

TERMS OF REFERENCE

Ref: PN/FJ/015/19

(Re-Advertised)

Post Title	Coastal Engineering Consultant
Duty Station	Funafuti in Tuvalu & Suva in Fiji
Project Name	Tuvalu Coastal Adaptation Project (TCAP)
Type of Contract	Individual Consultant Long Term Agreement (IC - LTA)
Post Level	International Consultant
Language Required	English
Duration of Contract	Up to 150 working days per year for maximum 3 years (total 450 working days) (from 1 May 2019 to 30 April 2022).
Reports To	TCAP's Chief Technical Adviser & Project Manager
Application Deadline	19 th April 2019

Consultancy Proposal should be sent via email to etenderbox.pacific@undp.org no later than **19th April, 2019 (Fiji Time)** clearly stating the title of consultancy applied for. Any proposals received after this date/time will not be accepted. Any request for clarification must be sent in writing, or by standard electronic communication to procurement.fj@undp.org. UNDP will respond in writing or by standard electronic mail and will send written copies of the response, including an explanation of the query without identifying the source of inquiry, to all consultants. Incomplete, late and joint proposals will not be considered and only offers for which there is further interest will be contacted. **Failure to submit your application as stated as per the application submission guide (Procurement Notice) on the above link will be considered incomplete and therefore application will not be considered.**

BACKGROUND INFORMATION

Tuvalu is the fourth smallest nation in the world in land area with a population of just over 10,000. It is one of the most vulnerable countries in the world to the impacts of climate change and particularly sea-level rise and the possibility of intensifying storm events. Recent cyclones have caused population displacement, significant loss and damage of infrastructure as well as destruction of agricultural resources, contamination of ground water and changes in shoreline systems. Such impacts negatively affect the wellbeing of communities and long term sustainable development aspirations.

In response to this increasing challenge, the Government of Tuvalu (GoT) and the Green Climate Fund (GCF) have jointly committed US\$ 38 million for the 'Tuvalu Coastal Adaptation Project.' The project will build coastal resilience which is an urgent national priority. This project will address the financial and capacity constraints at all levels – from technical to community awareness.

The Tuvalu Coastal Adaptation Project (TCAP), was approved in June 2016 and the project implementation commenced in September 2017. The project will run until September 2023. The

objective of the project is to enhance coastal resilience in Tuvalu by implementing a robust strategy of coastal measures in three of the country's nine islands. As such, the project is expected to:

- Implement appropriate coastal engineering approaches adjacent to high value vulnerable shorelines to ensure they are more resilient to the effects of increased wave hazards. This investment will be undertaken on the islands of Funafuti, Nanumea and Nanumaga, and directed along areas with high concentration of residences and social and economic assets;
- Strengthen institutional and community capacities for sustaining and replicating project results in other areas of Tuvalu.

In this regard, the United Nations Development Programme, Pacific Office in Fiji, is seeking to enter into Long Term Agreement (LTA) with an International consultant as a "Coastal Engineering Consultant" to assist the Project Management Unit (PMU) to ensure that the construction work's and associated processes are meticulously planned, implemented and monitored. Similarly, to ensure adherence to best practices, sustainability of solutions implemented, and longevity of the coastal defence measures are taken into account.

LTA Contracting modality and Call-off mechanism:

- An LTA is a mutual arrangement between UNDP and the individual to provide the required services at established fee or provisions. The LTA will be established for one year and renewable for up to three years linked to satisfactory performance of the individual consultant. UNDP reserves the right to rescind the agreement during that period should performance of the consultant not meet its requirements.
- It is expected the consultant to be engaged for maximum 150 working days per year up to 3 years starting from 1 May 2019 to 30 April 2022.
- UNDP does not warrant that any quantity of services shall be contracted during the term of this Agreement. A specific Term of Reference (TOR) outlining the deliverables shall be provided, and an Individual Contract would be issued to the consultant, detailing the time frame.
- Once the LTA is signed, if there is a specific service required, the focal person in the UNDP hiring unit would contact the Consultant and upon positive confirmation in the availability for the assignment, acceptance of the Term of reference, cost and travel arrangement, UNDP will issue an Individual Contract. Price in the order will be based on daily fee included in the LTA. After contract has been agreed between the two parties, no further costs would be reimbursed by UNDP unless there is prior written authorization by UNDP.
- Once the services are completed and have been approved by the hiring unit, the Consultant will provide the following for payment purposes:
 - a) complete invoice indicating the completed deliverables;
 - b) supporting documentation (bills/vouchers) for reimbursements of travel costs if applicable;
 - c) copy of the UNDP contract for the consultancy.

