

REQUEST FOR PROPOSAL

LIDAR Data Survey for Palau

RFP No.: RFP/FJI/JPN/001/19

Project: Enhancing Disaster and Climate Resilience in the Republic of Palau through

Improved Disaster Preparedness and Infrastructure

Country: Republic of Palau

Issued on: 19 December 2019

Contents

A. G	ENERAL PROVISIONS	
1.	Introduction	
2.	Fraud & Corruption, Gifts and Hospitality	
3.	Eligibility	
4.	Conflict of Interests	
B. P	REPARATION OF PROPOSALS	
5.	General Considerations	
6.	Cost of Preparation of Proposal	
7.	Language	
8.	Documents Comprising the Proposal	
9.	Documents Establishing the Eligibility and Qualifications of the Bidder	
10		
11		
12	,	
13		
14		
15	, ,	
16	.,	
17		
18	and the second s	
19	r	
20	and the second s	
21		
	UBMISSION AND OPENING OF PROPOSALS	
22		
23		
24	· · · · , · · · · · · · · · · · · · · ·	
25		
	VALUATION OF PROPOSALS	
26		
27 28	·	
28 29	•	
_		
30	·	
31		
32 33	•	
33 34	·	
_	WARD OF CONTRACT	
c. A 35		
36		
37		
38		
39		
40		
41	••	
42		
43	·	
43		
45	,	
46		
70	Color 110400010	•••••

SECTION 5. TERMS OF REFERENCE	23
Atmospheric conditions shall be cloud and fog free between the aircraft and ground d collection operations.	•
 Ground conditions shall be free of extensive flooding or any other type of inundation. 	24
LIDAR surveys of coastal zones to be conducted during low tide events during the agree period.	
SECTION 6: RETURNABLE BIDDING FORMS / CHECKLIST	34
FORM A: TECHNICAL PROPOSAL SUBMISSION FORM	35
FORM B: BIDDER INFORMATION FORM	36
FORM C: JOINT VENTURE/CONSORTIUM/ASSOCIATION INFORMATION FORM	38
FORM D: QUALIFICATION FORM	39
FORM E: FORMAT OF TECHNICAL PROPOSAL	41
FORM F: FINANCIAL PROPOSAL SUBMISSION FORM	43
FORM G: FINANCIAL PROPOSAL FORM	44

Section 1. Letter of Invitation

The United Nations Development Programme (UNDP) hereby invites you to submit a Proposal to this Request for Proposal (RFP) for the above-referenced subject.

This RFP includes the following documents and the General Terms and Conditions of Contract which is inserted in the Bid Data Sheet (BDS):

Section 1: This Letter of Invitation

Section 2: Instruction to Bidders

Section 3: Bid Data Sheet (BDS)

Section 4: Evaluation Criteria

Section 5: Terms of Reference

Section 6: Returnable Bidding Forms

- o Form A: Technical Proposal Submission Form
- o Form B: Bidder Information Form
- o Form C: Joint Venture/Consortium/Association Information Form
- o Form D: Qualification Form
- o Form E: Format of Technical Proposal
- o Form F: Financial Proposal Submission Form
- o Form G: Financial Proposal Form

If you are interested in submitting a Proposal in response to this RFP, please prepare your Proposal in accordance with the requirements and procedure as set out in this RFP and submit it by the Deadline for Submission of Proposals set out in Bid Data Sheet.

Please acknowledge receipt of this RFP by sending an email to murod.ruziev@undp.org and cc to dale.kacivi@undp.org indicating whether you intend to submit a Proposal or otherwise. You may also utilize the "Accept Invitation" function in eTendering system, where applicable. This will enable you to receive amendments or updates to the RFP. Should you require further clarifications, kindly communicate with the contact person/s identified in the attached Bid Data Sheet as the focal point for queries on this RFP.

UNDP looks forward to receiving your Proposal and thank you in advance for your interest in UNDP procurement opportunities.

Issued by:

Procurement Team

19 December 2019

Section 2. Instruction to Bidders

A. GENERAL PROVIS	IONS
1. Introduction	 Bidders shall adhere to all the requirements of this RFP, including any amendments in writing by UNDP. This RFP is conducted in accordance with the UNDP Programme and Operations Policies and Procedures (POPP) on Contracts and Procurement which can be accessed at https://popp.undp.org/SitePages/POPPBSUnit.aspx?TermID=254a9f96-b883-476a-8ef8-e81f93a2b38d Any Proposal submitted will be regarded as an offer by the Bidder and does not constitute or imply the acceptance of the Proposal by UNDP. UNDP is under no obligation to award a contract to any Bidder as a result of this RFP. As part of the bid, it is desired that the Bidder registers at the United Nations Global Marketplace (UNGM) website (www.ungm.org). The Bidder may still
2. Fraud & Corruption,	submit a bid even if not registered with the UNGM. However, if the Bidder is selected for contract award, the Bidder must register on the UNGM prior to contract signature. 2.1 UNDP strictly enforces a policy of zero tolerance on proscribed practices,
Gifts and Hospitality	including fraud, corruption, collusion, unethical or unprofessional practices, and obstruction of UNDP vendors and requires all bidders/vendors observe the highest standard of ethics during the procurement process and contract implementation. UNDP's Anti-Fraud Policy can be found at http://www.undp.org/content/undp/en/home/operations/accountability/audit/officeoff audit andinvestigation.html#anti
	Bidders/vendors shall not offer gifts or hospitality of any kind to UNDP staff members including recreational trips to sporting or cultural events, theme parks or offers of holidays, transportation, or invitations to extravagant lunches or dinners.
	 In pursuance of this policy, UNDP (a) Shall reject a proposal if it determines that the selected bidder has engaged in any corrupt or fraudulent practices in competing for the contract in question; (b) Shall declare a vendor ineligible, either indefinitely or for a stated period of time, to be awarded a contract if at any time it determines that the vendor has engaged in any corrupt or fraudulent practices in competing for, or in executing a UNDP contract.
	2.4 All Bidders must adhere to the UN Supplier Code of Conduct, which may be found at http://www.un.org/depts/ptd/pdf/conduct_english.pdf
3. Eligibility	3.1 A vendor should not be suspended, debarred, or otherwise identified as ineligible by any UN Organization or the World Bank Group or any other international Organization. Vendors are therefore required to disclose to UNDP whether they are subject to any sanction or temporary suspension imposed by these organizations.
	3.2 It is the Bidder's responsibility to ensure that its employees, joint venture members, sub-contractors, service providers, suppliers and/or their employees meet the eligibility requirements as established by UNDP.
4. Conflict of Interests	4.1 Bidders must strictly avoid conflicts with other assignments or their own interests, and act without consideration for future work. Bidders found to have a conflict of interest shall be disqualified. Without limitation on the generality of the above, Bidders, and any of their affiliates, shall be considered to have a conflict of interest with one or more parties in this solicitation process, if they: a) Are or have been associated in the past, with a firm or any of its affiliates which have been engaged by UNDP to provide services for the preparation of the design, specifications, Terms of Reference, cost analysis/estimation,

and other documents to be used for the procurement of the goods and services in this selection process; b) Were involved in the preparation and/or design of the programme/project related to the services requested under this RFP; or c) Are found to be in conflict for any other reason, as may be established by, or at the discretion of UNDP. 4.2 In the event of any uncertainty in the interpretation of a potential conflict of interest, Bidders must disclose to UNDP, and seek UNDP's confirmation on whether or not such a conflict exists. 4.3 Similarly, the Bidders must disclose in their proposal their knowledge of the following: a) If the owners, part-owners, officers, directors, controlling shareholders, of the bidding entity or key personnel are family members of UNDP staff involved in the procurement functions and/or the Government of the country or any Implementing Partner receiving services under this RFP; and b) All other circumstances that could potentially lead to actual or perceived conflict of interest, collusion or unfair competition practices. Failure to disclose such an information may result in the rejection of the proposal or proposals affected by the non-disclosure. The eligibility of Bidders that are wholly or partly owned by the Government shall 4.4 be subject to UNDP's further evaluation and review of various factors such as being registered, operated and managed as an independent business entity, the extent of Government ownership/share, receipt of subsidies, mandate and access to information in relation to this RFP, among others. Conditions that may lead to undue advantage against other Bidders may result in the eventual rejection of the Proposal. B. PREPARATION OF PROPOSALS 5. General In preparing the Proposal, the Bidder is expected to examine the RFP in detail. Material deficiencies in providing the information requested in the RFP may Considerations result in rejection of the Proposal. 5.2 The Bidder will not be permitted to take advantage of any errors or omissions in the RFP. Should such errors or omissions be discovered, the Bidder must notify the UNDP 6. Cost of Preparation 6.1 The Bidder shall bear any and all costs related to the preparation and/or submission of the Proposal, regardless of whether its Proposal was selected or of Proposal not. UNDP shall not be responsible or liable for those costs, regardless of the conduct or outcome of the procurement process. 7. Language 7.1 The Proposal, as well as any and all related correspondence exchanged by the Bidder and UNDP, shall be written in the language (s) specified in the BDS. The Proposal shall comprise of the following documents: 8. Documents 8.1 a) Documents Establishing the Eligibility and Qualifications of the Bidder; Comprising the b) Technical Proposal; Proposal c) Financial Proposal; d) Proposal Security, if required by BDS; e) Any attachments and/or appendices to the Proposal. 9. Documents The Bidder shall furnish documentary evidence of its status as an eligible 9.1 Establishing the and qualified vendor, using the Forms provided under Section 6 and Eligibility and providing documents required in those forms. In order to award a contract Qualifications of the to a Bidder, its qualifications must be documented to UNDP's satisfaction. Bidder 10. Technical Proposal The Bidder is required to submit a Technical Proposal using the Standard Forms and templates provided in Section 6 of the RFP. Format and Content 10.2 The Technical Proposal shall not include any price or financial information. A Technical Proposal containing material financial information may be declared non-responsive.

