



REQUEST FOR PROPOSAL (RFP)

United Nations Development Programme (UNDP) UN House 69, Road 1901, Block 319, Hooraa, Manama, Kingdom of Bahrain	DATE: 21 June 2020 REFERENCE: UNDP/2020/UNDP-SEU/001
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Dear Sir / Madam:

We kindly request you to submit your Proposal for Wind Resource Assessment and Mapping Consultancy.

Please be guided by the attached Annexes, in preparing your Proposal. The proposals may be submitted on or before Sunday, July 02, 2020, 08:00 hrs Eastern Daylight Time (EDT) and via the **UNDP eTendering portal ONLY**. For detailed information on UNDP eTendering and to register as a vendor on the portal please visit the following link:

<https://www.undp.org/content/undp/en/home/operations/procurement/business/procurement-notice/resources/>

<https://www.undp.org/content/dam/undp/library/corporate/Procurement/english/English%20UNDP%20eTendering%20User%20Guide%20for%20Bidders%20-%20Feb%202018.pdf>

Your Proposal must be expressed in **English**, and valid quotation for a minimum period of **120 Days**

In the course of preparing your Proposal, it shall remain your responsibility to ensure that it reaches on or before the deadline. Proposals that are received by UNDP after the deadline indicated above, for whatever reason, shall not be considered for evaluation. While submitting your Proposal, kindly ensure that they are signed and in the .pdf format, and free from any virus or corrupted files.

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

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

Any discrepancy between the unit price and the total price shall be re-computed by UNDP, and the unit price shall prevail, and the total price shall be corrected. If the Service Provider does not

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accept the final price based on UNDP's re-computation and correction of errors, its Proposal will be rejected.

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

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

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

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

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

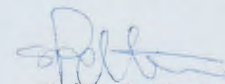
UNDP encourages every prospective Service Provider to prevent and avoid conflicts of interest, by disclosing to UNDP if you, or any of your affiliates or personnel, were involved in the preparation of the requirements, design, cost estimates, and other information used in this RFP.

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

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

Thank you and we look forward to receiving your Proposal.

Sincerely yours,



Stefano Pettinato
Resident Representative
21/06/2020

DESCRIPTION OF REQUIREMENTS

Context of the Requirement	Wind Resource Assessment and Mapping Consultancy.
Implementing Partner of UNDP	UNDP
Brief Description of the Required Services ¹	United Nations Development Programme (UNDP) in the Kingdom of Bahrain wishes to call for Request for Proposals from qualified international service to provide a proposal for the Wind Resource Assessment and Mapping consultancy services and support for the energy resources assessment and mapping assignment.
List and Description of Expected Outputs to be Delivered	Please refer to Terms of Reference (Annex 2)
Person to Supervise the Work/ Performance of the Service Provider	Project Manager, UNDP
Location of work	Manama, Kingdom of Bahrain
Expected duration of work	1 Year extendable up to 3 years depending on the company performance and budget availability
Target start date	13 th July 2020
Latest completion date	12 th July 2021
Travels Expected	Yes
Names and curriculum vitae of individuals who will be involved in completing the services	<input checked="" type="checkbox"/> Required
Currency of Proposal	<input checked="" type="checkbox"/> US Dollar
Value Added Tax on Price Proposal	<input checked="" type="checkbox"/> must be inclusive of VAT and other applicable indirect taxes
Validity Period of Proposals (Counting for the last day of submission of quotes)	<input checked="" type="checkbox"/> 120 days In exceptional circumstances, UNDP may request the Proposer to extend the validity of the Proposal beyond what has been initially

¹ A detailed TOR is attached to fully describe the nature of the work and other details of the requirements.

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	indicated in this RFP. The Proposal shall then confirm the extension in writing, without any modification whatsoever on the Proposal.	
Partial Quotes	<input checked="" type="checkbox"/> Not permitted	
Payment Terms ²	Payment will be released after approving the delivery and receipt of original invoice.	
Person(s) to review/inspect/ approve outputs/completed services and authorize the disbursement of payment	Project Manager, UNDP	
Type of Contract to be Signed	<input checked="" type="checkbox"/> Long-Term Agreement ³	
Criteria for Contract Award	<input checked="" type="checkbox"/> Highest Combined Score (Technical + Financial Assessment) <input checked="" type="checkbox"/> Full acceptance of the UNDP Contract General Terms and Conditions (GTC). This is a mandatory criterion and cannot be deleted regardless of the nature of services required. Non-acceptance of the GTC may be grounds for the rejection of the Proposal.	
Criteria for the Assessment of Proposal	Proposed Methodology, Approach and Implementation Plan I. Project approach, methodology & plan for a Typical <u>Off-Shore</u> Wind Resource Assessment and Mapping; II. Project approach, methodology & plan on Typical <u>On-Shore</u> Wind Resource Assessment and Mapping; III. Typical performance monitoring and evaluation mechanisms and tools for Wind Resource Assessment and Mapping IV. Comments/ Feedback on the Term of Reference.	30
	Project Testimonials I. Track Record/ Testimonials for delivering for <u>Onshore</u> Wind Resource Assessment and Mapping consultancy services for (minimum of 3)	45

² UNDP preference is not to pay any amount in advance upon signing of contract. If the Service Provider strictly requires payment in advance, it will be limited only up to 20% of the total price quoted. For any higher percentage, or any amount advanced exceeding \$30,000, UNDP shall require the Service Provider to submit a bank guarantee or bank cheque payable to UNDP, in the same amount as the payment advanced by UNDP to the Service Provider.

