



Government Women Engineering College, Ajmer, Makhupura, Nasirabad
Road, Ajmer -305002

INVITATION LETTER

Package Code: TEQIP-III/2019/RJ/gwec/113

Current Date: 12-Jul-2019

Package Name: GWECA/2019/ECE/Research Lab-Anechoic Chamber

Method: Shopping Goods

To,

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Sub: INVITATION LETTER FOR GWECA/2019/ECE/Research Lab-Anechoic Chamber

Dear Sir,

1. You are invited to submit your most competitive quotation for the following goods with item wise detailed specifications given at Annexure I,

Sr. No	Item Name	Quantity	Place of Delivery	Installation Requirement (if any)
1	RF Anechoic Chamber, Measurement Equipments & Software	1	ECE, GWEC Ajmer	Yes

2. Government of India has received a credit from the International Development Association (IDA) towards the cost of the **Technical Education Quality Improvement Programme [TEQIP]-Phase III** Project and intends to apply part of the proceeds of this credit to eligible payments under the contract for which this invitation for quotations is issued.

3. **Quotation**

- 3.1 The contract shall be for the full quantity as described above.
- 3.2 Corrections, if any, shall be made by crossing out, initialling, dating and re writing.
- 3.3 All duties and other levies payable by the supplier under the contract shall be included in the unit Price.
- 3.4 Applicable taxes shall be quoted separately for all items.
- 3.5 The prices quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.

- 3.6 The Prices should be quoted in Indian Rupees only.
4. Each bidder shall submit only one quotation.
5. Quotation shall remain valid for a period not less than **90**days after the last date of quotation submission.
6. Evaluation of Quotations: The Purchaser will evaluate and compare the quotations determined to be Substantially responsive i.e. which
- 6.1 are properly signed; and
- 6.2 Confirm to the terms and conditions, and specifications.
7. The Quotations would be evaluated for all items together.
8. Award of contract The Purchaser will award the contract to the bidder whose quotation has been determined to be substantially responsive and who has offered the lowest evaluated quotation price.
- 8.1 Notwithstanding the above, the Purchaser reserves the right to accept or reject any quotations and to cancel the bidding process and reject all quotations at any time prior to the award of Contract.
- 8.2 The bidder whose bid is accepted will be notified of the award of contract by the Purchaser prior to expiration of the quotation validity period. The terms of the accepted offer shall be Incorporated in the purchase order.
9. Payment shall be made in Indian Rupees as follows:
- Satisfactory Acceptance - 10% of total cost**
Satisfactory Delivery & Installation - 90% of total cost
10. Liquidated Damages will be applied as per the below:
Liquidated Damages Per Day Min % :N/A
Liquidated Damages Max % : N/A
11. All supplied items are under warranty of **36** months from the date of successful acceptance of items and AMC/Others is .
12. You are requested to provide your offer latest by **14:30** hours on **26-Jul-2019**, failing which it would be summarily rejected. GWEC Ajmer will not be responsible for postal delay or non-receipt of quotation.
13. Detailed specifications of the items are at Annexure I.
14. Training Clause (if any) **Yes**
15. Testing/Installation Clause (if any) **Yes**

16. Performance Security shall be applicable: **5%**
17. **Information brochures/ Product catalogue**, if any must be accompanied with the quotation clearly indicating the model quoted for.
18. Sealed quotation (complete in all respects) to be submitted/ delivered at the address mentioned below, **Government Women Engineering College, Ajmer, Makhupura, Nasirabad Road, Ajmer -305002**
19. You are requested to provide the company details viz. **Firm Registration Certificate, GST Registration Certificate** and any other necessary documents duly certified by **Chartered Accountant / Notary Public** (Audited balance sheets including profit and loss accounts for the three financial years viz. 2015-16, 2016-17 & 2017-2018).
20. The bidder should have **minimum 05 years** of experience in Manufacturing, Installation & Testing of **at least 05** similar or bigger size Anechoic Chambers up to 40 GHz in Government Organizations/IIT's/NIT's/Govt. Colleges.
21. The quotation would be opened on **26-Jul-2019 at 15:00 hrs** at **TEQIP-III Office, Govt. Women Engineering College Ajmer, Rajasthan – 305002, India** in the presence of bidder representatives who choose to attend the opening. The bidder representatives who are present shall sign an Attendance Sheet evidencing their attendance.
22. Notwithstanding the above, the Institute reserves the right to accept or reject any quotation(s) and to cancel the process and reject all quotation(s) at any time.
23. Dispute if any shall be subjected to the jurisdiction of Rajasthan in Ajmer/Jaipur.
24. We look forward to receiving your quotation and thank you for your interest in this project.