	10.3	Samples of items, when required as per Section 5, shall be provided within the time specified and unless otherwise specified by UNDP, and at no expense to UNDP
	10.4	When applicable and required as per Section 5, the Bidder shall describe the necessary training programme available for the maintenance and operation of the services and/or equipment offered as well as the cost to the UNDP. Unless otherwise specified, such training as well as training materials shall be provided in the language of the Bid as specified in the BDS.
11. Financial Proposals	11.1	The Financial Proposal shall be prepared using the Standard Form provided in Section 6 of the RFP. It shall list all major cost components associated with the
	11.2	the Financial Proposal, shall be assumed to be included in the prices of other
	11.3	activities or items, as well as in the final total price. Prices and other financial information must not be disclosed in any other place except in the financial proposal.
12. Proposal Security	12.1	A Proposal Security, if required by BDS, shall be provided in the amount and form indicated in the BDS. The Proposal Security shall be valid up to thirty (30) days after the final date of validity of the Proposal.
	12.2	The Proposal Security shall be included along with the Technical Proposal. If Proposal Security is required by the RFP but is not found along with the Technical Proposal, the Proposal shall be rejected.
	12.3	If the Proposal Security amount or its validity period is found to be less than what is required by UNDP, UNDP shall reject the Proposal.
	12.4	In the event an electronic submission is allowed in the BDS, Bidders shall include a copy of the Bid Security in their proposal and the original of the Proposal Security must be sent via courier or hand delivery as per the instructions in BDS.
	12.5	The Proposal Security may be forfeited by UNDP, and the Proposal rejected, in the event of any one or combination, of the following conditions: a) If the Bidder withdraws its offer during the period of the Proposal Validity specified in the BDS, or;
		b) In the event that the successful Bidder fails:
		i. to sign the Contract after UNDP has issued an award; or
	12.6	to furnish the Performance Security, insurances, or other documents that UNDP may require as a condition precedent to the effectivity of the contract that may be awarded to the Bidder.
13. Currencies	13.1	All prices shall be quoted in the currency or currencies indicated in the BDS. Where Proposals are quoted in different currencies, for the purposes of comparison of all Proposals:
		a) UNDP will convert the currency quoted in the Proposal into the UNDP preferred currency, in accordance with the prevailing UN operational rate of exchange on the last day of submission of Proposals; and
		b) In the event that UNDP selects a proposal for award that is quoted in a currency different from the preferred currency in the BDS, UNDP shall reserve the right to award the contract in the currency of UNDP's preference, using the conversion method specified above.
14. Joint Venture, Consortium or Association	14.1	
		Agreement among the legal entities, and submitted with the Proposal; and (ii) if they are awarded the contract, the contract shall be entered into, by and between UNDP and the designated lead entity, who shall be acting for and on behalf of all the member entities comprising the joint venture.
	14.2	After the Deadline for Submission of Proposal, the lead entity identified to

represent the JV, Consortium or Association shall not be altered without the prior written consent of UNDP. The lead entity and the member entities of the JV, Consortium or Association 14.3 shall abide by the provisions of Clause 9 herein in respect of submitting only one 14.4 The description of the organization of the JV, Consortium or Association must clearly define the expected role of each of the entity in the joint venture in delivering the requirements of the RFP, both in the Proposal and the JV, Consortium or Association Agreement. All entities that comprise the JV, Consortium or Association shall be subject to the eligibility and qualification assessment by UNDP. 14.5 A JV, Consortium or Association in presenting its track record and experience should clearly differentiate between: a) Those that were undertaken together by the JV, Consortium or Association; b) Those that were undertaken by the individual entities of the JV, Consortium or Association. 14.6 Previous contracts completed by individual experts working privately but who are permanently or were temporarily associated with any of the member firms cannot be claimed as the experience of the JV, Consortium or Association or those of its members, but should only be claimed by the individual experts themselves in their presentation of their individual credentials. 14.7 JV, Consortium or Associations are encouraged for high value, multi-sectoral requirements when the spectrum of expertise and resources required may not be available within one firm. 15. Only One Proposal 15.1 The Bidder (including the individual members of any Joint Venture) shall submit only one Proposal, either in its own name or as part of a Joint Venture. Proposals submitted by two (2) or more Bidders shall all be rejected if they are 15.2 found to have any of the following: they have at least one controlling partner, director or shareholder in common; or b) any one of them receive or have received any direct or indirect subsidy from the other/s; or they have the same legal representative for purposes of this RFP; or d) they have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about, or influence on the Proposal of, another Bidder regarding this RFP process; they are subcontractors to each other's Proposal, or a subcontractor to one Proposal also submits another Proposal under its name as lead Bidder; or some key personnel proposed to be in the team of one Bidder participates in more than one Proposal received for this RFP process. This condition relating to the personnel, does not apply to subcontractors being included in more than one Proposal. Proposals shall remain valid for the period specified in the BDS, commencing on 16. Proposal Validity 16.1 Period the Deadline for Submission of Proposals. A Proposal valid for a shorter period may be rejected by UNDP and rendered non-responsive. 16.2 During the Proposal validity period, the Bidder shall maintain its original Proposal without any change, including the availability of the Key Personnel, the proposed rates and the total price. 17. Extension of 17.1 In exceptional circumstances, prior to the expiration of the proposal validity period, UNDP may request Bidders to extend the period of validity of their **Proposal Validity** Proposals. The request and the responses shall be made in writing, and shall be Period considered integral to the Proposal.

	17.2	If the Bidder agrees to extend the validity of its Proposal, it shall be done without any change in the original Proposal.
	17.3	The Bidder has the right to refuse to extend the validity of its Proposal, and in which case, such Proposal will not be further evaluated.
18. Clarification of Proposal	18.1	Bidders may request clarifications on any of the RFP documents no later than the date indicated in the BDS. Any request for clarification must be sent in writing in the manner indicated in the BDS. If inquiries are sent other than specified channel, even if they are sent to a UNDP staff member, UNDP shall have no obligation to respond or confirm that the query was officially received. UNDP will provide the responses to clarifications through the method specified
		in the BDS.
	18.3	UNDP shall endeavor to provide responses to clarifications in an expeditious manner, but any delay in such response shall not cause an obligation on the part of UNDP to extend the submission date of the Proposals, unless UNDP deems that such an extension is justified and necessary.
19. Amendment of Proposals	19.1	At any time prior to the deadline of Proposal submission, UNDP may for any reason, such as in response to a clarification requested by a Bidder, modify the RFP in the form of an amendment to the RFP. Amendments will be made available to all prospective bidders. If the amendment is substantial, UNDP may extend the Deadline for submission
	19.2	of proposal to give the Bidders reasonable time to incorporate the amendment into their Proposals.
20. Alternative	20.1	Unless otherwise specified in the BDS, alternative proposals shall not be
Proposals	20.2	considered. If submission of alternative proposal is allowed by BDS, a Bidder may submit an alternative proposal, but only if it also submits a proposal conforming to the RFP requirements. UNDP shall only consider the alternative proposal offered by the Bidder whose conforming proposal ranked the highest as per the specified evaluation method. Where the conditions for its acceptance are met, or justifications are clearly established, UNDP reserves the right to award a contract based on an alternative proposal. If multiple/alternative proposals are being submitted, they must be clearly
21. Pre-Bid Conference	21.1	marked as "Main Proposal" and "Alternative Proposal" When appropriate, a Bidder's conference will be conducted at the date, time and
		location specified in the BDS. All Bidders are encouraged to attend. Non-attendance, however, shall not result in disqualification of an interested Bidder. Minutes of the Bidder's conference will be disseminated on the procurement website and shared by email or on the e-Tendering platform as specified in the BDS. No verbal statement made during the conference shall modify the terms and conditions of the RFP, unless specifically incorporated in the Minutes of the Bidder's Conference or issued/posted as an amendment to RFP.
C. SUBMISSION AND	OPEN	ING OF PROPOSALS
22. Submission	22.1	The Bidder shall submit a duly signed and complete Proposal comprising the documents and forms in accordance with the requirements in the BDS. The submission shall be in the manner specified in the BDS. The Proposal shall be signed by the Bidder or person(s) duly authorized to commit the Bidder. The authorization shall be communicated through a document evidencing such authorization issued by the legal representative of the bidding entity, or a Power of Attorney, accompanying the Proposal.
	22.3	Bidders must be aware that the mere act of submission of a Proposal, in and of itself, implies that the Bidder fully accepts the UNDP General Contract Terms and Conditions.

Hard copy (manual) submission	22.4	 in the BDS shall be governed as follows: a) The signed Proposal shall be marked "Original", and its copies marked "Copy" as appropriate. The number of copies is indicated in the BDS. All copies shall be made from the signed original only. If there are discrepancies between the original and the copies, the original shall prevail. b) 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: i. Bear the name and address of the bidder; ii. Bea addressed to UNDP as specified in the BDS iiii. Bear a warning that states "Not to be opened before the time and date for proposal opening" as specified in the BDS. If the envelopes and packages with the Proposal are not sealed and marked as required, UNDP shall assume no responsibility for the misplacement, loss,
	22.5	or premature opening of the Proposal. Email submission, if allowed or specified in the BDS, shall be governed as follows:
Email Submission		 a) Electronic files that form part of the proposal must be in accordance with the format and requirements indicated in BDS; b) The Technical Proposal and the Financial Proposal files MUST BE COMPLETELY SEPARATE. The financial proposal shall be encrypted with different passwords and clearly labelled. The files must be sent to the
		dedicated email address specified in the BDS. c) The password for opening the Financial Proposal should be provided only upon request of UNDP. UNDP will request password only from bidders whose Technical Proposal has been found to be technically responsive. Failure to provide correct password may result in the proposal being
	22.6	rejected.
eTendering submission	22.6	Electronic submission through eTendering, if allowed or specified in the BDS, shall be governed as follows: a) Electronic files that form part of the proposal must be in accordance with the format and requirements indicated in RDS:
		the format and requirements indicated in BDS; b) The Technical Proposal and the Financial Proposal files MUST BE COMPLETELY SEPARATE and each of them must be uploaded individually and clearly labelled.
		d) The Financial Proposal file must be encrypted with a password so that it cannot be opened nor viewed until the password is provided. The password for opening the Financial Proposal should be provided only upon request of UNDP. UNDP will request password only from bidders whose technical proposal has been found to be technically responsive. Failure to provide the correct password may result in the proposal being rejected.
		 c) Documents which are required to be in original form (e.g. Bid Security, etc.) must be sent via courier or hand delivery as per the instructions in BDS. d) Detailed instructions on how to submit, modify or cancel a bid in the eTendering system are provided in the eTendering system Bidder User
		Guide and Instructional videos available on this link: http://www.undp.org/content/undp/en/home/operations/procurement/b
23. Deadline for Submission of	23.1	the date and time, specified in the BDS. UNDP shall only recognize the date and
Proposals and Late Proposals	23.2	time that the bid was received by UNDP UNDP shall not consider any Proposal that is submitted after the deadline for the submission of Proposals.

24. Withdrawal,	24.1	A Bidder may withdraw, substitute or modify its Proposal after it has been
Substitution, and		submitted at any time prior to the deadline for submission.
Modification of	24.2	Manual and Email submissions: A bidder may withdraw, substitute or modify its
Proposals		Proposal by sending a written notice to UNDP, duly signed by an authorized
		representative, and shall include a copy of the authorization (or a Power of Attorney). The corresponding substitution or modification of the Proposal, if any,
		must accompany the respective written notice. All notices must be submitted in
		the same manner as specified for submission of proposals, by clearly marking
		them as "WITHDRAWAL" "SUBSTITUTION," or "MODIFICATION"
	24.3	eTendering: A Bidder may withdraw, substitute or modify its Proposal by
		Canceling, Editing, and re-submitting the proposal directly in the system. It is
		the responsibility of the Bidder to properly follow the system instructions, duly
		edit and submit a substitution or modification of the Proposal as needed. Detailed instructions on how to cancel or modify a Proposal directly in the
		system are provided in Bidder User Guide and Instructional videos.
	24.4	Proposals requested to be withdrawn shall be returned unopened to the Bidders
		(only for manual submissions), except if the bid is withdrawn after the bid has
		been opened
25. Proposal Opening	25.1	There is no public bid opening for RFPs. UNDP shall open the Proposals in the presence of an ad-hoc committee formed by UNDP, consisting of at least two
		(2) members. In the case of e-Tendering submission, bidders will receive an
		automatic notification once their proposal is opened.
D. EVALUATION OF F	PROPC	SALS
26. Confidentiality	26.1	Information relating to the examination, evaluation, and comparison of
		Proposals, and the recommendation of contract award, shall not be disclosed to
		Bidders or any other persons not officially concerned with such process, even after publication of the contract award.
	26.2	Any effort by a Bidder or anyone on behalf of the Bidder to influence UNDP in
		the examination, evaluation and comparison of the Proposals or contract award
		decisions may, at UNDP's decision, result in the rejection of its Proposal and may
27. Evaluation of	27.1	be subject to the application of prevailing UNDP's vendor sanctions procedures. The Bidder is not permitted to alter or modify its Proposal in any way after the
Proposals	27.1	proposal submission deadline except as permitted under Clause 24 of this RFP.
11000000		UNDP will conduct the evaluation solely on the basis of the submitted Technical
		and Financial Proposals.
	27.2	Evaluation of proposals is made of the following steps:
		a) Preliminary Examinationb) Minimum Eligibility and Qualification (if pre-qualification is not done)
		c) Evaluation of Technical Proposals
		d) Evaluation of Financial Proposals
28. Preliminary	28.1	UNDP shall examine the Proposals to determine whether they are complete with
Examination		respect to minimum documentary requirements, whether the documents have been properly signed, and whether the Proposals are generally in order, among
		other indicators that may be used at this stage. UNDP reserves the right to reject
		any Proposal at this stage.
29. Evaluation of	29.1	Eligibility and Qualification of the Bidder will be evaluated against the Minimum
Eligibility and		Eligibility/Qualification requirements specified in the Section 4 (Evaluation
Qualification	29.2	Criteria).
	23.2	In general terms, vendors that meet the following criteria may be considered qualified:
		a) They are not included in the UN Security Council 1267/1989 Committee's
		list of terrorists and terrorist financiers, and in UNDP's ineligible vendors'
		list;
		b) They have a good financial standing and have access to adequate financial resources to perform the contract and all existing commercial
		commitments,

