultural significance and play a critical role in promoting tourism and strengthening climate resilience.

PNG's 59 Protected Areas, which cover 17,248km² terrestrial and 3,344 km² marine habitats, form the backbone of these environmental riches and hold the key to the country's long-term environmental and economic health.² Ensuring these Protected Areas have strong stewardship – with robust management effectiveness plans – will bring myriad benefits to the country, from improved biodiversity protections to enhanced long-term growth of existing productive sectors.

Protected Areas today suffer from poor management and the absence of reliable data.

Despite the undeniable importance of these Protected Areas to the future of PNG, surprisingly little is documented about how these areas are managed. Today, 58 of the 61 Protected Areas have completed the Management Effectiveness Tracking Tool (METT), the global standard for reporting on the health of protected areas. Papua New Guinea's biodiversity and protected areas system are also under threat from

² Biodiversity Fund Concept Note

logging, mining, pollution and the growing commercialization of agriculture. Compounding these issues is the looming threat of greater climate change impacts.

This information gap is due to several challenges, but key among them are the logistical difficulties of reaching such remote parts of the country. Furthermore, collecting and reporting presents high cost and time challenges due to the utilization of non-digital data collection methods, limited connectivity, and the need for greater capacity building.

This lack of visibility creates challenges throughout PNG's environmental stakeholders. As part of the implementation of the Protected Areas Policy, the protected area leadership requires communities to be equipped with tools to record and monitor environmental change. Local government officials have difficulty tracking economic activity occurring within these areas and whether behaviour complies with national regulations. Intergovernmental Organizations (IGOs) and NGOs dedicated to protecting PNG's natural environment lack critical insight into threats these communities face and how to allocate resources most effectively. This is particularly important as the country announces the establishment of a PNG Biodiversity and Climate Fund, which requires a clear and transparent means of allocating resources and monitoring their use. Lastly, potential development partners would benefit for analytical insights in order to support their programming of future financial resources.

An expansion of an existing app developed for collecting conservation data in PNG, *Lukim Gather*, will assist in addressing these challenges by collecting data at the ground level to be analysed against national and global datasets. Taking advantage of the spatial data infrastructure being built at a national level for the UNDP-led "Natural Resource Centre of Excellence" for Papua New Guinea, the second phase of the app will look to collect data at the community level from leaders and members, and display this wealth of information in easy-to-understand visualizations that can drive conservation and funding decisions for governments and IGOs/NGOs. This ToR will facilitate the expansion of the *Lukim Gather* App(s) from a technical implementation perspective, including scoping, design, visualization and integration.

The next phase of Lukim Gather

Lukim Gather was initially designed by UNDP in partnership with the Conservation and Environmental Protection Authority (CEPA) and design consultancy Catalpa. The first phase was designed for park rangers as a tool for streamlined reporting of issues (e.g., poaching, logging) as well as monitoring of conservation efforts³ through a simplified METT survey. Over 2,000 users were trained on using the app across 2 pilot sites. The initial experience has produced several key lessons in digital tool development (e.g., focusing on smaller, more attainable goals to demonstrate initial value, results-oriented focus, and building scalable open infrastructure). However, it has also encountered some technical challenges, particularly collection of data and uptake of results into policy and programming.

The second phase of the app as proposed in this terms of reference will target Protected Area community leaders and members as the core user group and focus initially on METT digitization and collecting spatialized field-level data, which can assist in conservation decision-making. This phase aims to strengthen and target government and donor support to ensure interventions are tailored to real situations as they are perceived

³ For more information on *Lukim Gather* see:

https://www.pg.undp.org/content/papua_new_guinea/en/home/presscenter/articles/2020/mobile-application--a-new-tracking-tool-for-conservation.html

on the ground. Incentives around app usage and data collection will be built into METT processes and communities receiving resources from the Biodiversity and Climate Fund of Papua New Guinea. This will help drive sufficient app adoption and engagement early on, a critical stumbling block for many digital tools.

