INDIAN INSTITUTE OF TROPICAL METEOROLOGY
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PS/125/20/2016 9th September 2016

Sub: Minutes of the Pre-bid meeting of the "Supply, Commissioning, Installation and Satisfactory Demonstration of Transportable Wind Profiler" - Qty 02 Sets (as per tender document) held on 09/09/2016 at IITM, Pune.

A Pre-bid meeting relating to the "Supply, Commissioning, Installation and Satisfactory Demonstration of Transportable Wind Profiler" - Qty 02 Sets held on 9th September, 2016 at 11:30 hrs. at IITM, Pune.

In response to our Global Tender Notice No.PS/125/20/2016, representatives of the following prospective bidders / firms / companies had attended the meeting:

1) M/s. Pollution Equipment & Controls, New Delhi
2) M/s. BRD Technologies Pvt. Ltd., Gurgaon
3) M/s. Micronel Global Engineers Pvt. Ltd., Bangalore
4) M/s. SGS Weather and Environmental Systems Pvt. Ltd., New Delhi
5) M/s. Microcomm India Limited, New Delhi
6) M/s. Astra Microwave Products Ltd., Hyderabad

The Institute's reply to the queries raised is given as given below:

A. Queries raised by M/s. Pollution Equipment & Controls, New Delhi

1. The final transmit frequency must be known before wind profiler manufacturing can begin. The final frequency impacts many items such as the antennas, phase shifters, the transmitter etc., and thereby directly affects the delivery schedule.

Reply: This information will be made available at the time of Supply order.

2. The range gates are listed as 500, which is very significant for radar wind profiler. If the best range resolution is used (30m), this results in final minimum height of 15km. The maximum height however is listed as 4 km, which would result in approximately 133 range gates. Is 500 range gates absolutely required?

Reply: Yes, wind profiler is expected to provide useful returns up to the height about 15 km during severe weather such as convection. The specified maximum height of 4 km is for clear weather conditions.

No. of range bins are fixed considering severe weather that is expected to provide radar returns from higher altitude even beyond 10 km. Max. 4 km considered for clear weather during all seasons.

3. The number of coherent (512) and incoherent (100) integrations is not necessarily compatible with beam dwell times of about 60 seconds. Are these integration values absolutely required?

Reply: Yes, This is correct.

4. Under "beamwidth" specification, the beamwidth is listed at better than 7 degrees. Also under "beamwidth", the array size is listed at less than 2.2 m. Under the "power" specification, the grid size is listed at 2×2 m. Under "side lobe level" specification, it is listed as 17dB. Please note that the requested beamwidth, antenna size and side lobe level is very close to the theoretical limit and potentially does not account for normal design and production techniques. Can these specifications be clarified and potentially relaxed to allow use of non-custom (less expensive) items?

Reply: Specifications are achievable. TEC not for relaxing these specifications to allow non-custom items.

The tender calls for the radar to be placed in the container and the container should be transportable in the standard trailer without any special transportation permissions/requirements on Indian roads.

5. The 10 kVA UPS required for the power supply may not be large enough to support the radar for the requested 6 hours operation time. It also must be noted that even provided the radar could run for 6 hours, a 10 kVA UPS cannot in addition simultaneously power the air conditioning and lighting. This would mean the internal container temperature could exceed allowed operating temperature of the radar electronics. Please clarify?

Reply: Number of hours will depend on the backup battery and the system is expected to support the main electronic system, but not AC and other loads. For Air conditioning, IITM will take care of the power back up requirements.

6. Under the beam width specification, it noted that the antenna must be less than 2.2 m, "compatible with standard trailer". Under "transportable", it is noted that the system must be transportable with standard truck. Note that a standard ISO container is 2.43 m, which would be excluded under these specifications. Can IITM describe in more detail acceptable transport scenarios? For example, does IITM desire a trailered system, or a container system suitable for use with a fork truck or crane for loading?

Reply: IITM has asked for the container that should sit on the normal transportation trailer/truck with ISO container 2.43m width. AC and Clutter fence can be detached during transportation.

7. For boundary layer wind profiler, the antenna should be around 23 deg, kindly amend the specification accordingly.

8. The antenna beam should be 6 oblique and 1 vertical.

Reply: Beam width should be maintained. 5 beams are mandatory (4 oblique beams towards east, west, north and south and 1 vertical beam). More than specified are also acceptable.

9. Clause No.: 4.5 (b), Incidental Services (Page No.34), Site Engineer support: All support will be through email/ fax and other mode of communication.