- They have the necessary similar experience, technical expertise, production capacity where applicable, quality certifications, quality assurance procedures and other resources applicable to the provision of the services required;
- d) They are able to comply fully with UNDP General Terms and Conditions of Contract;
- e) They do not have a consistent history of court/arbitral award decisions against the Bidder; and
- f) They have a record of timely and satisfactory performance with their clients.

30. Evaluation of Technical and Financial Proposals

- The evaluation team shall review and evaluate the Technical Proposals on the basis of their responsiveness to the Terms of Reference and other RFP documents, applying the evaluation criteria, sub-criteria, and point system specified in the Section 4 (Evaluation Criteria). A Proposal shall be rendered non-responsive at the technical evaluation stage if it fails to achieve the minimum technical score indicated in the BDS. When necessary and if stated in the BDS, UNDP may invite technically responsive bidders for a presentation related to their technical proposals. The conditions for the presentation shall be provided in the bid document where required.
- 30.2 In the second stage, only the Financial Proposals of those Bidders who achieve the minimum technical score will be opened for evaluation. The Financial Proposals corresponding to Technical Proposals that were rendered non-responsive shall remain unopened, and, in the case of manual submission, be returned to the Bidder unopened. For emailed Proposals and e-tendering submissions, UNDP will not request for the password of the Financial Proposals of bidders whose Technical Proposal were found not responsive.
- 30.3 The evaluation method that applies for this RFP shall be as indicated in the BDS, which may be either of two (2) possible methods, as follows: (a) the lowest priced method which selects the lowest evaluated financial proposal of the technically responsive Bidders; or (b) the combined scoring method which will be based on a combination of the technical and financial score.
- When the BDS specifies a combined scoring method, the formula for the rating of the Proposals will be as follows:

Rating the Technical Proposal (TP):

TP Rating = (Total Score Obtained by the Offer / Max. Obtainable Score for TP) x 00

Rating the Financial Proposal (FP):

FP Rating = (Lowest Priced Offer / Price of the Offer Being Reviewed) x 100 Total Combined Score:

Combined Score = (TP Rating) x (Weight of TP, e.g. 70%) + (FP Rating) x (Weight of FP, e.g., 30%)

31. Due Diligence

- 31.1 UNDP reserves the right to undertake a due diligence exercise, also called post qualification, aimed at determining to its satisfaction, the validity of the information provided by the Bidder. Such exercise shall be fully documented and may include, but need not be limited to, all or any combination of the following:
 - a) Verification of accuracy, correctness and authenticity of information provided by the Bidder;
 - b) Validation of extent of compliance to the RFP requirements and evaluation criteria based on what has so far been found by the evaluation team;
 - c) Inquiry and reference checking with Government entities with jurisdiction on the Bidder, or with previous clients, or any other entity that may have done business with the Bidder;
 - Inquiry and reference checking with previous clients on the performance on on-going or contracts completed, including physical inspections of previous works, as necessary;

	1	
		e) Physical inspection of the Bidder's offices, branches or other places where business transpires, with or without notice to the Bidder;f) Other means that UNDP may deem appropriate, at any stage within the selection process, prior to awarding the contract.
32. Clarification of Proposals	32.1 32.2 32.3	To assist in the examination, evaluation and comparison of Proposals, UNDP may, at its discretion, ask any Bidder for a clarification of its Proposal. UNDP's request for clarification and the response shall be in writing and no change in the prices or substance of the Proposal shall be sought, offered, or permitted, except to provide clarification, and confirm the correction of any arithmetic errors discovered by UNDP in the evaluation of the Proposals, in accordance with RFP. Any unsolicited clarification submitted by a Bidder in respect to its Proposal, which is not a response to a request by UNDP, shall not be considered during the review and evaluation of the Proposals.
33. Responsiveness of Proposal	33.1	UNDP's determination of a Proposal's responsiveness will be based on the contents of the Proposal itself. A substantially responsive Proposal is one that conforms to all the terms, conditions, TOR and other requirements of the RFP without material deviation, reservation, or omission. If a Proposal is not substantially responsive, it shall be rejected by UNDP and may not subsequently be made responsive by the Bidder by correction of the
		material deviation, reservation, or omission.
34. Nonconformities, Reparable Errors and Omissions	34.1	Provided that a Proposal is substantially responsive, UNDP may waive any non-conformities or omissions in the Proposal that, in the opinion of UNDP, do not constitute a material deviation. UNDP may request the Bidder to submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities or omissions in the Proposal related to documentation requirements. Such omission shall not be related to any aspect of the price of the Proposal. Failure of the Bidder to comply with the request may result in the rejection of its Proposal. For Financial Proposal that has been opened, UNDP shall check and correct arithmetical errors as follows: a) if there is a discrepancy between the unit price and the line item total that is obtained by multiplying the unit price by the quantity, the unit price shall prevail and the line item total shall be corrected, unless in the opinion of UNDP there is an obvious misplacement of the decimal point in the unit price; in which case the line item total as quoted shall govern and the unit price shall be corrected; b) if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected;
	34.4	and c) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail. If the Bidder does not accept the correction of errors made by UNDP, its Proposal shall be rejected.
E. AWARD OF CONT	RACT	
35. Right to Accept, Reject, Any or All Proposals	35.1	UNDP reserves the right to accept or reject any Proposal, to render any or all of the Proposals as non-responsive, and to reject all Proposals at any time prior to award of contract, without incurring any liability, or obligation to inform the affected Bidder(s) of the grounds for UNDP's action. UNDP shall not be obliged to award the contract to the lowest priced offer.
36. Award Criteria	36.1	Prior to expiration of the proposal validity, UNDP shall award the contract to the qualified Bidder based on the award criteria indicated in the BDS.
37. Debriefing	37.1	In the event that a Bidder is unsuccessful, the Bidder may request a debriefing from UNDP. The purpose of the debriefing is to discuss the strengths and

		weaknesses of the Bidder's submission, in order to assist the Bidder in improving its future proposals for UNDP procurement opportunities. The content of other proposals and how they compare to the Bidder's submission shall not be discussed.	
38. Right to Vary Requirements at the Time of Award	38.1	of services and/or goods, by up to a maximum twenty-five per cent (25%) of total offer, without any change in the unit price or other terms and condition	
39. Contract Signature	39.1	Within fifteen (15) days from the date of receipt of the Contract, the successful Bidder shall sign and date the Contract and return it to UNDP. Failure to do so may constitute sufficient grounds for the annulment of the award, and forfeiture of the Proposal Security, if any, and on which event, UNDP may award the Contract to the Second Ranked Bidder or call for new Proposals.	
40. Contract Type and General Terms and Conditions	40. Contract Type and General Terms and Terms and Conditions, as specified in BDS, can be		
41. Performance Security	41.1	•	
42.1 Except when the interests of UNDP so require, it is UNDP's preference no advance payment(s) (i.e., payments without having received any an advance payment is allowed as per BDS, and exceeds 20% contract price, or USD 30,000, whichever is less, the Bidder shall sufficient the full amount of the advance payment in the form <a 15="" contract%20management%20payment%20and%20taxes_advanced%20payment%20guarantee%20form.docx&action="default</a" href="https://popp.undp.org/layouts/15/WopiFrame.aspx?sourcedoc=/UDOCUMENT LIBRARY/Public/PSU Contract%20Management%20Paand%20Taxes Advanced%20Payment%20Guarantee%20Form.docx80</th><th>Except when the interests of UNDP so require, it is UNDP's preference to make no advance payment(s) (i.e., payments without having received any outputs). If an advance payment is allowed as per BDS, and exceeds 20% of the total contract price, or USD 30,000, whichever is less, the Bidder shall submit a Bank Guarantee in the full amount of the advance payment in the form available at 			
43. Liquidated Damages	43.1	If specified in BDS, UNDP shall apply Liquidated Damages resulting from the Contractor's delays or breach of its obligations as per the Contract.	
44. Payment Provisions	44.1	Payment will be made only upon UNDP's acceptance of the work performed. The terms of payment shall be within thirty (30) days, after receipt of invoice and certification of acceptance of work issued by the proper authority in UNDP with direct supervision of the Contractor. Payment will be effected by bank transfer in the currency of contract.	
45. Vendor Protest	45.1	UNDP's vendor protest procedure provides an opportunity for appeal to those persons or firms not awarded a contract through a competitive procurement process. In the event that a Bidder believes that it was not treated fairly, the following link provides further details regarding UNDP vendor protest procedures: http://www.undp.org/content/undp/en/home/operations/procurement/business/protest-and-sanctions.html	
46. Other Provisions	46.1	In the event that the Bidder offers a lower price to the host Government (e.g. General Services Administration (GSA) of the federal government of the United States of America) for similar services, UNDP shall be entitled to same lower price. The UNDP General Terms and Conditions shall have precedence.	
	46.2	UNDP is entitled to receive the same pricing offered by the same Contractor in contracts with the United Nations and/or its Agencies. The UNDP General Terms and Conditions shall have precedence. The United Nations has established restrictions on employment of (former) UN	
	40.5	The officed Mations has established restrictions of employment of (former) ON	

staff who have been involved in the procurement process as per bulletin ST/SGB/2006/15
http://www.un.org/en/ga/search/view_doc.asp?symbol=ST/SGB/2006/15&refer
<u>er</u>

Section 3. Bid Data Sheet

The following data for the services to be procured shall complement, supplement, or amend the provisions in the Request for Proposals. In the case of a conflict between the Instructions to Bidders, the Data Sheet, and other annexes or references attached to the Data Sheet, the provisions in the Data Sheet shall prevail.

