

REQUEST FOR QUOTATION (RFQ) – Services

Guidelines for Detailed Wind Resource	
Measurements on Islands	DATE: August 6, 2013
Global Renewable Energy Islands Network	
(GREIN)	IRENA REFERENCE:
	RFQ/2013/O/027

Dear Sir / Madam:

We kindly request you to submit your quotation for **Guidelines for Detailed Wind Resource Measurements on Islands Global Renewable Energy Islands Network**, details of which are in Annex 1 of this RFQ.

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

Quotations may be submitted on or before **August 27, 2013** (**Close of Business**) via E- Mail, to **bids@irena.org**.

CONTACT PERSON:

[Luay Shalkhoub, Chief Procurement Officer, CPO] Email address of procurement officer <u>lshalkhoub@IRENA.Org</u> or <u>procurement@irena.org</u> **International Renewable Energy Agency (IRENA)** Procurement Office C 67 Office Building, Khalidiyah (32nd) Street P.O. Box 236 Abu Dhabi, United Arab Emirates

Please reference the RFQ number in your correspondence.

It shall remain your responsibility to ensure that your quotation will reach the address above on or before the deadline. Quotations that are received by IRENA after the deadline indicated above, for whatever reason, shall not be considered for evaluation. If you are submitting your quotation by email, kindly ensure that they are signed, stamped and in the .pdf format.

Please take note of the following additional requirements and conditions pertaining to the supply of the abovementioned good/s or services



Delivery Address / Location Method of RFQ Submission: via email to <u>Procurement@Irena.Org</u>	IRENA Headquarters C 67 Office Building, Khalidiyah (32nd) Street P.O. Box 236 Abu Dhabi, United Arab Emirates <u>RFQ for Services:</u> Submit your offers as Two Electronic Files in pdf format – One file marked as the Technical Proposal [TP _ Bidders Name.pdf], and the other file marked as the Financial
Delivery Date	Proposal [FP_BiddersName.pdf]. Please see the schedule in the TOR – attached as Annex 1
Preferred Currency of Quotation	United States Dollars
Tax on Price Quotation	□ must be inclusive of VAT and other applicable indirect taxes
Payment Terms	□ 100% within 30 days upon IRENA's acceptance of the final report delivered as specified.
Conditions for Release of Payment	□ Services as per Contract deliverables.
Other after-sale services / support required	□ Not required – duration
Deadline for the Submission of Quotation	August 27, 2013 to bids@irena.org
Period of Validity of Quotes starting the Submission Date	□ 60 days
Partial Bids / Partial Awards / Split Awards	□ Not permitted.
Evaluation Criteria	□ For Services: Bids are scored on a combined score - Technical Offer is 70% (according to the technical evaluation criteria in the TOR) and the Financial is 30%. The cut off technical score is 70%.



Annexes to this RFQ	 Form for Submission of Quotation (Annex 2) General Terms and Conditions / Special Conditions (Annex 3). 	
	Non-acceptance of the terms of the General Terms and Conditions (GTC) may be grounds for disqualification from this bidding process.	
Contact Person at IRENA for Inquiries	Luay Shalkhoub, Chief Procurement Officer.	

- a. Services proposed shall be reviewed based on completeness and compliance of the quotation with the minimum specifications or as described in the Terms of Reference / Scope of Work (TOR/SOW) above and or any other annexes providing details of IRENA's requirements.
- b. The quotation that complies with all of the specifications (TOR evaluation criteria) and requirements and offers the lowest price shall be selected. Any offer that does not meet the requirements shall be rejected.
- c. Any discrepancy between the unit price and the total price (obtained by multiplying the unit price and quantity) shall be re-computed by IRENA. The unit price shall prevail and the total price shall be corrected. If the vendor does not accept the final price based on IRENA's re-computation and correction of errors, its quotation will be rejected.
- d. Any Purchase Order / Contract that will be issued shall be subject to the General Terms and Conditions herein attached hereto.
- e. IRENA is not bound to accept any quotation, nor award a contract/Purchase Order, nor be responsible for any costs associated with your preparation and submission of a quotation, regardless of the conduct or outcome of the selection process.
- f. IRENA reserves the right to accept or reject any Proposal, to render any or all Proposals as non-responsive, and to annul the solicitation process and reject all Proposals at any time prior to award of contract, without thereby incurring any liability to the affected Proposer, or any obligation to inform the affected Proposer(s) of the grounds for IRENA 's action. IRENA shall neither be obliged to award the contract to the lowest price offer.
- g. Prior to the expiration of proposal validity, the contract may be awarded to the Proposer whose proposal is determined to be in the best interests of the Agency, based upon the evaluation method indicated in the Data Sheet and with due consideration given to the general principles governing IRENA procurement activities.