Reply: Section 4.5 "(b) A Site Engineer Support should be available at the site to operate and maintain the system on request." is revised as Section 4.5 "(b) A Site Engineer Support should be available at the site to maintain the system on request". This should be in person to maintain the system.

10. Clause No. : 4.5 (d), Incidental services (Page no.34), During warranty period, any complaint on system performances/defect/malfunction should be attended in 48 hours.

Reply: (d) During warranty period, any complaint on system performance/defect/male function should be attended and rectified within 24 hours. The required spare/sub system should be readily available for the site engineer to achieve this.

11. Any warranty replacement would be carried out within 2 weeks' time, allowing extra time for Customs and other formalities.

Reply: The spares should be available in India (as per requirement 4.5(ii) comprehensive AMC for five years) and the extra time for custom clearance does not arise. Comprehensive AMC (CAMC) will be part of L1 calculation, quote only CAMC.

12. Item 2.20 (f): This requirement should be modified to email support within 24 hours.

Reply: Email support is already mentioned. It is clarified that Engineer should attend the system within 24 hrs once issue with system is notified. The 2% penalty, if system is down for 5 days, is on Radar system cost but not on Order value for 2 systems. It is also clarified that quote should be for CMC for five years. List of spares may be attached and this list will not be considered for determining L1.

B. Queries raised by M/s. Astra Microwave Products Ltd., Hyderabad

1. As per the specifications given the tender document "Antenna Feed network specification is not specified" it is essential to arrive system configuration. It will lead quote for different configurations, whose cost and performance vary significantly.

Reply: Over all feeder network loss should be better than 2.5 dB.

2. Range Resolution is specified as 30m. it is very tight. may be relaxed to 50/75m. as this is an operational system.

Reply: No relaxation in this specification. It is achievable.

3. No of Range gates is specified as 500 minimum. It is on very high side. It should be maximum. Typical range gates for an operational system is in the range 50-250.

Reply: 500 range bin specification is kept to achieve 15km height with best resolution and it is possible to realize.

4. Minimum range is specified as 100m. It is tight and not possible all the time. It may be specified as 200m (essential) and 100m (desirable).

Reply: Operational gate starts from 100m.

5. Delivery Period is specified as 6 months. It is very tight as it includes development, review, delivery, installation, testing, commissioning of two systems. Is it for both systems put together? It is very tight schedule. It may be increased to 9 months.

Reply: Both wind profiler systems have to be used in time sensitive project. First system should be provided in 6 months and another system should be installed and commissioned in 8 months.

6. Spare parts needed for 10 yrs from delivery date. Spare parts delivery on payment on approved price list basis.

Reply: Spare parts for 5 years should be available as part of CAMC and thereafter that time, can be on the approved pricelist basis.

7. Payment schedule: 80% on delivery and 20% after installation and commissioning. Whether two systems can be paid separately or together?

Reply: It can be paid together or separately depending on system acceptance.

8. Qualification Criteria: (a) bidder should have supplied and installed at least 2 similar systems during past 3 years. (b) certificate performance from customers must be enclosed (c) the models should be in successful operation for at least one year as on date of bid opening. This condition may be relaxed.

Reply: a) It is revised as “with demonstrated capability for design and implementation of wind profiler systems”.

b) Parties should show the system manufactured details and results obtained.

c) Due to the specific details of specification, this is relaxed.

C. Queries raised by M/s. SGS Weather & Environmental Systems Pvt. Ltd., New Delhi

1. Para 1.15.1 A. (Page 9 of the RFP):In case of Foreign Bidder(s):

a) The BS shall be submitted either by the principal or by the Indian agent.

Question: We would like to submit the BS for our principal. In the Bid Security form (Page no: 44 of the RFP) the name of the tenderer will appear as SGS Weather and Environmental Systems Pvt. Ltd. in place of the OEM. Kindly confirm if Bank Guarantee will be acceptable to IITM.

Reply: BS either in the name of OEM or in the name of Indian Agent on behalf of their Principal is acceptable.

2. Para 4.4. (Page 34 of the RFP): Training

(a) The supplier shall provide training in theory, operation, maintenance and servicing of the radar system to two persons from IIITM for a period of 2 weeks at factory premises. The training shall include theoretical lectures on the system design, computer hardware/software and such other aspects which are considered essential for optimum utilization of the radar system.

Question: Since our OEM is in USA, kindly confirm that the “per diem”, “stay” and “Air ticket” charges for two persons from IITM for a period of 2 weeks at factory premises will be borne by IITM and bidder does not have to quote these charges in its offer.