Payments will be made upon satisfactory achieved deliverables under each assignment and submission of time sheet in accordance with number of days worked. Final payment shall require a signed performance evaluation of the consultant

Description of Responsibilities:

The consultant is expected to support the achievement of the following objectives:

- To prepare technical and detailed construction design, and costing of Coastal Protection measures for Funafuti, Nanumea and Nanumaga based on TCAP agreed conceptual designs.
- Support TCAP development application and safeguards processes as required.
- Provide technical advice for tender documentation related to the procurement of the construction company(s).
- Provide technical support for the Procurement Process of construction company(s).
- Prepare contracts related to construction company(s).
- Provide ongoing QC and inspections (M&E) of construction works.
- Work closely with TCAP Chief Technical Advisor to fine tune conceptual approaches, minimize impacts and enhance the sustainability of engineering approaches.
- As directed by TCAP, assist with related general problem solving and other relevant tasks as they may arise.

Scope of Services

The following scope of services includes the specific tasks and responsibilities required of the Coastal Engineering Consultant (IC).

No.	Tasks	Detail Breakdown of Tasks
1	Detailed design of coastal works	<ul style="list-style-type: none">• Review the approved conceptual designs for coastal works, in consultation with the CTA fine tune and amend as maybe necessary and develop agreed design parameters.• Develop the detailed construction design of said coastal works including but not limited to; detailed construction drawings for three main sites (Funafuti, Nanumea, Nanumaga).• Develop the bill of quantities and as necessary investigate and source materials, transport options and consider local capacities (Government, local council, community, etc) to undertake some aspects of works implementation (particularly pertinent on the outer islands)
2	Procurement of Construction Company (s)	<ul style="list-style-type: none">• Provide technical advice during the preparation of bidding documents.• Provide technical advice in the preparation of technical evaluation criteria for the bidding documents .• Support the procurement process and provide technical lead on review of subsequent bid documents.• Provide technical support with the PMU to engage with winning company and ensure they are fully aware of the project requirements and technical / logistical constrains of work.
3	Capital Works – Quality Control and Monitoring	<ul style="list-style-type: none">• Provide ongoing monitoring and quality control / review of works as the winning company implements capital works.

		<ul style="list-style-type: none"> • With the PMU and Safeguards Officer assist to ensure all environmental considerations and impact mitigation measures are in place. • Likewise, that relevant OH&S practice is observed, responsible waste management practices, etc. • At completion of works review infrastructure and submit report outlining any short falls in expectations • Review adherence to warranty provisions and that mobilisation / demobilisation criteria have been met. • Develop an “Infrastructure Owner’s Manual” outlining for example; maintenance schedules, monitoring requirements, improvements, considerations for future work, etc. • Support PMU to maintain good Government and Community relations and free flow of information to affected / neighbouring community members. • Assist PMU with problem solving as necessary during implementation
4	Other Tasks - as the situation may require	<ul style="list-style-type: none"> • At the inception of the Consultant Engineer’s contract and in consultation with the PMU develop the Engineer’s detailed work plan. • As work gets underway and in consultation with the PMU, potentially amend and re-prioritise the envisaged tasks to suit circumstances and accommodate new information and change. • Support capacity building efforts potentially through a range of modalities; Govt counterpart relationships, participation at workshops, community meetings, on-site mentoring, etc. • Maintain a flexible, responsive, positive approach to changing circumstances

Institutional Arrangement

- The IC will report to and work under the guidance of the TCAP Project Manager and Chief Technical Advisor and as appropriate seek inputs from the Deputy Team Leader, Resilience & Sustainable Development Program in the UNDP Pacific Office in Suva, Fiji.
- The IC is required to provide for his/her own computer as well as the travel, accommodation and transportation costs during this consultancy.
- UNDP shall allocate a working space at its Suva, Fiji Islands and Funafuti, Tuvalu office to accommodate the working station needs in the course of this consultancy.