The infrastructure developed by the first phase of the app will be adapted and simplified to meet the needs of envisaged users. The Incident Reporting will take an icon-based approach and, as appropriate, integrate easy offline geospatial data collection methods (such as seen in other apps such as maps.me or Mapeo) to adapt to users who may have low literacy. The app will be built to be easily downloaded from a standard app download application (ex. Google Play) and shared via Bluetooth to new users (ex. Through APK). A separate Research & Design consultant has been engaged to gather lessons learned from the first phase of the app and provide recommendations on implementation. These recommendations are expected to be fully considered by the offeror in their workplan and scoping for the second phase of the app.

Importantly, the second phase of the app is expected to enhance the ability of managers to use the results in a meaningful way, for example through the app itself to show community members, through dashboards to monitor progress in real-time, and through API services so that the results can be analysed against data produced in the Natural Resource Centre of Excellence. These results must efficiently fit into the ongoing processes and frameworks in Papua New Guinea, such as reporting on the SDGs and developing effective protected area networks.

Open by Default: Encouraging interoperable infrastructures

To encourage open data initiatives in PNG, the second phase of Lukim Gather will be built on open-source technology and the code will be available to share with stakeholders interested in the design and development of bespoke mobile technology. Furthermore, the data collected by the app will be fully interoperable with the infrastructure developed for the Natural Resource Centre of Excellence, which will be hosted on a UNDP AWS cloud environment. Building interoperability and openness into the design of the app will enhance the sustainability of the work, ensuring that long after the end of the project, the data and systems are available for key stakeholders to take up and repurpose as necessary.

Design Principles

The services of the vendor providing these services will align with the UN Secretary-General's Data Strategy. It is expected that the vendor will familiarize themselves with these guidelines and keep in relevant gender, risk, and environmental safeguards in the provision of services, alongside these key design principles:

- **Human-centered:** Technology is not a solution unto itself, but a route for capitalizing on and quickly scaling solutions. Therefore, services will be tailored to the target audience to ensure they are user-friendly and accessible.
- **Inclusivity:** Inclusion and transparency, including the use of open data, is prioritized wherever possible.
- **Ownership:** Data is a common good and belongs to organizations rather than teams and individuals. By default, data should be openly available unless there is good reason for it to remain confidential.
- **Transparency:** Manage products in a transparent manner to ensure the outputs are reproducible and traceable.
- **Gender:** The design and use of technology factor in gender considerations, including differences in access, literacy and bias.

- **Data and data protection:** Data gathered is managed in accordance with UN confidentiality, classification and privacy standards and rules; no personally identifiable information will be published publicly that might cause harm.
- **Multidisciplinary:** Technology builds upon strength in diversity and incorporates different skills, experience and perspectives.
- **Sustainability and scalability:** Technology used is interoperable with other systems in use, build on what has already been achieved and learned, be sustainable over time, with training, hand-over, maintenance and continuity measures in place.

2. Key Goals and Objectives:

The objective of the service contract is to slightly extend and improve upon the first phase of the Lukim Gather app, to make the results more effective to a wider group of stakeholders, including managers and communities who need to access and use ground-level data in biodiversity planning. The extension will improve upon the transfer of collected data into results that are easily accessible to managers and stakeholders interested in conservation data.

To assess the feasibility, the vendor can access the Lukim Gather app online from a computer or mobile device: <https://lukim-gather.catalpa.build/> and tested using the test account:

username: test

password: 12test34

The work will be organized into the following phases of development and priorities:

PHASE 1 – Research and refine first phase results

- Conduct a comparative analysis of existing open-source geospatial apps such as Mapeo, Maps.Me, OSM, etc to draw out potential features and lessons learned for future Lukim Gather development;
- Working with the R&D consultant, develop a report detailing the effectiveness and opportunities of Lukim Gather phase 1, including recommendations for future development;
- Transfer all Lukim Gather scripts to open-source, publishing scripts on Github;
- Administer Lukim Gather phase 1 on UNDP-controlled cloud environment (AWS);
- Hold inception workshop (remote) with relevant colleagues at UNDP to present findings and suggest development strategy and workplan.

PHASE 2 – Minimum Viable Product

- Build preliminary version of the second phase of the app, as agreed with UNDP following recommendations of Phase 1;
- Develop and test methodology for accessing and utilizing results from app data, including easily automated reports for managers, streamlining service into other existing web portals, etc. For example, develop and test a dynamic data dashboard for the browser, which is also mobile-friendly.