Reply: Bidder shall bare all the costs for the training. Air-ticket, per diem for the IITM officials will be at IITM cost whether national / international travel and stay.

3. Para 4.5 (Page 34 of the RFP): Incidental Services

(i). On site Comprehensive Warranty:

(g) If there is complete failure of the system for more than 2 working days due to failure of any of the hardware / software /networking equipment supplied by the vendor then a penalty of 2% of order value will be levied for delay in every 5 days or part thereof subject to the maximum of 10%

Question: 1). Please clarify

(a) The penalty of 2% for the non-working radar will be of the “Order Value” or the “individual radar value”.

Reply: 2% is on non-working radar (per radar cost)

(b) 2% penalty of down time of 5 days is very unrealistic and we request it to be reducing it to 0.5%.

Reply: Not accepted and will be as per tender document.

(c) Please confirm if the “individual radar value” will also include the Annual Maintenance Charges for 5 years or not.

Reply: Yes L1 calculation will include the CAMC and radar value

(d) The penalty of down time during CAMC charges will be applicable on the radar value or the AMC value of the particular radar.

Reply: Penalty percentage is calculated on the cost of the respective non-functioning radar.

4. Para 1.9 (Page 7 of the RFP): The bid prepared by the Bidder shall include the following as per the requirement of the Tender Document:

n	DGS&D Registration certificate in case the items under procurement falls under the restricted category of the current export-import policy of the Government of India

Question: Since this radar falls under the non-OGL category of the current export import policy of the Government of India, please clarify what DGS&D certificate is required or not. We request you to remove this requirement from the scope of the bidder.

Reply: The bidder should follow Government of India regulations applicable to import of items

5. General Question: Please confirm that the High Sea Sale will be acceptable to IITM against this tender and IITM will clear the shipment and pay the import duty directly under HSS.

Reply: The High Sea Sales (HSS) will be acceptable. However, the supplier has to clear the goods on behalf of this Institute. The charges towards customs duty and clearance will be reimbursed to the supplier on production of relevant supporting documents.

D. Queries raised by M/s. BRD Technologies Pvt., Ltd., Gurgaon

1. Frequency: Spot frequency of 1.28 GHz has been specified subject to frequency clearance. It is requested that some bandwidth range +/- 0.2 GHz may be allowed.

Reply: Not needed: Central frequency will be specified at the time of issuing supply order. TEC felt that 8MHz band width is sufficient.

2. Beamwidth: It is specified that Array diameter/ width shall be less than 2.2m, compatible with standard trailer. Please clarify the size of standard trailer, which will be used to transport these profilers.

Reply: Yes. The container holding the radar should be placed on a standard trailer/truck, without any special transportation requirements.

3. Power: It specifies to be around 2 kW, whereas 2kW is a large power for field operation. The required maximum height coverage can be achieved with 1kW also, which will suitable and effective.

Reply: No change on specification, 2kW as per specifications is acceptable.

4. Power: Suitable to achieve SNR to detect the signal @4km in all seasons in clear air condition - Please refer to the specifications at Height Coverage where it is written 100 m – to better than 3-4 km in clear air conditions. Thus the SNR to detect the signal should be 3-4 km in all seasons in clear air condition.

Reply: 3-4 km coverage is for clear air conditions. However the radar should be able to give data upto 10-15 km during convection. SNR should be sufficiently high to detect the signal upto an altitude of ≥ 4 km during all seasons.

5. Array size: Indicate array size - What is meant with array size? Is it the size of the Antenna, which will be placed onto the trailer?

Reply: Yes, explanations are given in earlier questions

6. Display: RTI, RTV, RTVW, RTSD- Please let us know what these abbreviations stand for. Please provide samples of these displays.

Reply: These are standard terms used for display. Range Time Intensity(RTI), Range Time Velocity(RTV), Range Time velocity Width(RTVW), Range Time Standard Deviation of all base products (RTSD).

7. Transportable: System shall be housed in an environmentally protected chamber/ container which is transportable with minimum effort over a standard truck - Is the truck planned to be for transportation only, or will the wind profilers be installed on a truck?

Reply: Truck/trailer is not part of the order. Wind profiler should be container based.

E. Queries raised by M/s. Microcomm India Limited, New Delhi

1. Asked about wind lidar will be considered ?

Reply: No. the system will be an RF system and should work under cloudy and precipitating conditions.

The Pre-bid Committee suggested continuing / keeping the tender document as it is incorporating the changes detailed above.