BDS No.	Ref. to Section.2	Data	Specific Instructions / Requirements
1	7	Language of the Proposal	English
2		Submitting Proposals for Parts or sub-parts of the TOR (partial bids)	Not Allowed
3	20	Alternative Proposals	Shall be considered.
4	21	Pre-proposal conference	Will be Conducted Time: 12.00 Fiji Time Date: January 15, 2020 Venue: UNDP Pacific Office The UNDP focal point for the arrangement is: Murod Ruziev E-mail: murod.ruziev@undp.org Dale Kacivi E-mail: dale.kacivi@undp.org Interested companies should provide contact details of their representative, including email, who will attend the meeting in order for UNDP to include into online tool for conference call.
5	10	Proposal Validity Period	90 days
6	14	Bid Security	Not Required
7	41	Advanced Payment upon signing of contract	Allowed up to a maximum of 20% of contract value. For advance payment conditions please refer to Clause 42 of Section 2. Instruction to Bidders.
8	42	Liquidated Damages	Choose an item. Percentage of contract price per day of delay: 0.1% Max. number of days of delay 30, after which UNDP may terminate the contract.
9	40	Performance Security	Required in the amount of 10% of contract amount. Please refer to Clause 41 of Section 2. Instruction to Bidders on performance security requirements.
10	18	Currency of Proposal	United States Dollar

11	31	Deadline for submitting requests for clarifications/ questions	5 days before the submission deadline
12	31	Contact Details for submitting clarifications/questions	Focal Person in UNDP: Murod Ruziev Address: Level 8, Kadavu House, 414 Victoria Parade, Privat Mail Bag Suva, Fiji E-mail address: murod.ruziev@undp.org
13	18, 19 and 21	Manner of Disseminating Supplemental Information to the RFP and responses/clarifications to queries	Posted directly to eTendering
14	23	Deadline for Submission	For eTendering submission - as indicated in eTendering system. Note that system time zone is in EST/EDT (New York) time zone. PLEASE NOTE: ✓ Date and time visible on the main screen of event (on eTendering portal) will be final and prevail over any other closing time indicated elsewhere, in case they are different. The correct bid closing time is as indicated in the eTendering 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. ✓ In case of any discrepancies, the deadline indicated in the system shall prevail 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 submitting your bid at the last minute, UNDP may not be able to assist.
14	22	Allowable Manner of Submitting Proposals	☑ e-Tendering Username: event.guest Password: why2change
15	22	Proposal Submission Address	https://etendering.partneragencies.org Business Unit Code: FJI10 Event ID: 0000005077
16	22	Electronic submission eTendering requirements	 Format: PDF files only File names must be maximum 60 characters long and must not contain any letter or special character other than from Latin alphabet/keyboard. All files must be free of viruses and not corrupted. Password protected Financial Proposal in .pdf should uploaded in the system, and in the system Bidders must insert "1" in the line item unit price. Password for financial proposal must not be provided to UNDP until requested by UNDP.

			 Documents which are required in original (e.g. Proposal Security) should be sent to the below address with a PDF copy submitted as part of the electronic submission: United Nations Development Programme Level 8 Kadavu House 414 Victoria Parade Private Mail Bag Suva, Fiji
17	27 36	Evaluation Method for the Award of Contract	Lowest Financial Offer among Technically Responsive and Qualified Proposals The minimum technical score required to pass is 70%.
18		Expected date for commencement of Contract	1st April, 2020
19		Maximum expected duration of contract	7 months from the date of signature of contract by both parties
20	35	UNDP will award the contract to:	One Proposer Only
21	39	Type of Contract	Purchase Order and Contract for Goods and Services for UNDP http://www.undp.org/content/undp/en/home/procurement/business/how-we-buy.html
22	39	UNDP Contract Terms and Conditions that will apply	UNDP General Terms and Conditions for Professional Services http://www.undp.org/content/undp/en/home/procurement/business/how-we-buy.html
23		Other Information Related to the RFP	NOTE: The Technical Proposal and Financial 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 Technical Proposal has been found to be pass the technical evaluation stage. Once a Technical Proposal has been found to be responsive by passing the technical evaluation stage, UNDP shall request the Proposer to submit the password to open the Financial Proposal. The Proposer shall assume the responsibility for not encrypting the Financial Proposal. NOTE: DO NOT ENTER BID AMOUNT IN THE SYSTEM, INSTEAD ENTER THE NUMBER 1. The step by step instructions for registration of bidders and quotation submission through the UNDP ATLAS e-Tendering system is available in the attached "Instructions Manual for the Bidders".

Section 4. Evaluation Criteria

Preliminary Examination Criteria

Proposals will be examined to determine whether they are complete and submitted in accordance with RFP requirements as per below criteria on a Yes/No basis:

- Appropriate signatures
- Power of Attorney
- Minimum documents provided
- Technical and Financial Proposals submitted separately
- Bid Validity

Minimum Eligibility and Qualification Criteria

Eligibility and Qualification will be evaluated on Pass/Fail basis.

If the Proposal is submitted as a Joint Venture/Consortium/Association, each member should meet minimum criteria, unless otherwise specified in the criterion.

Subject	Criteria	Document Submission requirement
ELIGIBILITY		
Legal Status	Vendor is a legally registered entity.	Form B: Bidder Information Form
Eligibility	Vendor is not suspended, nor debarred, nor otherwise identified as ineligible by any UN Organization or the World Bank Group or any other international Organization in accordance with RFP clause 3.	Form A: Technical Proposal Submission Form
Conflict of Interest	No conflicts of interest in accordance with RFP clause 4.	Form A: Technical Proposal Submission Form
Bankruptcy	Not declared bankruptcy, not involved in bankruptcy or receivership proceedings, and there is no judgment or pending legal action against the vendor that could impair its operations in the foreseeable future.	Form A: Technical Proposal Submission Form
Certificates and Licenses	 Patent Registration Certificates, if any of technologies submitted in the Proposal is patented by the Proposer Latest Certificate of Registration of the business Local Government permit to locate and operate in the country of registration Quality Certificate (e.g., ISO 14001 or 14064 or equivalent) and/or other similar certificates, accreditations, awards and citations received by the Bidder, if any Power of Attorney or designation of the official who signed bidding documents on behalf of the company 	
QUALIFICATION		
History of Non- Performing Contracts ¹	Non-performance of a contract did not occur as a result of contractor default for the last 5 years	Form D: Qualification Form

¹ Non-performance, as decided by UNDP, shall include all contracts where (a) non-performance was not challenged by the contractor, including through referral to the dispute resolution mechanism under the respective contract, and (b) contracts that were so challenged but fully settled against the contractor. Non-performance shall not include contracts where Employers decision was overruled by the

Litigation History	No consistent history of court/arbitral award decisions against the Bidder for the last 5 years	Form D: Qualification Form
Previous	Minimum 5 years of relevant experience	Form D: Qualification Form
Experience	Minimum 1 contracts of similar value, nature and complexity implemented over the last 5 years (For JV/Consortium/Association, all Parties cumulatively should meet requirement).	Form D: Qualification Form
Financial Standing	Minimum average annual turnover of USD 800,000 for the last 5 years. (For JV/Consortium/Association, all Parties cumulatively should meet requirement).	Form D: Qualification Form
	Bidder must demonstrate the current soundness of its financial standing and indicate its prospective long-term profitability. (For JV/Consortium/Association, all Parties cumulatively should meet requirement).	Form D: Qualification Form
Additional eligibility criteria	 Track Record – list of clients for similar services for the last 5 years as those required by UNDP, indicating description of contract scope, contract duration, contract value, contact references Minimum three recommendation letters from the past customers whom the Proposer rendered similar services in the past Signed and dated resumes and declaration of availability of involved specialists for the period of contract implementation Provide assurance of capability of equipment which will provide for a broad spectrum of requirements; for example highly accurate topographic capabilities (possibly in densely vegetated environments) and which will differentiate subtle elevation change in low lying islands 	

dispute resolution mechanism. Non-performance must be based on all information on fully settled disputes or litigation, i.e. dispute or litigation that has been resolved in accordance with the dispute resolution mechanism under the respective contract and where all appeal instances available to the Bidder have been exhausted.

Technical Evaluation Criteria

Summ	ary of Technical Proposal Evaluation Forms	Points Obtainable
1.	Bidder's qualification, capacity and experience	300
2.	Proposed Methodology, Approach and Implementation Plan	400
3.	Management Structure and Key Personnel	300
	Total	1000
Section	n 1. Bidder's qualification, capacity and experience	Points obtainable
1.1	Reputation of Organization and Staff Credibility / Reliability / Industry Standing: Successful corresponding work experience more than 5 years Previous experience in the Pacific Islands or SIDS, preferably in Palau or Northern Pacific working in logistically challenging and remote locations Two and more contracts in required area executed the in the past Recommendation letters, including from International Organization(s) – 3 point for each recommendation letter but not more than 9 points	50 17 13 11 9
1.2	General Organizational Capability which is likely to affect implementation: management structure, financial stability and project financing capacity, project management controls, extent to which any work would be subcontracted	90
1.3	Relevance of specialized knowledge and experience on similar engagements done in the region/country	70
1.4	Quality assurance procedures and risk mitigation measures	60
1.5	Organizational Commitment to Sustainability (mandatory weight)	30
	 Organization is compliant with ISO 14001 or ISO 14064 or equivalent Organization is a member of the UN Global Compact (https://www.unglobalcompact.org/) Organization demonstrates significant commitment to sustainability through some other means, for example internal company policy documents on women empowerment, renewable energies or membership of trade institutions promoting such issues 	20 5 5
	Total Section 1	300
Section	n 2. Proposed Methodology, Approach and Implementation Plan	Points 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?	80
2.2	Description of the Proposer's approach and methodology for meeting or exceeding the requirements of the Terms of Reference	100
2.3	Details on how the different service elements shall be organized, controlled and delivered	50

2.4	Description of available performance monitoring and evaluation mechanisms and tools; how they shall be adopted and used for a specific requirement	50
2.5	Assessment of the implementation plan proposed including whether the activities are properly sequenced and if these are logical and realistic	70
2.6	Demonstration of ability to plan, integrate and effectively implement sustainability measures in the execution of the contract	50
	Total Section 2	400
		Points
Section	n 3. Management Structure and Key Personnel	obtainable
3.1	Composition and structure of the team proposed. Are the proposed roles of the management and the team of key personnel suitable for the provision of the necessary services?	60
3.2	Qualifications of key personnel proposed	
3.2 a	Team Leader / Expert on Geograply, Geodesy, Photogammetry, and/or Surveying	120
	 University degree (or equivalent), preferably in sciences, management, geodesic sciences or field directly related to LIDAR survey (topogrpahic and/or bathymetric), (copy of diploma, certificate and other documents which ensure of high education degree might be requested by UNDP) More than 5 years of relevant practical experience in project and team 	50
	management and organization of large scale projects.	50
	- Experience in UNDP and other international projects in similar field	20
	- Experience in the Pacific Island regions	10
3.2 b	- Fluency in English	10
3.2 D	Senior Expert / Specialist on LIDAR/GIS data collection and analysis	80
	 University degree (or equivalent), preferably in the fields of Geographical Information Systems (GIS), geography or related field (copy of diploma, certificate and other documents which ensure of high education degree might be requested by UNDP) 	10
	 More than 3 years of relevant practical experience on Lidar collection and analysis, acquisition, analysis and production of lidar information 	40
	 Experience with UNDP and other international projects, including developing countries in similar field 	10
	- Experience in the Pacific Islands environments	10
	- Fluency in English	10
3.2 c	Junior Expert / Experience with LIDAR data collection and analysis	40
	 University degree (or equivalent), preferably in the fields of Geographical Information Systems (GIS), geography or related fiel (copy of diploma, certificate and other documents which ensure of high education degree might be requested by UNDP) 	5
	 More than 3 years of experience in GIS, Photogammetry, Geodesics, Surveying or other related fields 	15
	 Experience in UNDP and other international projects, including developing countries in similar field 	10
	- Fleuncy in English	10
	Total Section 3	300

Section 5. Terms of Reference

Terms of Reference for the Acquisition of LIDAR Data for Palau

1. Introduction

The Republic of Palau consists of approximately 340 islands located in the western Pacific Ocean, 528 mi (650 km) southeast of the Philippines. Eight of the islands are permanently inhabited. They vary geologically from the high, mountainous, and largest island of Babeldaob, to low coral islands, usually fringed by large barrier reefs. Palau has an area of approximately 415 square kilometers (160 sq mi). The most populous island is Koror. The capital Ngerulmud is located on the island of Babeldaob, in Melekeok State. Palau shares maritime boundaries with the Philippines, Indonesia, and the Federated States of Micronesia.