³ Minimum of one (1) year period and may be extended up to a maximum of three (3) years subject to satisfactory performance evaluation.

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	<p>II. Track Record/ Testimonials for delivering for <u>Off-shore</u> Wind Resource Assessment and Mapping consultancy services (<i>minimum of 3</i>)</p> <p>III. Track Record/ Testimonials for delivering <u>Wind Atlas</u> consultancy services (<i>minimum of 3</i>)</p> <p>IV. Track Record/ Testimonials for delivering <u>Policy & Regulatory frameworks</u> for Wind Energy (<i>minimum of 2</i>)</p> <p>V. Track Record/ Testimonials for delivering <u>Technical Due Diligence</u> services for Detailed Feasibility Study (<i>including prospecting, sitting and design</i>) of wind farm on-shore and off-shore (<i>minimum of 2</i>)</p>	
	<p>Management Structure and Key Personnel</p> <p>I. Detailed individual CV of Team Leader, Senior Wind Energy expert, Senior Wind Resource expert, Meteorological/ Weather Data Scientist, Policy & Regulatory Specialist (Wind).</p> <p>II. Any other relevant Junior level CV's of the relevant fields.</p>	25
<p>UNDP will award the contract to:</p>	<p><input checked="" type="checkbox"/> One or more Service Providers, depending on the following factors:</p> <p style="padding-left: 40px;">a) One or more best scoring and most advantageous Service Provider(s) may be selected.</p> <p>In addition to the Top scoring and most advantageous proposal submitted by a service provider (Primary), a consecutive list of other best scoring and most advantageous proposal submitted by a service provider(s) may be selected based on the Successfully passing the evaluation criteria.</p>	
<p>Contract General Terms and Conditions⁴</p>	<p><input checked="" type="checkbox"/> General Terms and Conditions for contracts (goods and/or services)</p> <p>Applicable Terms and Conditions are available at:</p> <p>http://www.undp.org/content/undp/en/home/procurement/business/how-we-buy.html</p>	

⁴ Service Providers are alerted that non-acceptance of the terms of the General Terms and Conditions (GTC) may be grounds for disqualification from this procurement process.

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Annexes to this RFP	<input checked="" type="checkbox"/> Terms of Reference (TOR) (Annex 2) <input checked="" type="checkbox"/> Form for Submission of Technical Proposal (Annex 3) <input checked="" type="checkbox"/> Form for Submission of Financial Proposal (Annex 4) <input checked="" type="checkbox"/> General Terms and Conditions (Annex 5)
Contact Person for Inquiries (Written inquiries only) ⁵	Procurement Associate procurement.bh@undp.org Any delay in UNDP's response shall not be used as a reason for extending the deadline for submission, unless UNDP determines that such an extension is necessary and communicates a new deadline to the Proposers.

⁵ This contact person and address is officially designated by UNDP. If inquiries are sent to other person/s or address/es, even if they are UNDP staff, UNDP shall have no obligation to respond nor can UNDP confirm that the query was received.

ANNEX 2

TERMS OF REFERENCE (TOR) **WIND RESOURCE ASSESSMENT AND MAPPING CONSULTANCY**

1. GENERAL INFORMATION

Project Title	: Wind Resource Assessment and Mapping Consultancy
Location	: The Kingdom of Bahrain
Type of the Contract	: Long Term Agreement (LTA)
Proposal Validity	: 120 Days
Latest Expected Service Start Date	: July 2020
Expected Service period	: One (1) Year, with a Possible Extension

2. ABOUT UNDP PROJECT

Following the approval of Cabinet, the UNDP is working with the Government of Bahrain since November 2014 on the Sustainable Energy Projects as a joint initiative between the office of the Minister of Electricity and Water Affairs and UNDP. The key objectives of the joint initiatives project is to develop a cohesive and sustainable energy policy and to promote Renewable Energy and Energy Efficiency in the Kingdom. The project is working towards bridging the legal, institutional, and capacity gaps for Bahrain's energy sector to meet the future challenges.