(Authorized Signatory)

Name & Designation

Annexure I

Sr. No	Item Name	Specifications
1	RF Anechoic Chamber, Measurement Equipments & Software	<p>RF Shielded Anechoic Chamber</p> <p>Size: 24 feet x 12 feet x 10 ft</p> <p>Frequency: 800MHz to 40GHz</p> <p>(a) Shielding structure constructed by using MS Pipe, Beams. Angles and GI sheet of thickness 2mm.</p> <p>(b) Shielding Effectiveness >80dB up to 18 GHz, >60dB up to 40 GHz. It is to be tested as per standard IEEE299.</p> <p>(c) RF Shielded Door Size 7feet x 3feet,Qty: 1 , using BeCu Finger gasket.</p> <p>(d) Access Panel 300mm x 300mm having N(F)-N(F), SMA(F)-SMA(F) , 2.94-2.94mm each Qty: 2</p> <p>(e) RF Power Line Filter: 32Amp, 220v, 50Hz, Qty: 1.</p> <p>(f) CCTV system with 2 HDMI Camera having DVR & 1 TB HDD.</p> <p>(g) Fire Alarm system having Two Zone Panel, Manual Call Point, Detectors and Hooter.</p> <p>(h) Fire Extinguisher ABC cylinder 5Kg, Qty: 2.</p> <p>(i) Honey Comb AC Vents 300mm x 300mm, Qty: 4.</p> <p>(j) Grounding of <2 ohm using Cupper strips. RF Absorbers of 12inch height. Reflectivity of Anechoic Chamber:</p> <ul style="list-style-type: none"> i. >-25dB @ 800MHz. ii. >-30dB @ 2GHz. iii. >-40dB @ 8GHz. iv. >-45dB @ 20GHz. v. >-48dB @ 40GHz. <p>*RF Absorbers are tested as Per NRL ARCH METHOD at Factory Premises as per NRL 8093, Serial No 1, 2 & 3</p> <p>*Quiet Zone size:</p> <ul style="list-style-type: none"> · 110cm x 110cm x 110cm @ 800MHz. · 40cm x 40cm x 40cm @ 8GHz. · 25cm x 25cm x 25cm @ 18GHz. · 20cm x 20cm x 20cm @ 40GHz. <p>Quiet Zone of the Anechoic Chamber is to be tested as per Free Space VSWR method .</p> <p>Emission Free LED lights, Qty: 6 @ 20 Watts.</p> <p>Automatic three Axis Antenna Positioning System</p> <ul style="list-style-type: none"> · Automatic three Axis Antenna Positioning System should consist following two parts: <p>(a) Central Dual Axis Position Controller for the test antenna at Receive side.</p>

(b) Single Axis Position Controller for the reference antenna (polarization controller) at Tx side.

- The position system should have position accuracy of 0.1 degree.

Both the Position Controllers should be controlled by a single controller to ensure synchronous operation.

- Central Dual Axis Position Controller should be able to point to any direction in the anechoic chamber.

- The Central Dual Axis Receive Position Controller should be able to carry antenna of at least 10 Kg weight.

- The Single Axis Transmit Position Controller should be able to carry antenna of at least 5 Kg weight.

- The controllers should exhibit a minimum speed of 6 rpm for all the axes.

- Controller should be based on at least 32 Bit ARM processor and should support multiple modes of operations.

- The controller should be able to operate in the Automatic, Manual and Host Controlled operational modes.

- RS-485 /Ethernet Ports should be there for connectivity with Host Computer.

- Precision Rotary joints, for up to 40GHz, should be included in the position controller system. Qty: Two Numbers.

- For Controller Configuration and Monitoring, character LCD display should be used.

- Windows based GUI (having all the essential antenna measurement parameters) should be provided for host based controlling.

- Positioner should have following movement:

- AZ = 360° rotation

- EL = ± 90°

- Polarization Axis = 360°

- Positioner should be provided along with Antenna Measurement Software which should be compatible with VNA.

- 2D, 3D Radiation Pattern, Gain, Axial Ratio, CP, 'S' Parameters and should be able to save in Excel File.

Air Conditioner 2Ton, 3 STAR Split AC, Qty: 2.

Installation and Commissioning of all test equipments for the testing the performance of Anechoic Chamber

FORMAT FOR QUOTATION SUBMISSION
(In letterhead of the supplier with seal)

Date: _____

To: _____

Sl. No.	Description of goods \ (with full Specifications)	Qty.	Unit	Quoted Unit rate in Rs. (Including Ex-Factory price, excise duty, packing and forwarding, transportation, insurance, other local costs incidental to delivery and warranty/ guaranty commitments)	Total Price (A)	Sales tax and other taxes payable	
						In %	In figures (B)
Total Cost							

Gross Total Cost (A+B): Rs. _____

We agree to supply the above goods in accordance with the technical specifications for a total contract price of Rs. _____ (Amount in figures) (Rupees _____ amount in words) within the period specified in the Invitation for Quotations.

We confirm that the normal commercial warranty/ guarantee of _____ months shall apply to the offered items and we also confirm to agree with terms and conditions as mentioned in the Invitation Letter.

We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in bribery.

Signature of Supplier

Name: _____

Address: _____

Contact No. _____