- h. At the time of award of Contract or Purchase Order (PO), IRENA reserves the right to vary the quantity of services and/or goods, by up to a maximum.
- i. IRENA implements a zero tolerance on fraud and corrupt practices, and is committed to preventing, identifying and addressing all such acts and practices against IRENA, as well as third parties involved in IRENA activities.

Sincerely yours,

IRENA (Authorised Officer) Luay Shalkhoub CPO August 6, 2013



Annex 1

TERMS OF REFERENCE RFQ/2013/O/027 Guidelines for Detailed Wind Resource Measurements on Islands Global Renewable Energy Islands Network (GREIN)

BACKGROUND:

The International Renewable Energy Agency (IRENA) is an intergovernmental body with a mandate to "promote the widespread and increased adoption and the sustainable use of all forms of renewable energy" (Article II). IRENA directs its principal partnership activities towards knowledge sharing, ensuring that existing information and experience is developed, organised, and made accessible in a usable format. Cooperation at the global, regional and national levels, knowledge sharing, enabling policies and enhanced capacity, as well as the encouragement of investment flows and strengthened technology and innovation, are essential elements in the Agency's efforts.

Pursuant to this mandate and the Malta Communique issued by ministers and other officials from 48 islands in September 2012, one of the activities in IRENA's 2013 work programme is to establish a Global Renewable Energy Islands Network (GREIN) for pooling knowledge, sharing best practices, and seeking innovative solutions for accelerated update of clean and cost-effective renewable energy technologies on islands and virtual islands far from transmission grids, reducing their needs for costly fossil fuel from distant sources.

Many islands rely on diesel fuel for a large portion of their electricity generation, and diesel-fuelled generation on islands typically costs 35 U.S. cents per kilowatt-hour or more. With advancements in technology, expanding markets and economies of scale, the costs of renewable electricity generation from wind and solar power plants have declined rapidly in recent years. Consequently, renewable power options can usually undercut the diesel-fuelled generating cost by a substantial margin, saving islands significant sums of money that can be applied to needed investments in education, infrastructure and other development priorities.



Project Objective

Many islands have significant wind resources, as identified in IRENA's Wind and Solar Atlas. However, detailed measurements over the course of a year or more are typically required to generate "bankable" data sufficient to obtain a loan for construction of a wind power plant. The seasonal and daily pattern of wind speeds at each site will affect the amount of power that can be generated from that site at different times and hence the revenues that can be generated. Thus accurate and reliable data on wind speeds are essential to wind turbine financing.

Yet many islands lack an understanding of the importance of wind monitoring for establishing a business case for wind projects. The masts used to monitor wind speeds and generated detailed wind measurements are often of poor quality or not correctly installed, due to lack of understanding of suitable design standards and installation methods. Poor siting of monitoring masts or inconsistent recording of wind data can reduce the quality of wind data collected, resulting in high uncertainty about the actual wind speeds and revenue prospects at each site.

Small island developing states often lack the experience to apply best practices for wind speed measurements and face significant challenges in doing so owing to their isolation, small size and less advanced stage of economic development. Wind projects are often small, and a single small utility must often plan and operate variety of power plants with a very small technical staff. In this context, simple and easily applied wind monitoring guidelines can be a great help.

