

Appendix A

Pre-Bid Questionnaire

Abbreviation used:

TD – Our Tender Document(PS/tender/08/2013)

Page No 03. Para 21. Option for antenna without Radome is acceptable but wind load specified on Radome should be taken as the wind load on antenna for design.

A1 . The only specified wind condition is in Item 14 (Page No 09). Shelter wind speed of 130 kmph. Is this the required wind load for the Radome as well?

Reply :- The shelter, antenna without radome or with radome and any other structure supplied for the operation of radar should withstand this windspeed (i.e. 130 kmph).

Page No 07 Para 03 & Page No 08 Para 11.

A2. Pl mention regarding relocation of the system. Will there be a crane available to assist in placing the antenna/pedestal and radome during the relocation? What is the time requirement for teardown/packing and unpacking/setup when the system is relocated?

Reply :- Please refer page 8, para 11 of TD. All the arrangements required for the first installation and commissioning will be done by the supplier at a site (the site could be anywhere in India, which will be decided by IITM). For subsequent relocations, supplier is responsible for dismantling, packing, sealing etc. to make the entire equipment ready to be transported . Again during re-installation at new site, the supplier is responsible for all the logistics, crane and any other arrangement needed for installation and commissioning.

For every relocation, IITM will only bear the cost of point to point transport to new location and insurance during transport. IITM will also take up the job of base preparation or bear the cost of base preparation.

Page No 05 Para 05.

A3. What data formats will the overlays listed be in? Please specify:

- a. Satellite
- b. Lightning
- c. Other External overlay – Please specify what other data/format the vendor may need to overlay.

Reply :- Geographic map overlay, topographic map overlay to be included. Provision to overlay satellite pictures like cloud images, overpass images should be provided in the offline software. Format of any special data, for example lightning location network data, will be provided to the supplier.

A4. What is the requirement for TITAN?

- a. Provide data output to the TITAN System only
 - i. What data format does TITAN accept?
- b. Ingest and overlay TITAN data on the Radar Workstation

Reply :- Some capabilities of TITAN, like storm evaluation, statistics on cloud images, information on storm evolution, precipitation and cloud characteristics etc . are


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important for cloud seeding experiment. TITAN ingests MDV format data. The supplier may refer to proper documentation source for this.

Page No 5 Para No 07.

A5. What is the IITM's expected use of the Spectral Data?

- (a) Does IITM want to record a single range gate for a specific target, or
- (b) Does IITM intend to record spectrum data for all ranges gates all the time? The difference in the amount of data gathered/stored is significant.

Reply:- Spectral data storage is not needed. (Spectral data components mentioned in Page 5, item 39(7) and 39(8) may be ignored. Moments data requirement remains valid.)

Provision to store IQ data for at least 1 hour should be provided.

Page No 06 Para No 13.

A6 How many active licenses does IITM expect?

Reply :- IITM do not need any additional license for the software installed in the radar control room and associated system setup. TITAN interface may be made as part of your display or by using a separate PC.

IITM requires a workstation and necessary software for offline analysis of radar data. This software may have floating license for atleast 5 users at a time. This software should have all the capabilities as that of Radar software for analyzing the radar data without any restriction.

Page No 06 Para No 16.

A7. Does IITM plan to install the workstation in the Radar cabinet?

Reply :- Workstation will be installed in IITM.

Page No 06 Item No V Para 3.

A8. Please clarify:

- (a) Is the UPS expected to maintain normal radar operations for 1 hour, or
- (b) Just to support the workstations/communications equipment

Reply :- IITM needs UPS for entire operation for atleast 15 minutes. This will help to change over Diesel Generator power as well as proper shutdown.

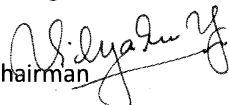
Page No 08 Para No 11.

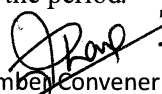
A9. The paragraph does not indicate whether a Trailer for mounting/carrying the containers is a part of deliverable or not. Please clarify.

Reply :- Container is part of the deliverable. The radar will be container mountable. The container will be set on a cemented platform either flushed to ground or raised to few feet from the ground.

Page No 10 Para No 23(g).

A10. Comprehensive Warranty states that there is a maximum penalty of 10% for outages during the IOP, and also that there is a maximum penalty of 10% for the rest of the period.

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(a) Will these be combined for a total of 20%, or is the maximum of all penalties 10%?

(b) Is the penalty valid for each year of the 5 year warranty period? e.g. total of 10% per year? Or limited to 10% total?

Also, the penalty rates during IOP are very high. Need to be rationalized

Reply :- The payment terms and penalty clauses has been modified and will be as per Annexure I

Page No 18 Para No 47(c).