- Develop reusable training package including manual and interactive online or video experience;
- Ensure that the results of the app are easily available for non-technical managers and interoperable with other technical infrastructure housed in the Natural Resource Centre of Excellence.

PHASE 3 – Pilot & User Testing

- Remotely support the pilot of the app in three protected areas sites around Mt. Wilhelm, Kimbe Bay and Sepik Wetlands to test key assumptions (eg. The results will be accessible and usable by managers, donors who wish to utilize the results in planning and funding, community leaders who wish to use the app, the app has the right level of complexity for the stakeholder group, etc.);
- Conduct user interviews (remote) to gather feedback on app experience;
- Quality assurance on testing and iterating the app to ensure it functions well before public release.

PHASE 4 – Refine and Release

- Incorporate feedback into app design to improve user experience;
- Update training packages, as needed;
- Conduct training on utilizing the data in tandem with other data available in the Natural Resource Centre of Excellence;
- Ensure that all scripts are uploaded and up to date on GitHub and that there are no outstanding issues as of July 31, 2022;
- Ensure that all source codes for the final release of the application have been handed over to UNDP in a usable format (i.e accessible CMS) so that UNDP can adjust and adapt the questionnaire and data as necessary;
- Ensure the final version of the app is available from at least one commonly used application access point for Android phones (ex. Google Play);
- Provide support services after application development for one year to ensure fixing of possible errors, in particular after the release of new versions of Android.
- Develop standard operating procedures document for updating the app questions and using the data.

3. Scope of Work and Expected Results

The incumbent should perform the tasks above according to the following schedule and deliverables.

Phase	Summary of deliverables	Deadline	Payment Percentage
0: Inception	<ul style="list-style-type: none"> • Inception meeting and workplan, including anticipated challenges 	Dec 15, 2021	20%
1: Research	<ul style="list-style-type: none"> • Desktop Review including user interview and comparative analysis 	Jan 31, 2022	20%

	<ul style="list-style-type: none"> Report detailing recommendations for app development Lukim Gather phase 1 scripts published on GitHub 		
2: Minimum Viable Product	<ul style="list-style-type: none"> Preliminary Lukim Gather 2 App version Methodology for utilizing app results such as dashboard, mobile-friendly is functional 	March 31, 2022	20%
3: Pilot and User Testing	<ul style="list-style-type: none"> Training manual and videos on use of App Report that includes feedback on app experiences and updates based on user feedback 	May 31, 2022	20%
4: Refine and release	<ul style="list-style-type: none"> Updated App All scripts updated on GitHub, no outstanding issues that should be covered within the scope of this contract 	July 31, 2022	20%

4. Reporting relationships

The vendor will closely work with the UNDP PNG team while taking responsibility for deadlines and deliverables as outlined in the Terms of Reference and associated Contract. The consultancy team will report directly to the project Chief Technical Advisor or their delegated staff member.

5. Working arrangements

The vendor will be responsible for the delivery, content, technical quality and accuracy of its own deliverables, subject to the provision of the necessary facilitation by UNDP on relevant aspects in the development of the App. The vendor is expected to have their own equipment to perform the tasks above.

This is a remote-based assignment with no anticipated travel to Papua New Guinea. If based in Papua New Guinea, the vendor will be expected to attend meetings in Port Moresby. If based internationally, the vendor will be expected to be available via zoom during PNG working hours at least twice per week. The vendor must be reasonably accessible by email and telephone (preferably mobile). The use of reliable, internet-based telecommunications application software (Zoom, MS Teams or equivalent) is required.

6. Assumptions

UNDP acknowledges that the vendor's work will rely upon collaboration with government departments, NGOs, UN agencies, donors, and protected area managers and residents. UNDP will therefore seek to:

- Facilitate effective liaison between the vendor and other teams undertaking related pieces of work in PNG, and work on protected areas and biodiversity data.
- Facilitate relevant information and data sharing agreements with relevant agencies/entities.
- Engage with stakeholders to pilot and test the application.