The project objective is to develop rigorous guidelines for wind monitoring on islands that are nonetheless simple, transparent, easily taught and easily followed so that remote island nations can apply these guidelines to obtain financing for wind projects on a commercial basis. The guidelines should be technically rigorous but written in a clear and concise manner.

To develop wind monitoring guidelines for islands, the project shall:

- 1. Review industry standards, guidelines and best practices related to wind monitoring.
- 2. Identify common pitfalls which can raise costs or reduce quality of wind data.
- 3. Assess appropriate choice of instrumentation for wind monitoring purposes.
- 4. Compile directions for proper installation of wind monitoring equipment.
- 5. Specify proper procedures for recording of wind monitoring data.

Topics to be covered in the wind monitoring guidelines include:

- 1. Principles of wind monitoring
- 2. Relationship of site-specific wind characteristics to available wind energy resource
- 3. Definition of a wind monitoring programme suited to meeting business objectives
- 4. Optimal wind mast placement for different terrains and wind farm configurations
- 5. Appropriate instrumentation, calibration and ancillary equipment for wind monitoring
- 6. Correct installation of wind monitoring equipment, particularly measurement systems
- 7. Comprehensive reporting and record keeping for wind monitoring data
- 8. Options and best practices for retrieval and storage of wind monitoring data
- 9. Proper maintenance of wind masts and associated measurement instruments

Duties and Responsibilities



The consultant shall prepare comprehensive, easy-to-understand wind monitoring guidelines that reflect the best practices in the wind industry, with sections on the following nine subjects:

Principles of wind monitoring

- 1. Relationship of site-specific wind characteristics to available wind energy resource
- 2. Definition of a wind monitoring programme suited to meeting business objectives
- 3. Optimal wind mast placement for different terrains and wind farm configurations
- 4. Appropriate instrumentation, calibration and ancillary equipment for wind monitoring
- 5. Correct installation of wind monitoring equipment, particularly measurement systems
- 6. Comprehensive reporting and record keeping for wind monitoring data
- 7. Options and best practices for retrieval and storage of wind monitoring data
- 8. Proper maintenance of wind masts and associated measurement instruments

Timeline and deliverables

Deliverable	Deliverable Description	Deliverable
Number		Date
1	Project inception report including project methodology, project work plan, detailed project outline, and resources to be allocated to each of the project tasks and deliverables.	15 September
2	Draft guidelines for topics 1, 2 and 3 (principles of wind monitoring, relationship of site-specific wind characteristics to available wind energy resource, definition of wind monitoring programme suited to meeting business objectives)	30 September
3	Draft guidelines for topics 4, 5 and 6 (optimal wind mast placement, appropriate instrumentation, correct installation)	15 October
4	Draft guidelines for topics 7, 8 and 9 (comprehensive reporting and record keeping, options and best practices for retrieval and storage of data, proper equipment maintenance)	31 October
5	Revised guidelines for all topics, presented in a report	30 November

All dates are indicative only EVALUATION CRITERIA

• Scoring of criteria evaluation:

Summary of Proposal Evaluation		Score Weight (%)	
1.	Technical Evaluation Criteria	70	
2.	Commercial/Financial Evaluation Criteria	30	
	TOTAL SCORE	100	



Technical Evaluation Criteria

The firm shall be evaluated according to the following qualifying criteria:

1) Quality of Technical Proposal (40 percent of score)

The proposed co. should provide evidence of capability / knowledge in documenting and describing:

- Principles of wind monitoring;
- Relationship of site-specific wind characteristics to available wind resources;
- Suitability of wind monitoring to specific business objectives;
- Optimal wind mast placement for different terrains and wind farm configurations;
- Appropriate instrumentation, calibration and ancillary equipment for wind monitoring;
- Correct installation of wind monitoring equipment, particularly measurement systems;
- Comprehensive reporting and record keeping for wind monitoring data;
- Options and best practices for retrieval and storage of wind monitoring data;
- Proper maintenance of wind masts and associated measurement instruments.

2) Expertise of Personnel (40 percent of score) please provide CVs of the team.