The project successfully draft related policies and regulatory frameworks in close coordination with stakeholders and partners in the Kingdom of Bahrain. In October 2016, the National Energy Efficiency Energy Action Plan (NEEAP) and the National Renewable Energy Action Plan (NREAP), which set the national targets for the Kingdom and outlines policies and other initiatives to meet these targets were finalised. Both Plans and the national targets were endorsed by Cabinet in January 2017.

3. PROJECT BACKGROUND

The UNDP closely working with the government stakeholders in developing a **Comprehensive Wind Resource Assessment and Mapping** for the Kingdom of Bahrain through a three-phase approach as follows:

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Phase - I	<i>Development of Wind Atlas through Preliminary wind resources assessment based on satellite, meteorological and reference data;</i>
Phase - II	<i>Establishment of Wind Resource Assessment (WRA) Stations across the country to measure, record & forecast data for On-shore & Offshore exclusively;</i>
Phase - III	<i>Authentication of data collected from the Wind Resource Assessment (WRA) Stations and upgrade the existing Wind Atlas (Phase I) for the Kingdom of Bahrain based on the outcomes from Phase I and Phase II;</i>

The Phase I of the project was completed on December 2017, while the other two phases (Phase II & Phase III) are planned for the year 2020 & 2021.

PHASE 1 - COMPLETED:

In 2017, the UNDP project has commissioned leading consultancy in the field of wind resource assessment to develop a comprehensive wind atlas for the Kingdom of Bahrain. The wind resources map has been developed using modern flow modelling techniques to calculate the wind speeds using an advanced microscale-mesoscale downscaling model approach. The model results have been validated using ground measurements at lower heights. The main map shows the annual average wind speeds at 100 m above the terrain and at 250 m spatial resolution. The Mesoscale modelled annual wind speeds map shows the results of the mesoscale modelling as the mean wind speed including the Exclusive Economic Zone for the 20 years modelling period (1997-2016) and at 100m above ground level.

BAHRAIN'S WIND CONDITIONS:

The wind conditions in the Kingdom of Bahrain are considered moderate. However, given modelled wind conditions, it is shown that modern, dedicated low wind turbines is a robust technology that will operate at reasonable capacity factors. Wind conditions – in general – most favorable along the coastline and to the south – outside the urbanized areas in the northern part of Bahrain Island. Offshore wind farms could be considered, potentially to the north where the wind conditions are favorable and the water areas are fairly shallow.

4. OBJECTIVE

The Project envisages assessment and quantification of any and all types of quality wind data, data processing, modelling and improvising the current wind atlas of the country. Besides the collection and analysis of wind and meteorological data, it is also crucial for

planning and implementation of investment grade Wind Energy Systems over onshore and Offshore.

Therefore, the objective of this assignment is to source a qualified Consultancy Service provider to support UNDP's project in the implementation of *Phase II and Phase III* of the Wind Resource Assessment and Mapping process, drafting of appropriate wind energy standards, guidelines and framework thereby stimulating the renewable energy growth by developing investment grade on-shore/off-shore Wind Energy projects in the Kingdom of Bahrain

5. ELIGIBILITY CRITERIA & EXPERIENCE

The company/ organization/ consortia shall mandatorily meet the following minimum eligibility criteria:

- I. Bidder shall be Local (and/or) International company and be commercially registered;
- II. International Bidder(s) must have a valid certificate of commercial registration issued by competent authority of their respective home country;
- III. Bidder must have a minimum of **Ten (10) years' experience** in the field of Wind Resource Assessment and Mapping Consultancy services projects;
- IV. Bidder must have delivered Wind Resource Assessment and Mapping consultancy services for at least **Two (2)** Off-shore projects & **Two (2)** On-shore projects in last **Ten (10) years** in any country.
- V. Bidder must have delivered Wind Atlas consultancy services for at least **Two (2)** projects in last **Ten (10) years** in any country.
- VI. Bidder must have delivered Policy & Regulatory frameworks consultancy services for Wind Energy for at least **Two (2)** projects in last **Ten (10) years** in any country.

6. ELIGIBILITY QUALIFICATION AND EXPERIENCES OF KEY PERSONNEL

The company/ organization/ consortia shall mandatorily meet the following minimum eligibility qualifications and experiences of the key personnel, who are assigned/ nominated/ deputed as the project team:

#	DESCRIPTION	MINIMUM EDUCATION QUALIFICATION	MINIMUM PROFESSIONAL EXPERIENCE
1.	Team Leader ⁶	Advanced university degree (Master's degree or equivalent)	15 Year (or) Higher (preferably in Wind Energy)

⁶ Team leader can be nominated among the team members, provided they satisfy the minimum qualification and experience criteria.