- Perform necessary on-ground tasks to support the work of the vendor.
- Offer timely feedback on drafts submitted by the vendor.

7. Fees: The financial cost proposal should include a detailed breakdown of the total budget proposal including: daily fees, presentation costs, and provision of unique domain for accessing Lukim Gather. The amount should be quoted in US\$.

Note: the fee does not need to include a provision for the cloud computing infrastructure itself, which will be provided by UNDP. However, the fee should include provision for administering and managing the app on the UNDP cloud environment, to which the vendor will have full access during the contracting period.

8. Terms of Payment: Payments schedule will be agreed based on deliverables, that is, the fee is payable upon satisfactory completion and acceptance of the deliverables by UNDP.

Reporting period and key milestones	Duration	Report due	Payment Percentage	Review and Approvals
Payment upon submission and acceptance of the Inception deliverables as noted above in Section 3.	10 days	15 December 2021	20%	CTA
Payment upon submission and acceptance of Phase 1 deliverables, as noted in Section 3.	30 days	Jan 31, 2022	20%	CTA
Payment upon submission and acceptance of Phase 2 deliverables, as noted in Section 3.	40 days	March 31, 2022	20%	CTA
Payment upon submission and acceptance of Phase 3 deliverables, as noted in Section 3.	40 days	May 31, 2022	20%	CTA
Payment upon submission and acceptance of Phase 4 deliverables, as noted in Section 3.	15 days	July 31, 2022	20%	CTA

9. Requirements and Qualification:

UNDP is seeking a qualified and appropriate company or a team of experts to provide this service. Bidder is expected to have the following experience, skills and qualities:

- At least 3 years of experience in developing mobile-friendly websites and apps which integrate geospatial data visualizations are essential;
- Extensive experience in supporting governments, organizations, UN agencies, academic institutions in database development, data visualization, training and translation of data into actionable insights;
- Proven track record of developing open source software solutions is essential, such as prolific GitHub contribution history or repositories;
- Experience in developing offline mobile data collection apps which integrate geospatial data is considered an asset;
- GEF project experience is an advantage.

- Relevant experience and certification in AWS administration is an advantage.

UNDP will seek an undertaking from the vendor that there is no conflict of interest between this project and any work the vendor is undertaking or may undertake for any other organizations likely to be affected by or to have an interest in the development of this App.

Requirements to project/team:

- Team lead/Manager
 - Master's Degree desirable in communications, marketing, engineering, environmental science, information technology or related fields;
 - At least 3 years of experience in leading the development of IT products, using Agile or Scrum project management methodology with a DevOps mindset;
 - At least 3 similar projects on developing the respective products (geospatial apps, offline mobile data collection apps, integrated spatial data infrastructure, websites to support donor-funded projects, open data solutions);
 - Language proficiency: Fluent English.
- IT team (at least one, two preferred):
 - At least a Bachelor's Degree in information technology, software engineering, GIS, or related fields;
 - At least 2 similar projects on developing the respective products (geospatial apps, offline mobile data collection apps, integrated spatial data infrastructure, websites to support donor-funded projects, open data solutions);
 - Minimum 2 years of experience in cloud, programming and software development including using AWS, Python, JavaScript, SQL to produce digital products;
 - Minimum 2 years of experience in developing software and mobile applications for Android;
 - Language proficiency: Fluent English.

10. Evaluation Criteria

A two-stage procedure is utilized in evaluating the proposals, with evaluation of the technical proposal being completed prior to any price proposal being opened and compared. The price proposals will be opened only for submissions that passed the minimum technical score of 70% (or 490 points) of the obtainable score of 700 points in the evaluation of the technical proposals.

In the First Stage, the technical proposal is evaluated on the basis of its responsiveness to the Terms of Reference (TOR) and as per below Evaluation Criteria.

In the Second Stage, the price proposals of all offerors, who have attained minimum 70% score in the technical evaluation, will be reviewed.

Overall evaluation will be completed in accordance with cumulative analysis scheme, under which the technical and financial aspects will have pre-assigned weights on 70% and 30% of the overall score respectively. The lowest cost financial proposal (out of technically compliant) will be selected as a baseline

and allocated the maximum number of points obtainable for financial part (i.e. 300). All other financial proposals will receive a number of points inversely proportional to their quoted price; e.g. 300 points x lowest price / quoted price.