A11. The second sentence in this Para is ambiguous. What is the proportion of warranty extension?

Reply :- The payment terms and penalty clauses has been modified and will be as per Annexure I

Page No 19 Para No 61.

A12. This penalty rate needs clarification. It appears to be too high and condition is one sided.

Reply :- The payment terms and penalty clauses has been modified and will be as per Annexure I

A13. In order to reduce system downtime, Internet access facility for remote access will be needed for fault diagnosis and rectification, especially for software related issues. Confirm same will be made available by IITM at all locations.

Reply :- Internet connection for any trouble shooting remotely will be provided on request and as per decision of the competent authority.

B1. We kindly request an extension of the bid deadline. The tender has been running during the most important Christian holiday season of the year, therefore, request you to kindly extend the bid opening date by 4 weeks.

Reply :- Last date of submission of Tender / bids will be 26th February 2014 on or before 12.00 hrs and Technical bids will be opened on the same date at 15.00 hrs in the IITM.

B2. Item 24(p11)- An Annual Maintenance Contract is required and the cost shall be included in the determination of L1. However the scope and nature of the AMC is not specified in detail. We kindly request further detailing of the AMC to ensure like-for-like comparison of bidders offers.

Reply :- The requirement is for 5 years comprehensive warranty (please see sr. No. 23 of TD). On 5 years completion, IITM requires comprehensive AMC (including spare sparts) for next 3 years. Yearwise breakup of AMC and warranty may be mentioned.


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B3. The bidding document includes a Pre-Contract Integrity Pact (p.22ff). Should this part be submitted with the bid? If yes, does it belong in the Technical Bid (Part I) or the Commercial Bid (Part II)?

Reply :- Pre-Contract Integrity Pact need to be signed by the vendor incorporating the necessary changes in the format provided along with tender document and submit as a part of Technical Bid.

B4. There are a number of uncompleted blanks in the Pre-Contract Integrity Pact (p.22f). For example in the "General Section" (p.22) as well as others. Please clarify.

Reply :- As above

B5. Further to our mails with regard to points that has been forwarded to you for the pre-bid meeting, please also include one more point as below with regard to Warranty.

The tender documents make reference to a number of forms of penalty:

- Late delivery: 1% per week up to 10% (p. 19 Item 60)
- In Warranty: Down time during Intensive Operation Periods over 48 hours = 2% per day up to 10% (p.10 Item 23)
- In Warranty: Down time outside of Intensive Operation Periods over 15 days = 2% per week up to 10% (p.10 Item 23)
- Delay in acceptance: 2% per month up to 10% (p.19 Item 62)

Could you please confirm that the total maximum cumulative penalty is 10% of contract value?

Reply :- The payment terms and penalty clauses has been modified and will be as per Annexure I

C1. The minimum and maximum velocity values to be measured by the radar.

Reply :- Please refer page 4, item 37 of the Tender Document..

C2. The operating and survival wind velocities for the antenna and radome.

Reply :- The shelter, antenna without radome or with radome and any other structure supplied for the operation of radar should withstand this windspeed (130 mph).

C3. The environmental specifications like temperature, humidity etc. for the operation of the radar.

Reply :- Please refer page 9, item 18(e) of the Tender Document.


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C4. Whether the radar should be container version or fixed. If transportable how frequently it would be done. Whether the panels of the antenna and or radome can be disassembled and reassembled at new location.

Reply :- Please refer page 8, item 11 of TD. It is container version. It can be disassembled and transported for relocation.

D1. Page 8, para 11, clause 11. The system shall be container based, consisting of transportable radar, shelter etc. which will be delivered to the consignee ready for operation virtually at any selected site that is accessible by a truck and/or trailer. System is expected to be relocated not more than 3 times during a time span of five years, anywhere in India as decided by IITM, and as per the scientific requirements. Party is responsible for dismantling and relocating the system with complete test and evaluation and commissioning procedures. Vendor should separately mention the details of relocation charges for each relocation and recommissioning in the quotation which will be considered for calculating Lowest Bidder (L1). Such expenditure towards each relocation will be paid only after test and evaluation and re-commissioning of the system. The transportation charges will be borne by IITM.

Besides transportation charges, whether insurance shall also be responsibility of IITM?

Reply :-Insurance during transport will be covered by IITM.

D2. Please confirm Page 9, para20, clause 20. The original equipment manufacturer will be responsible for the entire setup starting with, the supply, installation and commissioning of the equipment. The system should be integrated and demonstrated for proper functionality at our location.