- Education in planning, engineering and allied fields;
- Training in wind resource assessment and monitoring;
- Expertise in collection and analysis of wind resource data;
- Expertise in wind farm design and optimisation;
- Understanding of constraints on equipment and expertise in remote areas;
- Effective report writing skills.

The team should comprise of a:

- Project Leader: 10 years of experience
- Senior project Expert 5 years of experience
- Junior project: 3 years of experience
- 3) Experience of Company (20 percent of score)
 - Record of high-quality reports in planning, engineering and allied fields;
 - Record of high-quality reports on wind resource assessment and monitoring;
 - Experience in collection and analysis of wind resource data;
 - Experience in wind farm design and optimisation;
 - Understanding of constraints on equipment and expertise in remote areas;
 - Effective project progress monitoring procedures and strong quality control.



Annex 2

Cost Breakdown by Cost Component: RFP/2013/O/027 - **Guidelines for Detailed Wind Resource Measurements on Islands Global Renewable Energy Islands Network**, The Proposer is required to prepare the Financial Proposal in a <u>separate</u> folder from the rest of the RFP response as indicated in RFP.

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

The format shown below is suggested for use as a guide in preparing the Financial Proposal.

Description of the deliverables	Name & Designation of proposed staff	*Total Period of the Engagement	Cost / day in USD	Total in USD
1. Project inception report including project methodology, project work plan, detailed project outline, and resources to be allocated to each of the project tasks and deliverables.	e.g. Project Manager, Technical Specialist, Reaseacher etc,	10 days		
2. Draft guidelines for topics 1, 2 and 3 (principles of wind monitoring, relationship of site-specific wind characteristics to available wind energy resource, definition of wind monitoring programme suited to meeting business objectives); 4, 5 and 6 (optimal wind mast placement, appropriate instrumentation, correct installation) and topics 7, 8 and 9 (comprehensive reporting and record keeping, options and best practices for retrieval and storage of data, proper equipment maintenance)		30 days		
3. Final report - revised guidelines for all topics, presented in a report which reflects feedback and direction from IRENA Secretariat.		20 days		
Total Lump Sum: The fee must be inclusive of VAT (if	applicable).		·	



The fees indicated above for the key staff on this engagement and the fee structure shall remain fixed / unchanged for one year. Note: these rates must match the same that are indicated in the financial offer.

Proposers Name / Address:

Authorised Representative's

Telephone/Fax numbers: Email Address: Name / Designation:_____

Signature:_____

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Annex 3 GENERAL TERMS AND CONDITIONS FOR INSTITUTIONAL/CORPORATE CONTRACT

1. LEGAL STATUS

The Contractor shall be considered as having the legal status of an independent contractor vis-à-vis the Agency. Neither the Contractor, and any subcontractor, nor any of their personnel shall be considered to be employees or agents of the Agency.

2. PAYMENT TERMS

(a) The Agency shall, unless otherwise specified in the Contract, make payment within 30 days of receipt of the Contractor's invoice which is issued only upon the Agency's acceptance of the work specified in the Contract.

(b) The prices shown in the Contract cannot be increased except by express written agreement by the Agency. The Agency will not pay any charge for late payment unless expressly agreed to in writing.

3. CONTRACTOR'S RESPONSIBILITY FOR EMPLOYEES

The Contractor shall supervise and be responsible for the professional and technical competence of its employees and shall select, for work under the Contract, reliable individuals who will perform effectively in the implementation of the Contract, respect the local customs and conform to a high standard of moral and ethical conduct.

4. SOURCE OF INSTRUCTIONS

The Contractor shall neither seek nor accept instructions from any authority external to the Agency in connection with the performance of its obligations under the Contract. The Contractor shall refrain from any action which may adversely affect the Agency and shall fulfill its commitments with the fullest regard to the interests of the Agency.

5. OFFICIALS NOT TO BENEFIT

The Contractor warrants that it has not and shall not offer any direct or indirect benefit arising from or related to the Contract or the award thereof to any official or employee of the Agency. The Contractor acknowledges and agrees that any breach of this Article is a breach of an essential term of the Contract.