The winning proposal will be the one with the highest number of points after the points obtained in both technical and financial evaluations, respectively, are added up. The contract will be devoted to the bidder that submitted the winning proposal.

Technical Evaluation Criteria:

Summary of Technical Proposal Evaluation Forms		Points obtainable
1	Expertise of Firm / Organization	290
2	Proposed Methodology, Approach and Implementation Plan	240
3	Management Structure and Key Personnel	170
Total		700

Technical Proposal Evaluation		Points obtainable
<u>Form 1: Expertise of the Firm/Organization</u>		
1	Proven experience in in developing mobile-friendly websites and apps which integrate geospatial data visualizations: (3 - 4 years - 50 points; 5-6 years - 65 points; 7 years and more - 80 points)	80
2	Track record of developing open source software solutions is essential, such as prolific GitHub contribution history or repositories: (1-2 projects - 40 points; 3-4 projects -50 points; 5 projects and more - 60 points)	60
3	Extensive experience in supporting governments, organizations, UN agencies, academic institutions in database development, data visualization, training and translation of data into actionable insights: (1-2 assignments - 40 points; 3-4 assignments -50 points; 5 assignments and more - 60 points)	60
4	Experience in developing offline mobile data collection apps which integrate geospatial data (up to 40 points)	40
5	GEF project experience (30 points if available)	30
6	Relevant experience and certification in AWS administration (20 points if available)	20
Total		290
<u>Form 2: Technical Proposal Evaluation</u>		Points obtainable
1	Does the submitted Technical Proposal meet the objective and scope of work? (The Technical Proposal generally meets the objectives and scope of work – 60 points; The Technical Proposal corresponds well to the task, but workload overstated/understated – 80 points; The Technical Proposal is logical and details the algorithm of the task which is corresponding to the volume of work – 100 points)	100

2	How well developed, reasonable and reliable is the methodology of implementation of services? (The methodology was developed with an incomplete understanding of current realities and compliance with the tasks – 60 points; The methodology logically describes a sequence of works – 80 points; The methodology includes thorough criteria that demonstrate its feasibility –100 points)	100
3	How well developed and reliable is the task schedule? (The proposed task schedule contains some discrepancies – 30 points; the organization provided a balanced and realistic task schedule – 40 points)	40
Subtotal		240
Form 3: Management Structure and Key Personnel		Points obtainable
Team leader		Team Leader
1	Master's degree in communications, marketing, engineering, environmental science, information technology or related fields: (15 points – Master's / Specialist degree or higher; 20 points – PhD degree or higher)	20
2	Similar projects on developing the respective products (geospatial apps, offline mobile data collection apps, integrated spatial data infrastructure, websites to support donor-funded projects, open data solutions); (3-4 projects - 20 points; 5-6 projects - 25 points; 7 projects and more -30 points)	30
3	Experience in leading the development of IT products, with a DevOps mindset, using Agile or Scrum project management methodology: (3-4 years - 20 points; 5 years and more - 30 points)	30
4	Fluency in English: (5 points)	5
<u>Subtotals</u>		<u>85</u>
IT expert		Specialist 1
1	Bachelor's degree in communications, marketing, engineering, environmental science, information technology or related fields: (20 points – Master's / Specialist degree or higher; 15 points – Bachelors' degree)	20
2	Similar projects on developing the respective products (geospatial apps, offline mobile data collection apps, integrated spatial data infrastructure, websites to support donor-funded projects, open data solutions): (1-2 projects - 10 points; 3-4 projects - 15 points; 5 projects and more -20 points)	20
3	Experience in programming and software development including using AWS, Python, JavaScript, SQL to produce digital products: (2-3 years – 15 points; 4 years and more - 20 points)	20
4	Experience in developing software and mobile applications for Android; (2-3 years – 15 points; 4 years and more - 20 points)	20
5	Fluency in English: (5 points)	5
<u>Subtotals</u>		<u>85</u>
Total		170