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#	DESCRIPTION	MINIMUM EDUCATION QUALIFICATION	MINIMUM PROFESSIONAL EXPERIENCE
2.	Senior Wind Energy expert	Advanced university degree (Master's degree or PhD) such as engineering or relevant energy-related discipline; Preferable in fields related to Wind Energy	10 Year (or) Higher <i>(preferably in Wind Energy)</i>
3.	Senior Wind Resource expert		10 Year (or) Higher <i>(preferably in Wind Energy)</i>
4.	Meteorological/ Weather Data Scientist		10 Year (or) Higher <i>(preferably in Wind Energy)</i>
5.	Policy & Regulatory Specialist (Wind)	Advanced University degree (Master's degree or PhD) in economics, public policy, energy policy or finance.	10 Year (or) Higher <i>(preferably in Wind Energy)</i>

It is mandatory to delegate a minimum of at least one (1) of each abovementioned expert/ scientist/ specialist apart from the team leader. Also, it is mandatory to provided CV's of all the above-mentioned experts who will be assigned to the project, any other relevant Junior level CV's of the relevant fields can also be submitted.

7. COMPETENCIES

- Successful track record on consultancy for wind energy project, contract management, wind resources assessment & mapping (on-shore & off-shore) on a national or international level.
- Successful track record of developing technical standards, policy frameworks and guidelines for utility scale as well as commercial scale wind energy systems & technology (on-shore & off-shore).
- Current knowledge of wind energy technology, standards, market, industry and best practices, including the latest academic studies on wind resource assessment, mapping process methodology and development.
- Successful track record in handling logistically complex wind resource assessment, mapping and computation of data and analysis.
- Proven team player capable of working with a team of multi-disciplinary and multi-cultural specialists.

8. EVALUATION CRITERIA

UNDP shall open, evaluate and compare only the technical proposals that have been determined to be substantially responsive and that meet the Qualification criteria as per

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terms & conditions of this RFP tender document. A Technical Proposal Score will be calculated for each responsive technical proposal using the following criteria.

TECHNICAL EVALUATION CRITERIA		MAXIMUM POINTS
1.	<p>Proposed Methodology, Approach and Implementation Plan</p> <p>I. Project approach, methodology & plan for a Typical <u>Off-Shore</u> Wind Resource Assessment and Mapping;</p> <p>II. Project approach, methodology & plan on Typical <u>On-Shore</u> Wind Resource Assessment and Mapping;</p> <p>III. Typical performance monitoring and evaluation mechanisms and tools for Wind Resource Assessment and Mapping</p> <p>IV. Comments/ Feedback on this Term of Reference.</p>	30
2.	<p>Project Testimonials</p> <p>I. Track Record/ Testimonials for delivering for <u>Onshore</u> Wind Resource Assessment and Mapping consultancy services for <i>(minimum of 2)</i></p> <p>II. Track Record/ Testimonials for delivering for <u>Off-shore</u> Wind Resource Assessment and Mapping consultancy services <i>(minimum of 2)</i></p> <p>III. Track Record/ Testimonials for delivering <u>Wind Atlas</u> consultancy services <i>(minimum of 2)</i></p> <p>IV. Track Record/ Testimonials for delivering <u>Policy & Regulatory frameworks</u> for Wind Energy <i>(minimum of 2)</i></p> <p>V. Track Record/ Testimonials for delivering <u>Technical Due Diligence</u> services for Detailed Feasibility Study <i>(including prospecting, sitting and design)</i> of wind farm on-shore and off-shore <i>(minimum of 2)</i></p>	45
3.	<p>Management Structure and Key Personnel</p> <p>I. Detailed individual CV of Team Leader, Senior Wind Energy expert, Senior Wind Resource expert, Meteorological/ Weather Data Scientist, Policy & Regulatory Specialist (Wind).</p> <p>II. Any other relevant Junior level CV's of the relevant fields.</p>	25
TOTAL		100

The Minimum Technical Threshold to qualify the technical evaluation will be 70 Points out of 100 points as per above table. Bidders that do not achieve the minimum technical threshold will not pass the technical evaluation.

UNDP shall open, evaluate and compare only the Financial Proposals of the bidders who have achieved or exceeded the minimum technical threshold of 70 points in the Technical Evaluation as per abovementioned table.

9. OVERVIEW OF PROJECT SCOPE:

The likely scope of the project is briefly outlined in the below sections; this is to ensure that the Bidder(s) is/are fully aware of the likely course of scope of the project and make sure they are competent enough in all aspects to deliver any and all of the sections of the scope of work as requested.

Upon the completion of UNDP eTender process and identifying the successful Bidder, the UNDP and / or implementing partner shall develop and discuss the actual scope of work along with deliverables depending upon the project requirement. Kindly note that, depending upon project requirement the Consultancy Service Providers shall be requested to deliver any and all of the sections of the scope of work as requested by the UNDP and / or implementing partner.

The Consultancy Service Providers shall be responsible for assisting the the UNDP and / or implementing partner in ensuring the successful implementation of **Phase II & Phase III** of the Wind Resources Assessment and Mapping process under the supervision of the Project Manager, UNDP Project.