The people of Palau, closely tied to and reliant on their natural resources and environment, have been increasingly concerned about the changes they are experiencing, from storms to rising seas to disasters that worsen with time. The country's remoteness, limited services, small low lying islands and heavily populated coastlines, and potential exposure to infrequent but potentially devastating tropical cyclones, mean Palau is one of the most vulnerable countries in the world. This is particularly so when viewed through the lens of climate change and sea-level rise impacts, which is enhancing the country's exposure to marine hazards. When combined with considerable development and economic challenges, the high levels of vulnerability to climate change impacts are likely to have severe long-term effects on sustainable development of the country.

The threat of ongoing level rise and changing incidence of severe tropical storms means that most of Palau's inhabited areas are subject to enhanced exposure to incidences of marine flooding and wave inundation. To successfully model and assess the risks of either storm generated wave inundation impacts or the gradually increasing sea level rise inundation events in low lying areas, high quality topographic data is required. Detailed high resolution topographic data is absent in Palau. Without high resolution topographic information the relationship between water levels or wave dynamics and land cannot be accurately assessed.

This long standing gap in baseline topographic data, hampers empirical understanding of sea level rise impacts and thus scientific reporting, undermines the design of adaptation response. This data will become a crucial baseline to inform all aspects of development, infrastructure planning, adaptation, and etc.

The Palau Automated Land And Resource Information Systems (PALARIS) is the main in-country spatial data user and data developer, and has the mandate to provide ongoing national spatial data support. PALARIS would be the immediate beneficiary of this project.

Many stakeholders across state and national government will see the provision of this data as an extraordinary step forward to facilitate improved planning and understanding of resources and vulnerability. This baseline will be of key interest to development partners and local authorities interested in adaptation, infrastructure development, natural resource management and environmental monitoring. It will for the first time since sea level rise has been an issue of concern in Palau, that detailed and accurate topographic information will be made available, a fundamental first step in assessing national vulnerability to climate change.

2. Objectives

This survey is expected to provide accurate national coverage of island topography (LIDAR) to primarily support PALARIS's island vulnerability assessment work but also feed into a very broad spectrum of vulnerability, adaptation, development, resource management and environmental monitoring needs in PALAU. In respect to PALARIS, it will provide not only a fundamental baseline for the national vulnerability assessment and planning but will also serve as an integral baseline for shoreline monitoring.

Specifications for the LIDAR survey are based on specifications provided by the United States Geological Service (USGS). Released as a working draft in 2010 and formally published in 2012, the USGS–NGP Lidar Base Specification (LBS), was quickly embraced by numerous States, counties, and foreign countries as the foundation for their own lidar specifications. Published in 2012, the NEEA report documented a substantial return on such an investment, defined five quality levels (QL) for elevation data, and recommended an 8-year collection cycle of QL2 lidar data as the optimum balance of benefit and affordability. In response to the

study, the USGS–NGP established the 3D Elevation Program (3DEP) in 2013 as the interagency vehicle through which the NEEA recommendations could be realized.

The specification used to develop this TOR is based on the USGS-NGP Lidar Base Specification version 1.3, Published in February 2018.

3. Scope of Work:

3.1 LIDAR Data Collection

a. Collection Area

Estimated coverage of the topographic LIDAR survey for the islands of Palau is approximately 415 square kilometers. Acquire airborne LIDAR coverage of all land forms across all the island of Palau, including the "Rock Island" and ephemeral features such as sand banks, etc. Below is a breakdown of estimated coverage area for the various islands formations.

Name of Island	Estimated Coverage (km²)	Description
Kayangel	1.72	Atoll system that includes the islands of
		Ngeangel, Ngeriungs, Ngerbelas and Orak
Babeldoab	327.61	
Koror	56.8	Includes the Main islands of Koror (Koror,
		Malakal and Meyeuns) and associated Rock
		Islands
Peleliu	16.94	Includes Peleiu island and associated Rock
		Islands.
Angaur	8.05	Includes Island of Angaur
Sonsorol	3.01	Includes the Islands of Sonsorol, Fana, Merir
		and Pulo Ana
Hatohobei	0.86	Includes Hatohobei island and Helen island
Estimated Total	414.99	Total Coverage
Coverage Area		

b. Collection Conditions

Conditions for collection of LIDAR data shall follow these guidelines:

- Atmospheric conditions shall be cloud and fog free between the aircraft and ground during all collection operations.
- Ground conditions shall be free of extensive flooding or any other type of inundation.
- LIDAR surveys of coastal zones to be conducted during low tide events during the agreed survey period.

c. Multiple Discrete Returns

Data collection must be capable of at least three returns per pulse. Full waveform collection is acceptable and welcomed; however, waveform data are regarded as supplemental information. Deriving and delivering multiple discrete returns is required in all cases.

d. Intensity Values

Intensity values are required for each return. The values are to be recorded in the .las files in their native radiometric resolution.

e. Nominal Pulse Spacing (NPA)

A NPS of at least 2 points per square meter is required. Dependent on the local terrain and land cover conditions in the project area, a greater point density may be required. Assessment of the NPS will be made against single swath, first-return only data, located within the geometrically usable center portion (typically 90 percent) of each swath, acceptable data voids excluded. NPS will be calculated as the square root of the

average area per point. Average along-track and cross-track point spacing should be comparable (within 10 percent).

f. Data Voids

Data voids within a single swath are not acceptable, except in the following circumstances:

- Where caused by water bodies,
- Where caused by areas of low near infra-red (NIR) reflectivity such as asphalt or composition roofing, or
- Where appropriately filled-in by another swath

g. Spatial Distribution

The spatial distribution of geometrically usable points is expected to be uniform. Although it is understood that lidar instruments do not produce regularly gridded points, collections should be planned and executed to produce a first-return point cloud that approaches a regular lattice of points, rather than a collection of widely spaced high density profiles of the terrain.

h. Flight Overlap

Flightline overlap of 20 percent or greater is required to ensure there are no data gaps between the usable portions of the swaths. Collections in high relief terrain are expected to require greater overlap. Any data with gaps between the geometrically usable portions of the swaths will be rejected.

I. Vertical Accuracy

The minimum vertical accuracy requirement for the unclassified LIDAR point cloud, using the NDEP/ASPRS methodology, is listed below:

• Fundamental Vertical Accuracy (FVA) <= 18.5 centimeters (cm) Accuracyz (ACCz), 95 percent (9.25 cm Root Mean Square Error (RMSE)). This equates to Quality Level 2 (QL 2) in table 1.

The minimum vertical accuracy requirements for the derived DEM, using the NDEP/ASPRS methodology are listed below:

• Fundamental Vertical Accuracy (FVA)<= 18.5 centimeters (cm) Accuracyz (ACCz), 95 percent (9.25 cm Root Mean Square Error (RMSE)). Again, this equates to Quality Level 2 (QL 2) in table 1.

Table 1. Quality Levels for LiDAR Horizontal Resolution and Vertical Accuracy					
Elevation Quality	Source	Horizontal Resolution Terms		Vertical Accuracy Terms	
Levels (QL)		Point Density	Nominal Pulse Spacing (NPS)	VerticalRM SEz	Equivalent Contour Accuracy
QL 1	LiDAR	8 pts/m ₂	0.35 m	9.25 cm	1-ft
QL 2	LiDAR	2 pts/m ₂	0.7 m	9.25 cm	1-ft
QL 3	LiDAR	1 – 0.25 pts/m ₂	1 – 2 m	≤18.5 cm	2-ft

3.2 Data Processing and Handling

a. LAS file Format

All processing will be carried out with the understanding that all point deliverables are required to be in LAS format, version 1.4. Data producers are encouraged to review the LAS Specification version 1.4 in detail (ASPRS, 2011)

b. Global Positioning Systems (GPS) Times

The time of global positioning system (GPS) data shall be recorded as Adjusted GPS Time, at a precision sufficient to allow unique timestamps for each pulse. Adjusted GPS Time is defined to be Standard (or

satellite). The encoding tag in the LAS header shall be properly set. See the LAS Specification version 1.4 for additional information (ASPRS, 2011).

c. Coordinate Reference System

The required Coordinate Reference System is as follows:

Coordinate Reference System: Universal Transverse Mercator (UTM)N 53

Horizontal Datum: Most current realization of WGS84

Horizontal Units: International Feet

Vertical Datum: Mean Sea Level for Palau as established by the Bureau of Lands and Survey of Palau

Vertical Units: International Feet and Meter **Vertical Reference:** Orthometric Heights

d. Units of Reference

All references to the unit of measure "Feet" and "Foot" must specify "International" or "Intl", U.S. survey feet are not to be used as a unit of measure. All references to measurements should also include metric units in "meters"

e. Swath Identification

Each swath will be assigned a unique File Source ID. It is required that the Point Source ID field for each point within each LAS swath file be set equal to the File Source ID before any processing of the data. Refer to the appropriate LAS Specification (ASPRS, 2011).

f. Point Families

Point families (multiple return "children" of a single "parent" pulse) shall be maintained intact through all processing before tiling. Multiple returns from a given pulse will be stored in sequential (collected) order.

g. Swath Size and Segmentation

Swath files will be 2 gigabytes (GB) in size or less. Long swaths (those which result in a LAS file larger than 2 GB) will be split into segments no greater than 2 GB each.

- Each sub-swath will retain the original File Source ID of the original complete swath.
- Points within each sub-swath will retain the Point Source ID of the original complete swath.
- Each sub-swath file will be named identically to the original complete swath, with the addition of an ordered alphabetic suffix to the name ("-a", "-b" ... "-n"). The order of the named sub-swaths shall be consistent with the collection order of the points ("-a" will be the chronological beginning of the swath; "-n" will be the chronological end of the swath).
- Point families shall be maintained intact within each sub-swath.
- Sub-swaths should be broken at the edge of the scan line.
- Other swath segmentation approaches may be acceptable, with prior approval.

h. Scope of Collection

All collected swaths are to be delivered as part of the Calibrated Raw Data Deliverable. This includes calibration swaths and cross-ties. This in no way requires or implies that calibration swath data are to be included in product generation. All collected points are to be delivered. No points are to be deleted from the swath LAS files. Excepted from this are extraneous data outside of the buffered project area (aircraft turns, transit between the collection area and airport, transit between fill-in areas, and the like). These points may be permanently removed. Busted swaths that are being completely discarded by the vendor and re-flown do not need to be delivered.

i. Use of the LAS Withheld Flag

Outliers, blunders, noise points, geometrically unreliable points near the extreme edge of the swath, and other points the vendor deems unusable are to be identified using the Withheld flag, as defined in the LAS specification.