Duty Station

- The IC is required to be initially based in the UNDP Pacific Office in Suva during the early stages of this engagement and will be based in Tuvalu once the construction works have commenced.

REQUIRED SKILLS AND EXPERIENCE

Educational Qualification

- Minimum Bachelor's degree in Coastal Engineering or related field;

Experience

- At least 7 years of professional experience in the area of coastal engineering and coastal-protection structures;
- Preference given to specific experience in coastal engineering in small tropical Pacific Island environments, especially cyclone exposed atolls / tropical reef mediated shoreline systems;
- Expert level of experience with hydrodynamic modelling, construction, planning and design;
- Substantial, relevant and practical experience with reef mediated shoreline processes, cyclone hazard exposure mitigation, coastal management, dredging operations, reclamation;
- Experience in working in remote rural island locations, preferably Pacific Island States;
- Demonstrated ability to engage and work in Pacific Island environments, Governments and with local communities;
- Excellent working knowledge of English and written communication skills;

Language Requirements

- Fluency in English – both written and oral.

Compliance with UN Core Values

- Demonstrates integrity by modelling the UN's values and ethical standards;
- Promotes the vision, mission, and strategic goals of UNDP;
- Displays cultural, gender, religion, race, nationality and age sensitivity and adaptability;
- Treats all people fairly without favouritism;
- Fulfils all obligations to gender sensitivity and zero tolerance for sexual harassment;

PRICE PROPOSAL AND SCHEDULE OF PAYMENTS

Daily Fee

The IC shall quote an all-inclusive Daily Fee for this consultancy work. The term "all-inclusive" implies that all costs (professional fees, communications, consumables, etc.) that could be incurred by the IC in completing the assignment are already factored into the daily fee submitted in the proposal. If applicable, travel or daily allowance cost (if any work is to be done outside the IC's duty station) should be identified separately.

Payments

Payments shall be done on a monthly basis and based on actual days worked, and upon verification of completion of deliverables and approval by the IC's supervisor of a Time Sheet indicating the days worked in the period.

General Notes on Financial Offer

- UNDP shall not accept travel costs exceeding those of an economy class ticket. Should the Consultant wish to travel on a higher class he/she should do so using his/her own resources;
- In the event of unforeseeable travel not anticipated in this TOR, payment of travel costs including tickets, lodging and terminal expenses should be agreed upon, between UNDP and the Individual Consultant, prior to travel and will be reimbursed;

Tentative Schedule for the 150 working days per year period

The order of prioritizing the work phases (in the 3 project islands) is yet to be finalized as UNDP is currently in consultation with GCF on this. We thus entail below a skeleton and (most likely) tentative work schedule for the 150 working days per year period (that is based on the scope of works mentioned above) to simply shed a better insight into the likely payment schedule to be adopted.

No.	Tasks	Detail Breakdown of Tasks	Period	Number of Days
1	Detailed design of coastal works	<ul style="list-style-type: none">• Review the approved conceptual designs for coastal works, in consultation with the CTA fine tune and amend as maybe necessary and develop agreed design parameters.• Develop the detailed construction design of said coastal works including but not limited to; detailed construction drawings for three main sites (Funafuti, Nanumea, Nanumaga).• Develop the bill of quantities and as necessary investigate and source materials, transport options and consider local capacities (Government, local council, community, etc) to undertake some aspects of works implementation (particularly pertinent on the outer islands)	May-July 2019	30 days
2	Procurement of Construction Company (s)	<ul style="list-style-type: none">• Preparation of procurement documents – RFP's (Request For Proposal) applicable to the detailed designs.• Support the procurement process and provide technical lead on review of subsequent bid documents.• Provide technical support with the PMU to engage with winning company and ensure they are fully aware of the project requirements and technical / logistical constrains of work in these unique environments.	August 2019	20 days