The following projected scope of work is segregated into the Three (3) different stages for effective execution of the Wind Resources Assessment and Mapping project;

A. DEVELOPMENT STAGE:

- I. Prospecting for wind-rich areas through desktop analysis, high-level analysis, site assessment (*terrain, roughness, topography, vegetation, climatology, etc*), micro-siting of met-masts, and due diligence to screen and find the most promising regions in the Kingdom of Bahrain for installing *meteorological towers (met-masts)* for Onshore and *Ground-based remote sensing systems* for Offshore;
- II. Provide support on reviewing various measuring instruments, sensors, met-masts structures (permanent / temporary) which are highly reliable, durable and suitable for the different terrain of kingdom of Bahrain for higher accuracy, lower tolerance and higher resolution (*vertical & horizontal*);
- III. Provide support on reviewing various meteorological data parameters to be measured; types of time series of data collection and a most reliable Wind Data Acquisition & Management software for gathering, storing, retrieving, analysing, and validating wind data to ensure its bankability;
- IV. Shall develop & review Term of Reference (ToR) & Request for Proposal (RFP) tender documents in accordance with the latest International standard and best practices for formally soliciting companies to establish an infrastructure for the Wind Resource Assessment and Mapping on a turnkey basis;

Any other deliverables deemed fit and requested by the UNDP and / or implementing partner for the “development stage” of the Project;

B. IMPLEMENTATION STAGE:

- I. Shall review and evaluate the RFP proposals solicited to establish the infrastructure for the Wind Resource Assessment and Mapping on a turnkey basis for Onshore & Offshore. Also, provide evaluation report highlighting the observations resulting from the evaluation process and recommending the contractor/s to be awarded;
- II. Provide technical due diligence on the proposals received on the Technical configuration of instrumentation & sensor, met-masts & Remote sensing system, Wind Data Acquisition & Management procedure, Station Operation & Maintenance procedures, calibration of instrumentation & sensor procedures, Methods proposed for calculating the Uncertainty & Losses, modelling, forecasting, documentation, Reporting, etc; including the SWOT analysis, risk matrix.
- III. Shall perform Owner’s engineer services such as monitoring, inspection, Quality assurance/ control, pre/post-dispatch Inspection, built to specifications comparisons, checking and verifying the adequacy of existing wind measurements from on-site met masts and compliance with international standards and track deliverables, etc;
- IV. Shall perform Owner’s engineer services for satisfactory acceptance on various milestone of the project, such as installation, testing, commissioning, etc. and shall account for all the deliverables defined in the solicited RFP;
- V. Any other deliverables deemed fit and requested by the UNDP and / or implementing partner for the “implementation stage” of the Project;

C. OPERATIONAL STAGE:

- I. Provide support on data collection, handling, quality control, validation, processing, assumptions to significantly reduce the uncertainty & losses;
- II. Provide support on reference wind data, wind forecasting, modeling of wind flow, energy yield, annual energy production, estimation of losses, variability and uncertainty, long-term correction, assumptions, optimization, comparison of wind data, Micro-siting of turbines.
- III. Shall ensure that the wind data compatible for Wind Atlas, further shall also ratify data and quality assurance for producing a bank/ investment-grade wind data report;
- IV. Any other deliverables deemed fit and requested by the UNDP and / or implementing partner for the “Operational stage” of the Project;

D. TECHNICAL SERVICES:

- I. Conduct site assessment, site visits, site survey, site study, renewable energy resource assessment, meteorological data analysis, Wind energy potential assessment, technical features & specification of the equipment, balance of system equipment/ components, bill of quantity/ materials, type of plant, size of plant, basic financial & economic analysis, technical calculation, recording, measuring & verification, gathering of photo & video of the site.
- II. Develop a capacity building programme on Wind Resource Assessment and Mapping; Conduct training for the implementing partner staffs and local consultants.
- III. Provide Technical due diligence on the currently available comprehensive wind atlas developed for the Kingdom of Bahrain (<http://www.seu.gov.bh/windatlas/>)
- IV. Conduct a feasibility study on various wind potential site of the country for proposing **Megawatt Scale** wind farms for Onshore & Offshore each separately.
- V. Conduct an independent analysis on various technologies, markets, appropriate policies (e.g. feed-in-tariffs, Open access, etc;), incentive mechanisms, financial instruments & funding mechanisms used by public organisations and businesses in the different national and regional.
- VI. Conduct an independent analysis & feasibility study on the National Grid for integrating with wind farms (Onshore & Offshore) with the network.
- VII. Support in identifying different types of risks (including legal, commercial, financial, environmental and social risks) as well as the appropriate mitigation (de-risking) instruments, funding mechanisms, incentive mechanisms and innovative structures and alternative finance tools to promote Wind Resource Assessment and Mapping in the Kingdom of Bahrain.
- VIII. Analyse Financial Viability of regional and international wind projects, assessing the key factors affecting Levelized Cost of Energy (LCOE), and develop an investment decision matrix specifically for the context of the Kingdom of Bahrain.
- IX. Conduct a comparative study on policy frameworks and technical standards for Wind Energy & Wind-Solar hybrid in the different national and regional; accordingly develop policy frameworks with the latest International standard and best practices for commercial (*micro, small, medium, large*) & utility scale projects and technical standards suitable for the climatic conditions for the kingdom of Bahrain.
- X. Study the prevailing market condition of Bahrain and develop strategies for stimulating the market growth.
- XI. Preparation of Pre-Feasibility Report, Detailed Feasibility Report, Detailed Project Report, Inspection Report, Technical Due Diligence report.