This applies primarily to points that are identified during pre-processing or through automated post-processing routines. If processing software is not capable of populating the Withheld bit, these points may be identified using Class=11. Noise points subsequently identified during manual Classification and Quality Assurance/Quality Control (QA/QC) may be assigned the standard LAS classification value for Noise (Class=7), regardless of whether the noise is "low" or "high" relative to the ground surface.

j. Point Classification

- ALL points not identified as Withheld are to be classified.
- No points in the Classified LAS deliverable will be assigned Class=0.

If overlap points are required to be differentiated by the data producer or cooperating partner, they must be identified using a method that does not interfere with the classification. Technique used to identify overlap must be clearly described in the project metadata files.

k. Positional Accuracy Validation

Before classification of and development of derivative products from the point cloud, verification of the vertical accuracy of the point cloud, absolute and relative, is required. The Fundamental Vertical Accuracy (absolute) is to be assessed in clear, open areas as described in the section called Vertical Accuracy above. Swath-to-swath and within swath accuracies (relative) are to be documented. A detailed report of this validation process is a required deliverable.

I. Classification Accuracy

It is required that due diligence in the classification process will produce data that meet the following tests:

- Following classification processing, no non-withheld points should remain in Class 0.
- Within any 1 kilometer (km) x 1 km area, no more than 2 percent of non-withheld points will possess a demonstrably erroneous classification value.

Note: These requirements may be relaxed to accommodate collections in areas where the PALARIS agrees classification to be particularly difficult.

m. Classification Consistency

Point classification is to be consistent across the entire project. Noticeable variations in the character, texture, or quality of the classification between tiles, swaths, lifts, or other non-natural divisions will be cause for rejection of the entire deliverable.

n. Tiles

This section assumes a projected coordinate reference system. A single non-overlapped tiling scheme (the Project Tiling Scheme) will be established and agreed upon by the data producer and the SOM before collection (file size will be a determinant). This scheme will be used for ALL tiled deliverables.

- Tile size is required to be an integer multiple of the cell size of raster deliverables.
- Tiles are required to be sized using the same units as the coordinate system of the data.
- Tiles are required to be indexed in X and Y to an integer multiple of the tile's X-Y dimensions.
- All tiled deliverables will conform to the Project Tiling Scheme, without added overlap.
- Tiled deliverables will edge-match seamlessly and without gaps

A tiling scheme of 10,000 feet x 10,000 feet is recommeded. This may be changed after discussions between PALARIS and the vendor.

3.3 Hydro-Flattening

Hydro-flattening pertains only to the creation of derived DEMs. Breaklines may be used to help classify the point data. The goal of PALARIS, through use of hydro-flattening, is to enhance the cartographic and aesthetic value of derived DEMs (and derived contours) concerning water features. To accomplish this goal will require that ponds and lakes (of the size specified) include shore breaklines and/or polygons possessing a single elevation representing the current water level. Inland rivers and streams (of the size specified) will be addressed through creation of breaklines on either shore, and contain a descending elevation in the direction of flow as required to accurately reflect the current elevation of the water surface.

a. Inland Reservoirs and Lakes

- 2 acres or greater surface area (approximately equal to a round pond 350 feet in diameter) at the time of collection.
- Flat and level water bodies (single elevation for every bank vertex defining a given water body).
- The entire water surface edge must be at or below the immediately surrounding terrain. The presence of floating water bodies will be cause for rejection of the deliverable.
- Long impoundments such as reservoirs or inlets, whose water surface elevations drop when moving downstream, are required to be treated as rivers.

Feature size thresholds may be increased by agreement if the current thresholds prove to be prohibitively expensive.

b. Inland Streams and Rivers

- Nominal width of inland rivers and streams will based data producer's best professional judgment and agreed upon by PALARIS.
- The entire water surface edge must be at or below the immediately surrounding terrain.
- Stream channels are required to break at road crossings (culvert locations). The roadway over a culvert should be continuous. A culvert, regardless of size, is defined as having earth between the road surface and the top of the structure.
- Bridges are required to be removed from the DEM. Streams and rivers should be continuous at bridge locations. Bridges are defined as having an elevated deck structure that does not rest on earth.
- When the identification of a structure such as a bridge or culvert cannot be made reliably, the feature should be regarded as a culvert.

c. Single-Line Streams

Collection and integration of single-line streams within the project is required and should include the following:

- All vertices along single-line stream breaklines are at or below the immediately surrounding terrain.
- Single-line stream breaklines are not to be used to introduce cuts into the DEM at road crossings (culverts), dams, or other such features.

d. Islands

Permanent islands 1/2 acre or larger shall be delineated within all water bodies.

Feature size thresholds may be increased by agreement if the current thresholds prove to be prohibitively expensive or difficult.

4. **DELIVERABLES**

a. Metadata

The term "metadata" refers to all descriptive information about the project. This includes textual reports, graphics, and supporting shapefiles. Metadata deliverables include the following items:

- Collection report detailing mission planning and flight logs.
- Survey report detailing the collection of control and reference points used for calibration and QA/QC.
- Processing report detailing calibration, classification, and product generation procedures including methodology used for breakline collection and hydro-flattening.
- QA/QC Reports (detailing the analysis, accuracy assessment and validation of the following:
 - o Point data (absolute, within swath, and between swath)
 - Bare-earth surface (absolute)
 - Other optional deliverables as appropriate
- Control and calibration points: All control and reference points used to calibrate, control, process, and validate the lidar point data or any derivative products that are to be delivered in report form including appropriate from/to diagrams and photographs.
- Georeferenced, digital spatial representation of the precise extents of each delivered dataset. This
 should reflect the extents of the actual lidar source or derived product data, exclusive of TIN artifacts
 or raster NODATA areas. A union of tile boundaries or minimum bounding rectangles is not
 acceptable. ESRI Polygon shapefile or geodatabase is preferred.

- Product metadata Each Lift: Describing the extents of the lift, the swaths included in the lift, locations
 of GPS base stations and control for the lift, preprocessing and calibration details for the lift,
 adjustment and fitting processes applied to the lift in relation to other lifts, and other lift-specific
 information.
- Each tiled deliverable product group:
- Raw point data (calibrated-unclassified)
- Classified point data
- Bare-earth DEMs
- Breaklines (if generated)
- Other datasets delivered under the contract (Hydro-flattened and/or Hydro-enforced DEM, intensity images, and others)

b. Raw Point Cloud

Raw point cloud deliverables include the following items:

- All swaths, returns, and collected points, fully calibrated and adjusted to ground, by swath.
 - Withheld points should not be included in this deliverable but are required in the Classified Point Cloud.
- In LAS v1.4 format.
- Correct and properly formatted georeference information must be included in all LAS file headers.
- GPS times are to be recorded as Adjusted GPS Time, at a precision sufficient to allow unique timestamps for each pulse.
- Intensity values (native radiometric resolution).
- One file per swath, one swath per file, file size not to exceed 2 GB, as described under the section called Swath Size and Segmentation above.
- Vertical accuracy requirements using the NDEP/ASPRS methodology for the point cloud are FVA<=
 18.5 cm ACCz, 95-percent confidence level (9.25 cm RMSEz).

c. Classified Point Cloud

Delivery of classified point cloud data is a standard requirement for the project. Classified point cloud deliverables include the following items:

- All project swaths, returns, and collected points, fully calibrated, adjusted to ground, and classified, by tiles. Project swaths exclude calibration swaths, cross-ties, and other swaths not used, or intended to be used, in product generation.
- In LAS v1.4 format.
- Correct and properly formatted georeference information must be included in all LAS file headers.
- GPS times are to be recorded as Adjusted GPS Time, at a precision sufficient to allow unique timestamps for each pulse.
- Intensity values (native radiometric resolution).
- Tiled delivery, without overlap, using Project Tiling Scheme.
- Classification Scheme (minimum) as listed in table 2
- Vertical accuracy requirements using the NDEP/ASPRS methodology for the point cloud are FVA<=
 18.5 cm ACCz, 95-percent confidence level (9.25 cm RMSEz).

Table 2.	Minimum Classified Point Cloud Classification Scheme
Code	Description
1	Not ground (all returns deemed not ground returns)
2	Bare-earth ground (DEM)
7	Noise(low or high; manually identified if needed)
9	Water (if Hydro-flattened or Hydro-enforced DEM requested)

10	Ignored Ground (if Hydro-flattened or Hydro-enforced DEM requested; Breakline proximity)
11	Withheld (if the Withheld bit is not implemented in processing software)

*Class 7, Noise, is included as an adjunct to the Withheld bit. All noise points are to be identified using one of these two

methods.

**Class 10, Ignored Ground, is for points previously classified as bare-earth but whose proximity to a subsequently added breakline requires that it be excluded during Digital Elevation Model (DEM) generation.

d. Bare-Earth Hydro-flattened Surface Digital Elevation Model (DEM)

Delivery of a hydro-flattened bare-earth topographic DEM is a requirement in both Raster and ASCII format is required. Bare-earth surface deliverables include the following items:

- Bare-earth DEM, generated through use of a triangulated irregular network (TIN), to the limits of the Buffered Project Area.
 - Raster data file with cell size no greater than 3 feet, and no less than the design Nominal Pulse Spacing (NPS).
 - Delivery in an industry-standard, GIS-compatible, 32-bit floating point raster format (ERDAS .IMG preferred).
- ASCII text file with grid spacing no greater than 3 feet, and no less than the design Nominal Pulse Spacing (NPS).
- Georeference information shall be included in each raster and ASCII file.
- Tiled delivery, without overlap.
- Hydro-flattening as outlined in the "Hydro-Flattening" section. The methodology used for hydro-flattening is at the discretion of the data producer
- DEM tiles will show no edge artifacts or mismatch. A quilted appearance in the overall project DEM surface, whether caused by differences in processing quality or character between tiles, swaths, lifts, or other non-natural divisions, will be cause for rejection of the entire deliverable.
- Void areas (for example, areas outside the Buffered Project Area but within the tiling scheme) shall be coded using a unique NODATA value. This value shall be identified in the appropriate location within the raster file header or external support files (for example, .aux).
- Vertical accuracy of the bare-earth surface will be assessed and reported in accordance with the guidelines developed by the NDEP and subsequently adopted by the ASPRS.
- The following thresholds represent the minimum vertical accuracy requirements using the NDEP/ASPRS methodology:
 - FVA<= 18.5 cm ACCz, 95 percent Confidence Level (9.25 cm RMSEz)
 - CVA<= 26.5 cm, 95th percentile
 - SVA<= 26.5 cm, 95th percentile
 - All QA/QC analysis materials and results are to be delivered to PALARIS.
 - Depressions (sinks), natural or man-made, are not to be filled (as in hydro-conditioning and hydro-enforcement).

e. LIDAR Intensity Images

LIDAR intensity images are georeferenced raster files with each pixel representing the intensity of the LIDAR return. This is a required delivery.

- LIDAR intensity image, generated to the limits of the Buffered Project Area
- Georeference information shall be included in each raster file.
- Tiled delivery, without overlap.
- Void areas (for example, areas outside the Buffered Project Area but within the tiling scheme) shall be coded using a NODATA value.

f. High Resolution Digital Color Imagery

- Digital imagery is to be georeferenced and concurrently captured with the LIDAR data, and where practical and cost efficient orthorectified.
- The final product should be close to a fully orthorectified imagery product as possible.
- The LIDAR point cloud data should be colorized with the aligned RGB aerial imagery values.