3	Capital Works - QC and Monitoring	<ul style="list-style-type: none"> • Provide ongoing monitoring and quality control / review of works as the winning company implements capital works. • With the PMU and Safeguards Officer assist to ensure all environmental considerations and impact mitigation measures are in place. • Likewise, that relevant OH&S practice is observed, responsible waste management practices, etc. • At completion of works review infrastructure and submit report outlining any short falls in expectations • Review adherence to warranty provisions and that mobilisation / demobilisation criteria have been met. • Develop an “Infrastructure Owner’s Manual” outlining for example; maintenance schedules, monitoring requirements, improvements, considerations for future work, etc. • Support PMU to maintain good Government and Community relations and free flow of information to affected / neighbouring community members. • Assist PMU with problem solving as necessary during implementation 	Sept-Dec 2019	50 days
4	Other Tasks - as the situation may require	<ul style="list-style-type: none"> • At the inception of the Consultant Engineer’s contract and in consultation with the PMU develop the Engineer’s detailed work plan. • As work gets underway and in consultation with the PMU, potentially amend and re-prioritise the envisaged tasks to suit circumstances and accommodate new information and change. • Support capacity building efforts potentially through a range of modalities; Govt counterpart relationships, participation at workshops, community meetings, on-site mentoring, etc. • Maintain a flexible, responsive, positive approach to changing circumstances 	Jan-Apr 2020	50 days

EVALUATION

Cumulative analysis

The proposals will be evaluated using the cumulative analysis method with a split 70% technical and 30% financial scoring. The proposal with the highest cumulative scoring will be awarded the contract. Applications will be evaluated technically and points are attributed based on how well the proposal meets the requirements of the Terms of Reference using the guidelines detailed in the table below:

When using this weighted scoring method, the award of the contract may be made to the individual consultant whose offer has been evaluated and determined as:

a) responsive/compliant/acceptable, and

b) having received the highest score out of a pre-determined set of weighted technical and financial criteria specific to the solicitation where technical criteria weighs 70% and Financial criteria/ Proposal weighs 30%

- Technical Criteria weighting; 70%
- Financial Criteria weighting; 30%

Only candidates obtaining a minimum of 49 points in the Technical Evaluation would be considered for the Financial Evaluation. Interviews may be conducted as part of technical assessment.

Evaluation Matrix for Technical proposals

No.	Evaluation Criteria	Points
	Technical Evaluation	
1	Minimum Bachelor's degree in Coastal Engineering or related field; Minimum 9.8 points; Master's degree or higher degree in Coastal Engineer or related field; maximum of 14.0 points Weigh = 10%; Maximum Points: 14.0	14.0
2	At least 7 years of professional experience in the area of coastal engineering and coastal-protection structures. Preference given to experience in tropical reef mediated shoreline systems. At least 7 years – 7.0 points For every 3 years – 2.0 points, up to maximum of 14.0 points Weigh = 20%; Maximum Points: 14.0	14.0

3	<p>At least 4 assignments involving HD modelling and design in cyclone exposed reef mediated shoreline systems.</p> <ul style="list-style-type: none"> For 1 assignment, a total of 7.0 points 2 assignments – 9.5 points 3 assignments – 12.0 points 4 assignment – 14.0 points <p>Weigh = 20%; Maximum Points: 14.0</p>	14.0
4	<p>Experience in Small Island Developing States (SIDS) – number of years on assignment.</p> <p>At least 7 years – 7.0 points For every 3 years – 3.0 points, up to maximum of 14.0 points</p> <p>Weigh = 20%; Maximum Points: 14.0</p>	14.0
5	<p>Number of years of experience with planning, design and supervision and monitoring of coastal engineering infrastructural works.</p> <p>At least 7 years – 7.0 points For every 3 years – 3.0 points, up to maximum of 14.0 points</p> <p>Weigh = 20%; Maximum Points: 14.0</p>	14.0
	Total – Technical Evaluation	70.0

[Shortlisted Candidates](#)

Shortlisted candidates may be contacted for an interview.

Offerors must send the following documents.

- i) **CV including names/contacts of at least 3 referees.**
- ii) **A cover letter indicating why the candidate considers himself/herself suitable for the required consultancy**
- iii) **Completed template for confirmation of Interest and Submission of Financial Proposal.**