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- XII. Conduct a detail review and standardize the Term of Reference (ToR) & Request for Proposal (RFP) already developed by the implementing partner, in accordance with the latest International standard and best practices for Wind Energy & Wind-Solar hybrid projects.
- XIII. Provide Technical due diligence for Wind Energy & Wind-Solar hybrid projects regardless of their size (*micro, small, medium and large scale*);
- XIV. Conduct review on PPAs used in Wind Energy & Wind-Solar hybrid projects in the region and develop a Power Purchase Agreement (PPA) suitable for the Kingdom of Bahrain for the same;
- XV. Summarize the experience and lessons learned on projects of a similar nature in comparable environments and provide expert advice on various project phases;
- XVI. Any other deliverables deemed fit and requested by the UNDP and / or implementing partner for the Project.

E. OTHER SERVICES:

- I. Shall attend and represent the UNDP and / or implementing partner at meetings/ conferences physically and/or virtually as deemed necessary for the project;
- II. Shall ensure the availability of any and all essential professional software, measuring & verifying instruments / equipment, testing instruments / equipment, tools & tackles for any and all defined Wind Resource Assessment and Mapping consultation services for the project.

10. SUPPORTING DOCUMENTS

The Bidder(s) shall provide all the following supporting documents mandatorily in accordance to the eligibility criteria (**Section 5&6**) and evaluation criteria (**Section 8**).

- a) Brief Company Profile (*Not exceeding 10 Pages*)
- b) Certificate of Registration of Company (*as per country*)
- c) VAT Registration Certificate (*If any*)
- d) Awards/ Certification/ recognitions (*If any*)
- e) Financial Statements for the last three year (*2017, 2018 & 2019*)
- f) Project approach, methodology & plan for a Typical **Off-Shore & On-Shore** Wind Resource Assessment and Mapping; Typical performance monitoring and evaluation mechanisms and tools for Wind Resource Assessment and Mapping; Comments/ Feedback on the Term of Reference
- g) Track Record/ Testimonials for delivering for **Onshore** Wind Resource Assessment and Mapping consultancy services for government ministries/

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boards/ organization/ agencies – Globally (*outlining the projects sizes, budget, outcomes, assigned team to work on the project*) - **(minimum of 2)**

- h) Track Record/ Testimonials for delivering for **Off-shore** Wind Resource Assessment and Mapping consultancy services for government ministries/ boards/ organization/ agencies – Globally (*outlining the projects sizes, budget, outcomes, assigned team to work on the project*) - **(minimum of 2)**
- i) Track Record/ Testimonials for delivering **Wind Atlas** consultancy services for government ministries/ boards/ organization/ agencies – Globally (*outlining the projects sizes, budget, outcomes, assigned team to work on the project*) - **(minimum of 2)**
- j) Track Record/ Testimonials for delivering **Policy & Regulatory frameworks** for Wind Energy for government ministries/ boards/ organization/ agencies – Globally (*outlining the projects sizes, budget, outcomes, assigned team to work on the project*) **(minimum of 2)**
- k) Track Record/ Testimonials for delivering **Technical Due Diligence Services** such as Detailed Feasibility Study (*including prospecting, sitting and design*) for a wind farm on-shore and off-shore (*outlining the projects sizes, budget, outcomes, assigned team to work on the project*) - **(minimum of 2)**
- l) Detailed individual CV's of Team Leader, Senior Wind Energy expert, Senior Wind Resource expert, Meteorological/ Weather Data Scientist, Policy & Regulatory Specialist (Wind), who will be providing wind energy resources assessment and mapping services. It is mandatory to delegate a minimum of at least one of each abovementioned expert/ scientist/ specialist apart from the team leader.
- m) Organogram of the proposed team structure/personnel.

11. FEE BASIS

The Service Provider(s) shall provide the professional fees in USD (United States Dollars) as follows:

Description	Unit of Time
Senior Wind Energy Expert/ Specialist	Daily
Senior Wind Resource Assessment Expert/ Specialist	Daily

NOTE:

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In any case, If the Service Providers are required for visit(s) to the kingdom of Bahrain, the cost shall be reimbursed as per the UNDP Policy. Such reimbursement is limited to the following

- 1) Air Travel - Economy class only
- 2) Daily Subsistence Allowance (DSA) - as per applicable rates for the Kingdom of Bahrain

In addition, provide the **financial quote only on the Financial Proposal** and **not with the Technical Proposal**. **Any financial quote found in the Technical Bids OR in the e-tender portal** except in the financial proposal submission form **shall be rejected outright**.