5. Expected duration of the contract and delivery of the work

Survey to be completed as soon as practical from the date of signature of the contract. Preferably before March 2019.

From the agreed date of mobilization, the expected duration of works is 7 months.

8. Title Rights

All products to be produced under UNDP contract remain UNDP property until transfer of title has been initiated by UNDP in favoure of PALARIS.

9. Deliverables and Schedules/Expected Outputs

Output No.	Output Description	Due Date
Output 1	Inception report including detailed methodology, mission schedule and coordination of necessary logistics to support the mission in Palau	1-Month after signing of contract
Output 2	Mission Report - collection of topographic LIDAR data and imagery across Palau	3-month after signing of contract
Output 3	Draft Report with postprocessing of data and sharing of data and preliminary products for review	5-months after signing of contract
Output 4	Final Report with georeferenced seamless, topographic and imagery products and associated metadata report	End of contract period

10. Payment Schedule

Output	Payment (%)
Output 1. Development of detailed mission schedule and coordination of necessary	20%
logistics to support the mission in Palau.	
Output 2. Undertake survey mission – complete the collection of topographic LIDAR	30%
data and imagery across all nine atolls.	
Output 3. Post processing of data and sharing of data and preliminary products for	25%
review.	
Output 4. Final Report with georeferenced seamless topographic and imagery	25%
products and associated metadata report.	

11. Terms of Payment

Payments shall be processed within 30 days from receipt of signed and stamped invoice specifying the achieved deliverables under Section 8 with relevant documents evidencing achievement of the given output.

All of the deliverables are subject to approval from the PALARIS Senior GIS Analyst and UNDP in order to process payments to the contractor.

UNDP will not accept any payment request outside of this TOR. All payments shall be made in US Dollars. All planned costs related to this consultancy must be specified in the proposal by contractor for this assignment.

12. Tax Obligation

The Contractor is solely responsible for all taxation or other assessments on any income derived from UNDP. UNDP will not make any withholding from payments for the purposes of income tax. UNDP is exempt from any liabilities regarding taxation and will not reimburse any such taxation to the contractor.

13. Monitoring and Evaluation

All activities will be monitored and evaluated based on qualitative and quantitative information. The contractor is requested to submit monthly updates, share mission plans and on completion of the mission and post processing work submit initial data products for review and provide assurances regarding calibration and accuracy.

The contractor undertakes to maintain confidentiality on all information that is not in the public domain and shall not be involved in another assignment that represents a conflict of interest to the prevailing assignment.

14. Services and Facilities Provided by UNDP and PALARIS

The contractor will be provided with office space at the PALARIS Office in Palau. Access to the internet and local telephone line for work related communications are available. PALARIS can issue letter for visa applications while all costs associated with travel arrangement should be covered by the Contractor and will support the implementation in terms of facilitating access to information, data and relevant stakeholders, monitoring progress and providing technical feedback. PALARIS will work with Contractor to initiate and support dialogue with relevant agencies and organizations in Palau in relation to importation and operation of equipment required for the lidar survey. PALARIS or UNDP will not be rersponsible for any these associated costs which may include but not limited to, importation fees of equipment, associated aircraft fees for landing, housing, maintenance and flights and etc. Focal points will be nominated to liaise with the implementing entity on a regular basis.

15. Required EQUIPMENT, Qualification, Skills and Experience of the Consultancy Firm

- Valid business registration
- Minimum 5 years of experience in conducting similar aircraft mounted LIDAR topographic and/or bathymetry surveys.
- Minimum three recommendation letters from the past customers whom the Proposer rendered similar services in the past
- Previous experience in the Pacific Islands or SIDS, preferably in Palau or Northern Pacific working in logistically challenging and remote locations will be an asset
- Provide assurance of capability of equipment which will provide for a broad spectrum of requirements; for example highly accurate topographic capabilities (possibly in densely vegetated environments) and which will differentiate subtle elevation change in low lying islands.
- An experienced and self-sufficient survey team which can trouble shoot and ensure survey completion under challenging conditions with limited access to outside assistance.
- Proven track record of completion of high quality, accurate integrated LIDAR survey products (topography imagery and/or bathymetry).
- Proven track record of human resources and operational capacity to undertake assignments of this remote nature, scale and specification.
- A company profile will be provided outlining the equipment, survey team's capacity and experience and with relevant similar survey work will be summarized.

Team Qualifications

The contractor must show their survey and data processing team has the capacity and breadth of skills commensurate with both the airborne and post processing components of this assignment.

The Contractor shall provide at minimum the following Key personnel with the following qualifications:

a) Team Leader / Expert on Geograply, Geodesy, Photogammetry, and/or Surveying

- A university degree in Sciences, Management, Geodesic sciences or field directly related to LIDAR survey (topogrpahic and/or bathymetric).
- 5 years of project management experience related to similar assessments

- Experience in working with international organizations; including experience in the Pacific Islands Region
- Previous professional experience in related surveys and assessments.
- Good planning skills, analytical work and reporting abilities. Able to communicate effectively with stakeholders, highly motivated and able to complete project within the allotted time period
- Fluency in spoken and written English.

b) LIDAR / GIS data collection specialist

- Univeristy degree geodetic sciences, GIS, geography or related field
- 3 years of experience in relevant practical experience on Lidar collection and analysis
- Good knowledge of requirements related to the acquisition, analysis and production of lidar information
- Experience in working with international organisations including developing countries is a strong asset
- Previous professional experience in Pacific Island environments
- Fluency in spoken and written English.

c) The Survey Team

- The survey team shall have the necessary relevant qualifications to perform the required tasks under this ToRs.
- At a minimum each of the suggested team members shall have the required expertise and experience in the related field for which the team member shall be assigned for.
- A relevant degree/ certificate in the area of specialization is also required. It is expected that
 each of the assigned team members have 3 years of experience in the area of specialisation they
 are assigned for.
- Experience in the Asia Pacific region is preferable.
- Palau is a small and culturally unique setting, the survey team must have an awareness of the need for culturally appropriate behavior and sensitivity at all times, both on and off duty.

16. Governance and Accountability

- a) UNDP will be authority who will directly supervise the contractor, and to whom the contractor will be directly responsible to, reporting to, seeking approval/acceptance of output.
- b) PALARIS to monitor draft products and outputs on monthy basis.
- c) The contractor is expected to liaise/interact/collaborate/meet with in the course of performing the work with UNDP and PALARIS.

17. Additional References or Resources

Specifications for this LIDAR survey is based on specifications provided by the United States Geological Service (USGS), USGS-NGP Lidar Base Specification version 1.3, Published in February 2018. LAS data specifications published by the American Society for Photogrammetry & Remote Sensing (ASPRS) were also used to develop this TOR.

* Note: Cited References and Supplemental Information

American Society for Photogrammetry & Remote Sensing (ASPRS), 2011, LAS specification (Version 1.4–R12): Bethesda, Md., ASPRS, 27 p.

U.S. Geological Survey (USGS), 2018, Lidar Base Specifications, version 1.3.

Section 6: Returnable Bidding Forms / Checklist

This form serves as a checklist for preparation of your Proposal. Please complete the Returnable Bidding Forms in accordance with the instructions in the forms and return them as part of your Proposal submission. No alteration to format of forms shall be permitted and no substitution shall be accepted.

Before submitting your Proposal, please ensure compliance with the Proposal Submission instructions of the BDS 22.

Technical Proposal Envelope:

Have you duly completed all the Returnable Bidding Forms?	
 Form A: Technical Proposal Submission Form 	
Form B: Bidder Information Form	
 Form C: Joint Venture/Consortium/ Association Information Form 	
Form D: Qualification Form	
Form E: Format of Technical Proposal	
Form H: Proposal Security Form (n/a)	
[Add other forms as necessary]	
Have you provided the required documents to establish compliance with the evaluation criteria in Section 4?	

Financial Proposal Envelope

(Must be submitted in a separate sealed envelope/password protected email. Read instruction on financial proposal submission described data sheet above)

Form F: Financial Proposal Submission Form	
Form G: Financial Proposal Form	

Form A: Technical Proposal Submission Form

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
RFP reference:	RFP/FJI/JPN/001/19 – LIDAR Survey		

We, the undersigned, offer to provide the services for [Insert Title of services] in accordance with your Request for Proposal No. [Insert RFP Reference Number] and our Proposal. We are hereby submitting our Proposal, which includes this Technical Proposal and our Financial Proposal sealed under a separate envelope.

We hereby declare that our firm, its affiliates or subsidiaries or employees, including any JV/Consortium /Association members or subcontractors or suppliers for any part of the contract:

- a) is not under procurement prohibition by the United Nations, including but not limited to prohibitions derived from the Compendium of United Nations Security Council Sanctions Lists;
- b) have not been suspended, debarred, sanctioned or otherwise identified as ineligible by any UN Organization or the World Bank Group or any other international Organization;
- c) have no conflict of interest in accordance with Instruction to Bidders Clause 4;
- d) do not employ, or anticipate employing, any person(s) who is, or has been a UN staff member within the last year, if said UN staff member has or had prior professional dealings with our firm in his/her capacity as UN staff member within the last three years of service with the UN (in accordance with UN post-employment restrictions published in ST/SGB/2006/15);
- e) have not declared bankruptcy, are not involved in bankruptcy or receivership proceedings, and there is no judgment or pending legal action against them that could impair their operations in the foreseeable future;
- f) undertake not to engage in proscribed practices, including but not limited to corruption, fraud, coercion, collusion, obstruction, or any other unethical practice, with the UN or any other party, and to conduct business in a manner that averts any financial, operational, reputational or other undue risk to the UN and we embrace the principles of the United Nations Supplier Code of Conduct and adhere to the principles of the United Nations Global Compact.

We declare that all the information and statements made in this Proposal are true and we accept that any misinterpretation or misrepresentation contained in this Proposal may lead to our disqualification and/or sanctioning by the UNDP.

We offer to provide services in conformity with the Bidding documents, including the UNDP General Conditions of Contract and in accordance with the Terms of Reference

Our Proposal shall be valid and remain binding upon us for the period of time specified in the Bid Data Sheet.

We understand and recognize that you are not bound to accept any Proposal you receive.

I, the undersigned, certify that I am duly authorized by [Insert Name of Bidder] to sign this Proposal and bind it should UNDP accept this Proposal.