6. ASSIGNMENT AND INSOLVENCY

(a) The Contractor shall not assign, transfer, pledge or make other disposition of the Contract or any part thereof, or any of the Contractor's rights, claims or obligations under the Contract except with the prior written consent of the Agency.

(b) Should the Contractor become insolvent or should control of the Contractor change by virtue of insolvency, the Agency may, without prejudice to any other rights or remedies, immediately terminate the Contract by giving the Contractor written notice of termination.

7. SUBCONTRACTING

In the event the Contractor requires the services of one or more subcontractors, the Contractor shall obtain the prior written approval of the Agency for all subcontractor(s). The Agency's approval of a subcontractor shall not relieve the Contractor of any of its obligations under the Contract, and the terms of any subcontract shall be subject to and in conformity with the provisions of the Contract.

8. INDEMNIFICATION

The Contractor shall indemnify, hold and save harmless and defend at its own expense the Agency, its officers, agents, servants and employees from and against all suits, claims, demands and liability of any nature or kind, including cost and expenses arising out of acts or omissions of the Contractor or its employees or subcontractors in the performance of the Contract. This requirement shall extend, inter alia, to claims or liabilities in the nature of workers' compensation, product liability and to liabilities pertaining to intellectual property rights. The obligations under this clause do not lapse upon termination of the Contract.

9. INSURANCE AND LIABILITIES TO THIRD PARTIES

(a) The Contractor shall provide and thereafter maintain all appropriate workmen's compensation insurance, or its equivalent, with respect to its employees to cover claims for personal injury, bodily injury or death arising from the execution of the Contract.

(b) The Contractor shall provide and thereafter maintain insurance against all risk in respect of its property and any equipment used for the execution of the Contract.

(c) The Contractor shall also provide and thereafter maintain liability insurance in an adequate amount to cover third party claims for death, bodily injury, loss of and damage to property arising from or in connection with the implementation of the Contract or from the operation of any vehicles, boats, airplanes and other equipment owned or leased by the Contractor or its agents, servants, employees or subcontractors performing work or services in connection with of the Contract.

(d) Except for insurance mentioned in paragraph (a), the insurance policies under this clause shall:

- (i) Name the Agency as additional beneficiary (additional insured);
- (ii) Include a waiver of subrogation of the Contractor's rights to the insurance carrier against the Agency;

(iii) Provide that the Agency shall receive thirty (30) days written notice from the insurers prior to any cancellation or change of coverage. (e) The Contractor shall, upon request, provide the Agency with satisfactory evidence of the insurance required under this Article.

10. ENCUMBRANES/LIENS

The Contractor shall not cause or permit any lien, attachment or other encumbrance by any person to be placed on file in any public office or on file with the Agency against any monies due or to become due for any Services or Goods provided under the Contract, or by reason of any other claim or demand against the Contractor.



11. TITLE TO EQUIPMENT

Title to any equipment and supplies that may be furnished by the Agency shall rest with the Agency and any such equipment shall be returned to the Agency at the conclusion of the Contract or when no longer needed. Such equipment, when returned shall be in the same condition as when delivered to the Contractor, subject to normal wear and tear, and the Contractor shall be liable to compensate the Agency for any damage or degradation of the equipment that is beyond normal wear and tear.

12. OBSERVANCE OF THE LAW

The Contractor shall comply with all laws, ordinances, rules and regulations bearing upon the performance of its obligations under the terms of the Contract.

13. COPYRIGHT, PATENTS AND OTHER PROPRIETARY RIGHTS

Except as otherwise expressly provided in the Contract, the Agency shall be entitled to all intellectual property and other property rights, including but not limited to copyrights, patents and trademarks, with regard to products, documents or other materials which bear a direct relation to or are produced, prepared or collected in consequence or in the course of the execution of the Contract. At the request of the Agency, the Contractor shall take all necessary steps, prepare and process all necessary documents and assist in securing such proprietary rights and transferring them to the Agency in compliance with the requirements of the applicable law.