12. NON – BILLABLE SERVICES

Any and all cost(s) associated with exclusive meetings / discussions with any or all team member(s) of the UNDP and / or implementing partner and / or Project stakeholders shall NOT be remunerated.

13. INFORMATION ON WORK APPORTIONMENT

Upon identifying the Successful Bidder(s) in this tender a Long-Term Agreement (LTA) shall be signed between the UNDP and the Successful Bidder(s). Under an LTA, UNDP does not warrant that any quantity of services shall be purchased during the term of this Agreement. Where a request for services arises, UNDP shall directly contract the consultant based on availability of the individual at short notice and/or based on time zones.

Following to the LTA, for any and all Wind Resource Assessment and Mapping Consultancy Services requirement as mentioned in the ***Section 9 (Project Scope)***, the UNDP and / or implementing partner shall discuss with the Service Provider(s) and mutually agree on the cost and timeline for delivery of each of the services as required

- Prior to commencement of any Wind Resource Assessment and Mapping Consultancy Services, the Service Provider(s) must issue a quotation for any and all defined Wind Resource Assessment and Mapping Consultancy Services.
- Once the quotation is approved by the UNDP and / or implementing partner and Purchase Order (P.O) is issued; the Service Provider(s) is allowed to commence any and all defined Wind Resource Assessment and Mapping Consultancy Services.
- To raise an invoice for any and all Wind Resource Assessment and Mapping Consultancy Services, the UNDP and / or implementing partner written acceptance (i.e. not mere receipt) of the quality of the outputs for the service(s) delivered is mandatory.

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- Original Invoice (hard copy) is mandatory in all cases.
- The Service Provider(s) shall raise an invoice on a monthly pro-rata basis in accordance with the mutually agreed cost for any and all defined Wind Resource Assessment and Mapping Consultancy Services
- Payment Terms & Conditions shall be in accordance with the UNDP policy.

14. UNDP ETENDER - IMPORTANT INSTRUCTIONS:

The Bidder(s) are kindly advised to follow the below “Do’s” & “Don’t’s” to avoid rejection for your proposals.

<i>DONT's</i>	<i>DO's</i>
<i>❖ Please DO NOT mention your ACTUAL PRICE in the ONLINE VERSION of the FINANCIAL PROPOSAL @ UNDP eTendering portal</i>	<i>❖ Please mention a DEFAULT PRICE as “1” and DEFAULT QUANTITY as “1” in the ONLINE VERSION of the FINANCIAL PROPOSAL @ UNDP eTendering portal</i> <i>❖ Please mention your ACTUAL PRICE in this Annex 4 (FINANCIAL PROPOSAL) ONLY</i> <i>❖ Please “PASSWORD PROTECT” this Annex 4 (FINANCIAL PROPOSAL) while submitting/ uploading your proposals through UNDP eTendering portal</i> <i>❖ The “PASSWORD” of this Annex 4 shall be shared in a separate email to the procurement.bh@undp.org ONLY</i>

ANNEX 3

FORM FOR SUBMITTING SERVICE PROVIDER'S - TECHNICAL PROPOSAL⁷

(This Form must be submitted only using the Service Provider's Official Letterhead/Stationery⁸)

[insert: Location].

[insert: Date]

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

Dear Sir/Madam:

We, the undersigned, hereby offer to render the Wind Resource Assessment and Mapping consultancy services to UNDP in conformity with the requirements defined in the RFP [Reference No] dated [specify date], and all of its attachments, as well as the provisions of the UNDP General Contract Terms and Conditions.

We enclosed the Detail Technical Proposal, which consists of the following:

Form I: Qualifications of the Service Provider

Form II: Proposed Methodology, Approach and Implementation Plan

Form III: Testimonial of Success for Similar Assignment

Form IV: Qualification of Key Personnel

We hereby declare and ensure that the Technical Bids do not consist of any financial proposal or any indication of financial cost and in case if found, our proposal shall be rejected outright.

Form I: Qualifications of the Service Provider

The Service Provider must describe and explain how and why they are the best entity that can deliver the requirements of UNDP by indicating the following

- a. **Brief Company Profile** – (Not exceeding 10 Pages), describing the nature of the business, field of expertise, certifications and accreditations, Awards/ recognitions (If any)

⁷ This serves as a guide to the Service Provider in preparing the Proposal.