Name:	
Title:	
Date:	
Signature:	

[Stamp with official stamp of the Bidder]

Form B: Bidder Information Form

Legal name of Bidder	[Complete]
Legal address	[Complete]
Year of registration	[Complete]
Bidder's Authorized Representative Information	Name and Title: [Complete] Telephone numbers: [Complete] Email: [Complete]
Are you a UNGM registered vendor?	☐ Yes ☐ No If yes, [insert UGNM vendor number]
Are you a UNDP vendor?	☐ Yes ☐ No If yes, [insert UNDP vendor number]
Countries of operation	[Complete]
No. of full-time employees	[Complete]
Quality Assurance Certification (e.g. ISO 9000 or Equivalent) (If yes, provide a Copy of the valid Certificate):	[Complete]
Does your Company hold any accreditation such as ISO 14001 related to the environment? (If yes, provide a Copy of the valid Certificate):	[Complete]
Does your Company have a written Statement of its Environmental Policy? (If yes, provide a Copy)	[Complete]
Contact person UNDP may contact for requests for clarification during Proposal evaluation	Name and Title: [Complete] Telephone numbers: [Complete] Email: [Complete]
Please attach the following documents:	 Patent Registration Certificates, if any of technologies submitted in the Proposal is patented by the Proposer Latest Certificate of Registration of the business Local Government permit to locate and operate in the country of registration Quality Certificate (e.g., ISO 14001 or 14064 or equivalent) and/or other similar certificates, accreditations, awards and citations received by the Bidder, if any Power of Attorney or designation of the official who Track Record – list of clients for similar services for the last 5 years as those required by UNDP, indicating description of contract scope, contract duration, contract value, contact references Minimum three recommendation letters from the past customers whom the Proposer rendered similar services in the past Signed and dated resumes and declaration of availability of involved specialists for the period of contract implementation

 Provide assurance of capability of equipment which will provide for a broad spectrum of requirements; for example highly accurate topographic capabilities (possibly in densely vegetated environments) and which will differentiate subtle elevation change in low lying islands

Form C: Joint Venture/Consortium/Association Information Form

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
RFP reference:	RFP/FJI/JPN/001/19 – LIDAR Survey		

	re/Consortium/Association.	торозаги тие втор	osai is subifilitied as a joint		
No	No Name of Partner and contact information (address, telephone numbers, fax numbers, e-mail address)		Proposed proportion of responsibilities (in %) and type of services to be performed		
1	[Complete]		[Complete]		
2	[Complete]		[Complete]		
3	[Complete]		[Complete]		
NI	e of leading partner	[Complete]			
Associate every contra	authority to bind the JV, Consortium, ciation during the RFP process and, in vent a Contract is awarded, during act execution)	document signed	by every partner, which details the likely lega		
			lity of the members of the said joint venture:		
□ Let	ter of intent to form a joint venture	OR 🗆	JV/Consortium/Association agreement		
	reby confirm that if the contract is e jointly and severally liable to UND	•	es of the Joint Venture/Consortium/Association nt of the provisions of the Contract.		
Nam	e of partner:	Nam	e of partner:		
Signature:			Signature:		
Date:		Date	:		
Nam	e of partner:	Nam	e of partner:		
Signa	ature:	Sign	Signature:		
Date:			Date:		

Form D: Qualification Form

Name of Bidder:	[Insert Name of Bidder]		Select date
RFP reference:	RFP/FJI/JPN/001/19 – LIDAR Survey		

If JV/Consortium/Association, to be completed by each partner.

Historical Contract Non-Performance

☐ Contract non-performance did not occur for the last 5 years								
☐ Contrac	☐ Contract(s) not performed for the last 5 years							
Year	Year Non- performed Contract Identification Total Contract An (current value in contract							
		Name of Client: Address of Client: Reason(s) for non-performance:						

Litigation History (including pending litigation)

☐ No litigation history for the last 5 years					
☐ Litigation	n History as indicat	ed below			
Year of dispute	Amount in dispute (in US\$)	Contract Identification	Total Contract Amount (current value in US\$)		
		Name of Client:			
		Address of Client:			
		Matter in dispute:			
		Party who initiated the dispute:			
		Status of dispute:			
		Party awarded if resolved:			

Previous Relevant Experience

Please list only previous similar assignments successfully completed in the last 3 years.

List only those assignments for which the Bidder was legally contracted or sub-contracted by the Client as a company or was one of the Consortium/JV partners. Assignments completed by the Bidder's individual experts working privately or through other firms cannot be claimed as the relevant experience of the Bidder, or that of the Bidder's partners or sub-consultants, but can be claimed by the Experts themselves in their CVs. The Bidder should be prepared to substantiate the claimed experience by presenting copies of relevant documents and references if so requested by UNDP.

Project name & Country of Assignment	Client & Reference Contact Details	Contract Value	Period of activity and status	Types of activities undertaken

Bidders may also attach their own Project Data Sheets with more details for assignments above.

	Attached are t	the Statements c	of Satisfactory	/ Performance fror	n the To	p 3 (three) Clients or more.
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Financial Standing

Annual Turnover for the last 3 years	Year	USD
	Year	USD
	Year	USD
Latest Credit Rating (if any), indicate the		
source		

Financial information (in US\$ equivalent)	Historic information for the last 3 years					
	Year 1	Year 2	Year 3			
	Information from Balance Sheet					
Total Assets (TA)						
Total Liabilities (TL)						
Current Assets (CA)						
Current Liabilities (CL)						
	Information from Income Statement					
Total / Gross Revenue (TR)						
Profits Before Taxes (PBT)						
Net Profit						
Current Ratio						

☐ Attached are copies of the audited financial statements (balance sheets, including all related notes, and income statements) for the years required above complying with the following condition:

- a) Must reflect the financial situation of the Bidder or party to a JV, and not sister or parent companies;
- b) Historic financial statements must be audited by a certified public accountant;
- c) Historic financial statements must correspond to accounting periods already completed and audited. No statements for partial periods shall be accepted.

Form E: Format of Technical Proposal

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
RFP reference:	RFP/FJI/JPN/001/19 – LIDAR Survey		

The Bidder's proposal should be organized to follow this format of Technical Proposal. Where the bidder is presented with a requirement or asked to use a specific approach, the bidder must not only state its acceptance, but also describe how it intends to comply with the requirements. Where a descriptive response is requested, failure to provide the same will be viewed as non-responsive.

SECTION 1: Bidder's qualification, capacity and expertise

- 1.1 Brief description of the organization, including the year and country of incorporation, and types of activities undertaken.
- 1.2 General organizational capability which is likely to affect implementation: management structure, financial stability and project financing capacity, project management controls, extent to which any work would be subcontracted (if so, provide details).
- 1.3 Relevance of specialized knowledge and experience on similar engagements done in the region/country.
- 1.4 Quality assurance procedures and risk mitigation measures.
- 1.5 Organization's commitment to sustainability.

SECTION 2: Proposed Methodology, Approach and Implementation Plan

This section should demonstrate the bidder's responsiveness to the TOR by identifying the specific components proposed, addressing the requirements, providing a detailed description of the essential performance characteristics proposed and demonstrating how the proposed approach and methodology meets or exceeds the requirements. All important aspects should be addressed in sufficient detail and different components of the project should be adequately weighted relative to one another.

- 2.1 A detailed description of the approach and methodology for how the Bidder will achieve the Terms of Reference of the project, keeping in mind the appropriateness to local conditions and project environment. Details how the different service elements shall be organized, controlled and delivered.
- 2.2 The methodology shall also include details of the Bidder's internal technical and quality assurance review mechanisms.
- 2.3 Explain whether any work would be subcontracted, to whom, how much percentage of the work, the rationale for such, and the roles of the proposed sub-contractors and how everyone will function as a team
- 2.4 Description of available performance monitoring and evaluation mechanisms and tools; how they shall be adopted and used for a specific requirement.
- 2.5 Implementation plan including a Gantt Chart or Project Schedule indicating the detailed sequence of activities that will be undertaken and their corresponding timing.
- 2.6 Demonstrate how you plan to integrate sustainability measures in the execution of the contract.
- 2.7 Any other comments or information regarding the project approach and methodology that will be adopted.

SECTION 2A: Bidder's Comments and Suggestions on the Terms of Reference

Provide comments and suggestions on the Terms of Reference, or additional services that will be rendered beyond the requirements of the TOR, if any.

SECTION 3: Management Structure and Key Personnel

- Describe the overall management approach toward planning and implementing the project. Include 3.1 an organization chart for the management of the project describing the relationship of key positions and designations. Provide a spreadsheet to show the activities of each personnel and the time allocated for his/her involvement.
- 3.2 Provide CVs for key personnel that will be provided to support the implementation of this project using the format below. CVs should demonstrate qualifications in areas relevant to the Scope of Services.

Format for CV of Proposed Key Personnel

Name of Personnel	[Insert]
Position for this assignment	[Insert]
Nationality	[Insert]
Language proficiency	[Insert]
Education/	[Summarize college/university and other specialized education of personnel member, giving names of schools, dates attended, and degrees/qualifications obtained.]
Qualifications	[Insert]
	[Provide details of professional certifications relevant to the scope of services]
Professional certifications	Name of institution: [Insert]Date of certification: [Insert]
Employment Record/ Experience	[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.]
	[Insert]
	[Provide names, addresses, phone and email contact information for two (2) references]
References	Reference 1: [Insert]
	Reference 2: [Insert]

	[insert]
	[Provide names, addresses, phone and email contact information for two (2) references]
References	Reference 1: [Insert]
	Reference 2:
	[Insert]
9	nat to the best of my knowledge and belief, these data correctly describe es, and other relevant information about myself.
Signature of Personnel	Date (Day/Month/Year)

Form F: Financial Proposal Submission Form

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
RFP reference:	RFP/FJI/JPN/001/19 – LIDAR Survey		

We, the undersigned, offer to provide the services for [Insert Title of services] in accordance with your Request for Proposal No. [Insert RFP Reference Number] and our Proposal. We are hereby submitting our Proposal, which includes this Technical Proposal and our Financial Proposal sealed under a separate envelope.

Our attached Financial Proposal is for the sum of [Insert amount in words and figures].

Our Proposal shall be valid and remain binding upon us for the period of time specified in the Bid Data Sheet.

We understand you are not bound to accept any Proposal you receive.

Name:	 	 	
Title:	 	 	
Date:			
Signature:	 	 	

[Stamp with official stamp of the Bidder]

Form G: Financial Proposal Form

Name of Bidder:	[Insert Name of Bidder]	Date:	Select date
RFP reference:	RFP/FJI/JPN/001/19 – LIDAR Survey		

The Bidder is required to prepare the Financial Proposal following the below format and submit it in an envelope separate from the Technical Proposal as indicated in the Instruction to Bidders. Any Financial information provided in the Technical Proposal shall lead to Bidder's disqualification.

The Financial Proposal should align with the requirements in the Terms of Reference and the Bidder's Technical Proposal.

Currency of the proposal: US Dollars

Table 1: Summary of Overall Prices

	Amount(s)
Professional Fees (from Table 2)	
Other Costs (from Table 3)	
Total Amount of Financial Proposal	

Table 2: Breakdown of Professional Fees

Name	Position	Fee Rate	No. of Days/months/ hours	Total Amount
		Α	В	C=A+B
In-Country				
Home Based				
		Subtotal P	rofessional Fees:	

Table 3: Breakdown of Other Costs (can be adjusted as per your planned activities)

Description	UOM	Quantity	Unit Price	Total Amount
International flights	Trip			
Subsistence allowance	Day			
Miscellaneous travel expenses	Trip			
Local transportation costs	Lump Sum			
Out-of-Pocket Expenses	Х			
Aircraft/Equipment mobilization	Lump Sum			
Aircraft Landing Fees	Day			
Aircraft Parking Fees	Day			
Equipment Importation Fees	Per Equipment			

Aircraft/Equiment Maintenance	Lump			
Other Costs: (please specify)				
		Sub	total Other Costs:	

Table 4: Breakdown of Price per Deliverable/Activity

Deliverable/ Activity description	Time (person days)	Professional Fees	Other Costs	Total
Deliverable 1: Development of detailed mission schedule and coordination of necessary logistics to support the mission in Palau				
Deliverable 2: Undertake survey mission – complete the collection of topographic LIDAR data and imagery across all nine atolls.				
Deliverable 3: Post processing of data and sharing of data and preliminary products for review				
Deliverable 4: Final Report with georeferenced seamless topographic and imagery products and associated metadata report				