



The Provision of a Data Acquisition System for Wind and Solar Resource Monitoring at a Remote Mini-grid in Upper Blinkwater, South Africa

Request for Quotation (RFQ) No: 5799/11/02/2022

Date of issue	Friday, 28 January 2022
Closing Date and Time	Friday, 11 February 2022 at 16:30
RFQ Number	5799/11/02/2022
Contact details	For submission of quotations or any other enquiries: tender@csir.co.za

1 INVITATION FOR QUOTATION

Quotations are hereby invited to supply a data acquisition system for long-term monitoring of wind and solar resources at a remote mini-grid location in Upper Blinkwater, South Africa. The installation and long-term monitoring are not included in the price.

2 QUOTATION REQUIREMENTS

The supplier will provide an integrated monitoring solution that has been tested and validated prior to delivery. The system shall be delivered to Port Elizabeth, and the CSIR will be responsible for installing the system on site with telephonic support from the supplier, as needed. The system must include the following components:

Technical components of the weather station

Item	Description	Quantity	Details
1	Irradiance sensor	1	One 'secondary-standard' pyranometer (see ISO 9060) with manufacturer's calibration certificate.
2	Ambient temperature	1	One 'beehive' ambient temperature sensor with manufacturer's calibration certificate.
3	Wind speed	1	One cup anemometer with manufacturer's calibration certificate.
4	Wind direction	1	One wind direction sensor with manufacturer's calibration certificate.
5	Data logger	1	The data logger must have a minimum of 30 days storage, log once per minute, and transmit to the base station once per hour or more frequently. A manufacturer's calibration certificate is sufficient.
6	Clock synchronization	1	The data logger clock must be synchronized daily with the base station computer clock.
7	Enclosure	1 or more	Necessary enclosures for any sensitive equipment that requires protection from the environment
8	Wireless transmitter, receiver, and pc interface	1	Hardware and software for wireless transmission of data from the data logger to the computer base station approximately 300 m away.
9	Power	1	One solar panel with mounting hardware to power the sensors, data logger, and RF transmitters.
10	Battery storage	1	One battery with enclosure sized to provide a minimum of five (2) days autonomy for the data acquisition system.
12	Data storage on the base station computer	1	The data from the data logger must be transmitted and saved to the existing Windows-based PC.
13	Cabling and connections	1	Sufficient cabling and connections to integrate the data from the point of collection to the point of storage on the PC.
14	Shipping	1	Shipping arrangements and cost to Nelson Mandela University in Port Elizabeth

The components should meet the following minimum requirements:

- Electrical connections and all equipment to conform to Regulatory requirements (Occupational Health and Safety Act 85 of 1993, relevant regulations and standards (SANS)).

- Any necessary piping to be insulated isolated from environmental conditions. (Temperature and UV)
- All equipment to come with minimum one year manufacturer's warranty to be handed over to the client

3 EVALUATION CRITERIA

- 3.1 Selection of suppliers will be based on the 80/20 preference point system.
- 3.2 Indicate CSD number (National Treasury Central Supplier Database) on quotation. If not registered yet on CSD, use www.csd.gov.za to register.
- 3.3 No order will be issued or no contract will be signed without a valid CSD number.
 - Provide valid original or certified copy of the B-BBEE Certificate issued by an accredited verification agency and bearing a SANAS logo; **or**
 - Valid sworn affidavits made on dti designed templates; **or**
 - DTI issued sworn affidavit; **or**
 - CIPC issued B-BBEE certificate.

4 PRICING QUOTATION

- 4.1 Price needs to be provided in South African Rand (excl. VAT) or (Inc VAT) where applicable, with details on price elements that are subject to escalation and exchange rate fluctuations clearly indicated.
- 4.2 Price should include additional cost elements such as freight, insurance until acceptance, duty where applicable, etc.
- 4.3 Payment will be according to the CSIR Payment Terms and Conditions.

5 OTHER TERMS AND CONDITIONS

- 5.1 The supplier shall under no circumstances offer, promise or make any gift, payment, loan, reward, inducement, benefit or other advantage, which may be construed as being made to solicit any favour, to any CSIR employee or its representatives. Such an act shall constitute a material breach of the Agreement and the CSIR shall be entitled to terminate the Agreement forthwith, without prejudice to any of its rights.
- 5.2 A validity period of 90 days will apply to all quotations except where indicated differently on the quote.

- 6 No goods and/or services should be delivered to the CSIR without an official CSIR Purchase order. CSIR purchase order number must be quoted on the invoice. Invoices without CSIR purchase order numbers will be returned to supplier.**

7 DECLARATION BY TENDERER

Only tenderers who completed the declaration below will be considered for evaluation.

RFQ No: 5799/11/02/2022

I hereby undertake to render services described in the attached tendering documents to CSIR in accordance with the requirements and task directives / quotation specifications stipulated in RFQ No. **5799/11/02/2022** at the price/s quoted. My offer/s remains binding upon me and open for acceptance by the CSIR during the validity period indicated and calculated from the closing date of the quotation.

I confirm that I am satisfied with regards to the correctness and validity of my quotation; that the price(s) and rate(s) quoted cover all the services specified in the quotation documents; that the price(s) and rate(s) cover all my obligations and I accept that any mistakes regarding price(s) and rate(s) and calculations will be at my own risk.

I accept full responsibility for the proper execution and fulfilment of all obligations and conditions devolving on me under this RFQ as the principal liable for the due fulfilment of this RFQ process.

I declare that I have no participation in any collusive practices with any tenderer or any other person regarding this or any other RFQ proposal.

I accept that the CSIR may take appropriate actions, deemed necessary, should there be a conflict of interest or if this declaration proves to be false.

I confirm that I am duly authorised to sign this proposal.

NAME (PRINT)
CAPACITY
SIGNATURE
NAME OF FIRM
DATE

WITNESSES	
1
2
DATE:	