⁸ Official Letterhead/Stationery must indicate contact details – addresses, email, phone and fax numbers – for verification purposes

- a. **Business Licenses** – Certificate of Commercial Registration (or) License and VAT Registration Certificate (if applicable)
- b. **Latest Audited Financial Statement** – Financial Statements for the last three year (2017, 2018 & 2019) to indicate its financial stability.

Form II: Proposed Methodology, Approach and Implementation Plan

The Service Provider must describe and explain in detail about their Methodology, Approach and Implementation Plan on how they are going to execute the works and achieve the deliverables exceeding the requirement in the TOR but not limited to the following

- a. Project approach, methodology & plan for a Typical **Off-Shore** Wind Resource Assessment and Mapping;
- b. Project approach, methodology & plan on Typical **On-Shore** Wind Resource Assessment and Mapping;
- c. Typical performance monitoring and evaluation mechanisms and tools for Wind Resource Assessment and Mapping
- d. Comments/ Feedback on this Term of Reference.

Form III: Testimonial of Success for Similar Assignment

The Service Provider must provide the track record and list of testimonials but not limited to the following:

- a. Track Record/ Testimonials for delivering for **Onshore** Wind Resource Assessment and Mapping consultancy services for government ministries/ boards/ organization/ agencies – Globally (*outlining the projects sizes, budget, outcomes, assigned team to work on the project*) - **(minimum of 2)**
- b. Track Record/ Testimonials for delivering for **Off-shore** Wind Resource Assessment and Mapping consultancy services for government ministries/ boards/ organization/ agencies – Globally (*outlining the projects sizes, budget, outcomes, assigned team to work on the project*) - **(minimum of 2)**
- c. Track Record/ Testimonials for delivering **Wind Atlas** consultancy services for government ministries/ boards/ organization/ agencies – Globally (*outlining the projects sizes, budget, outcomes, assigned team to work on the project*) - **(minimum of 2)**
- d. Track Record/ Testimonials for delivering **Policy & Regulatory frameworks** for Wind Energy for government ministries/ boards/ organization/ agencies – Globally

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(outlining the projects sizes, budget, outcomes, assigned team to work on the project)
(minimum of 2)

- e. Track Record/ Testimonials for delivering **Technical Due Diligence Services** such as Detailed Feasibility Study *(including prospecting, sitting and design)* for a wind farm on-shore and off-shore *(outlining the projects sizes, budget, outcomes, assigned team to work on the project)* - **(minimum of 2)**

Form IV: Qualifications of Key Personnel

The Service Provider must provide:

- a. Compilation of Key Personnel: names, designation, educational qualifications, years of experience of the key personnel that will perform the services indicating who is Team Leader, who are supporting, role/s undertaken, etc;
- b. Detailed individual CV's of Team Leader, Senior Wind Energy expert, Senior Wind Resource expert, Meteorological/ Weather Data Scientist, Policy & Regulatory Specialist (Wind).
- c. Any other relevant Junior level CV's of the relevant fields
- d. Organogram of the proposed team structure/personnel.

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

[Designation]

[Date]

ANNEX 4

FORM FOR SUBMITTING SERVICE PROVIDER'S - FINANCIAL PROPOSAL⁹

(This Form must be submitted only using the Service Provider's Official Letterhead/Stationery¹⁰)

[insert: Location].

[insert: Date]

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

Dear Sir/Madam:

We, the undersigned, hereby offer to render the following services to UNDP in conformity with the requirements defined in the RFP [Reference No] dated [specify date], and all of its attachments, as well as the provisions of the UNDP General Contract Terms and Conditions:

A. Proposed Cost for Wind Resource Assessment and Mapping Consulting Service(s)

Description	Unit of Time	Quantity	Total Rate (USD)
Senior Wind Energy Expert/ Specialist	Daily	1	
Senior Wind Resource Assessment Expert/ Specialist	Daily	1	

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

[Designation]

[Date]

DONT's	DO's
❖ Please DO NOT mention your ACTUAL PRICE in	❖ Please mention a DEFAULT PRICE as "1" and DEFAULT QUANTITY as "1" in the ONLINE VERSION of the <u>FINANCIAL PROPOSAL @ UNDP eTendering portal</u>

⁹ This serves as a guide to the Service Provider in preparing the Proposal and this Annex must be password protected.

¹⁰ Official Letterhead/Stationery must indicate contact details – addresses, email, phone and fax numbers – for verification purposes

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<i>the ONLINE VERSION of the FINANCIAL PROPOSAL @ UNDP eTendering portal</i>	<ul style="list-style-type: none"><i>❖ Please mention your ACTUAL PRICE in this Annex 4 (FINANCIAL PROPOSAL) ONLY</i><i>❖ Please "PASSWORD PROTECT" this Annex 4 (FINANCIAL PROPOSAL) while submitting/ uploading your proposals through UNDP eTendering portal</i><i>❖ The "PASSWORD" of this Annex 4 shall be shared in a separate email to the procurement.bh@undp.org ONLY</i>
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