14. CONFIDENTIALITY

(a) All technical, financial or other documentation and data the Contractor compiled for or received from the Agency under the Contract shall be treated as confidential and shall be delivered only to the Agency's authorized officials on completion of the Work or as requested by the Agency.(b) The Contractor may not communicate at any time to any other person, Government or authority external to the Agency, any information known to it by reason of its association with the Agency which has not been made public except with the authorization of the Agency, nor shall the Contractor at any time use such information to private advantage. These obligations do not lapse upon termination of the Contract.

15. USE OF NAME, EMBLEM, OR OFFICIAL SEAL OF THE AGENCY

The Contractor shall not advertise or otherwise make public for purposes of commercial advantage that it is a Contractor of the Agency, nor shall the Contractor, in any manner whatsoever, use the name, emblem or official seal of the Agency or any abbreviation of the name of the IRENA in connection with its business or otherwise, without the prior written approval by the Agency.

16. FORCE MAJEURE

(a) *Force majeure* as used herein shall mean acts of God, industrial disturbances, acts of the public enemy, civil disturbances, explosions and any other similar cause of equivalent force not caused by nor within the control of either party and which neither party is able to overcome.

(b) In the event of or as soon as possible after the occurrence of any cause constituting *force majeure*, the Contractor shall give notice and full particulars in writing to the Agency of such occurrence if the Contractor is thereby rendered unable, wholly or in part, to perform its obligations and meet its responsibilities under the Contract. The Contractor shall also notify the Agency of any other changes in conditions or the occurrence of any event which interferes or threatens to interfere with the Contractor's performance under the Contract. Upon receipt of the notice required under this Article, the Agency shall take such action as, in its sole discretion, it considers to be appropriate or necessary in the circumstances, including the granting to the Contractor of a reasonable extension of time in which to perform its obligations under the Contract.

(c) If the Contractor is rendered permanently unable, wholly or in part, by reason of force majeure to perform its obligations and meet its responsibilities under the Contract, the Agency shall have the right to terminate the Contract on the same terms and conditions as are provided for in Article 17 ("Termination") of these General Terms and Conditions, except that the period of notice may be seven (7) days instead of thirty (30) days.

17. TERMINATION

(a) The Agency may terminate the Contract in whole or in part, and at any time, upon thirty (30) days' notice of termination to the Contractor. The initiation of arbitral proceedings in accordance with Article 18 ("Settlement of Disputes") of these General Terms and Conditions, shall not be deemed a termination of the Contract.

(b) The Agency may terminate forthwith the Contract at any time should the funding for the Agency be curtailed or terminated, in which case the Contractor shall be reimbursed by the Agency for all reasonable costs incurred by the Contractor prior to receipt of the notice of termination.

(c) In the event of termination by the Agency, no payment shall be due from the Agency to the Contractor except for work and services satisfactorily performed in accordance with the express terms of the Contract.

(d) Should the Contractor be adjudicated bankrupt, or be liquidated or become insolvent, or should the Contractor make an assignment for the benefit of its creditors, or should a Receiver be appointed on account of the insolvency of the Contractor, the Agency may, without prejudice to any other right or remedy it may have under the Contract terminate the Contract forthwith. The Contractor shall immediately inform the Agency of the occurrence of any of the above events.

18. SETTLEMENT OF DISPUTES

(a) The Parties shall use their best efforts to settle amicably any dispute, controversy or claim arising out of the Contract or the breach, termination or invalidity thereof.

(b) Any dispute, controversy or claim that is not settled under the preceding paragraph, shall be referred to arbitration in accordance with the UNCITRAL arbitration rules as at present in force. The arbitral tribunal shall take into account the internationally recognized general principles of commercial transactions. The arbitral tribunal shall have no authority to award punitive damages, nor to award interest in excess of five (5) per cent, and any such interest shall be simple interest only. The parties shall be bound by any arbitration award rendered as a result of such arbitration as the final adjudication of any such dispute.

19. PRIVILEGES AND IMMUNITIES

Nothing in or relating to the Contract shall be deemed a waiver, express or implied, of any of the privileges and immunities of the Agency.