In a case, an Indian system integrator company (who offers the radar manufactured) participates in the tender as prime bidder and is fully responsible for execution of all after sales services as per tender, how IITM sees this scenario w.r.t above stated tender condition?

Reply :- The prime bidder is responsible. Please refer page 12 item 28 in the TD. The prime bidder should have demonstrated experience and has supplied same or similar system in the past. The TEC will evaluate the documentary evidence on previous experience to technically qualify the prime bidder. TEC decision will be the final in this regard.

D3: Which shall be the first site where system shall be commissioned first time? How much (maximum) relocations are foreseen and what shall be the final site where radar shall be finally installed and operated as permanent?

Reply :- The site could be anywhere in India, depending on the project scientific objectives.

D4: Please confirm if any custom duty shall be applicable for import of radar in the present tender. If radar manufactured by .. (i.e. foreign OEM) is offered by Indian system integrator, whether IITM shall provide custom duty exemption certificate facilitating duty free import?

Reply:-Custom duty exemption (CDE) certificate for imported components / subsystem / system / radar will be provided. Detailed list of items needed CDE should be provided in advance (in the technical bid itself). IITM, in consultation with TEC (Technical Evaluation Committee), will asses and approve such lists.


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D5: How price evaluation shall be carried out amongst foreign OEM's direct bid, Indian manufacturer's bid, and Indian System Integrator Company's bid offering foreign OEM's radar? Please elaborate implication of custom duty and various local taxes e.g. VAT, sales tax etc., if applicable.

Reply :- Taxes may be quoted separately. However Landing cost to IITM will be considered for deciding the L1 bidder.

D6: Whether IITM shall allow remote monitoring as it shall provide a more efficient methodology for maximum uptime of the system?

Reply :- Internet connection for any trouble shooting remotely will be provided on request and as per decision of the competent authority.

D8 . #1.12: Is it ok to have 4 selectable pulse widths (0.5/1.0/2.0/5.0). These are adjustable within 0.5us...5.0us.

Reply :- No. Specified specification need to be met.

D9 . #1.38: How critical is Variable doppler calibration?

Reply :- 0.5 m/s step is expected to check and validate during simulation. The simulation results are to be provided for evaluation by TEC.

D10. #1.39(10) System noise temperature and disk usage not stored for analysis. Please confirm if this acceptable?

Reply:- Disk usage may not be needed.

D11. #1.39(13) Software is licensed and tied to the hardware. Please confirm if this is acceptable?

Radar software for operation, online display, monitoring, analysis, maintenance and trouble shooting etc should be licensed to radar operator without any restriction. We also require TITAN interface and display in this setup.

The workstation (pg 4, item 39(2)) is meant for offline analysis and the workstation should have all the analysis/display capabilities as that of the radar software with multiple user license (5 users).

D12. #1.VI(g) Is the signal generator required for X-band or C-band?

Reply :-Need a signal generator upto X Band.

D13. #10 Radar is not COTS if it's meant here. Is it a problem?

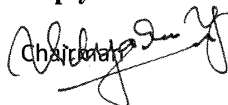
Reply :- No.

D14. #25 g) Documentation for components of radar system contains relevant amount of information related to parts but not all required information down to nuts and bolts level. Included information enables however maintenance and repairs. Please confirm if this is acceptable?

Reply :- Accepted.

E1. Page 5 / Para 39 (2) : For multi-user capability, please specify maximum number of Users?

Reply :- Please refer A6 of this document


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E2. Page 6 / Para 39 (12) : It states Provision for remote radar control and operation. Please specify which functions need to be controlled remotely?

Reply :- System can be checked remotely by the manufacturer after approval of the Director IITM. IITM will provide internet connection.

E3. Page 6 / Para V : Is the Diesel Generator required for continuous use or only as Back-up power in case of Mains outage?

Reply :- System is expected to operate in remote places. DG may be used continuously in case of long power failure. DG should support continuous operation.

E4. Page 8 / Para 11 : Is Trailer required as one of the deliverables?

Reply :- IITM will require container mountable system.

E5. Page 10 / Para 23 (d) : During Warranty period , downtime of 24 hours is not feasible. It is requested that this may kindly be increased to 2 weeks.

Reply :- Please see Annexure -I for the Payment and penalties terms and condition.

E6. Page 11 / Para 24 :Please specify if the AMC required is for Labour only or Labour plus Parts?

Reply :- It is comprehensive AMC (including spares parts).

E7. Page 12 / Para 25 (g) : Detailed Parts List is not possible for COTS equipment, and it is requested that this may be deleted for COTS equipment?

Reply :- Documentation should include the details of major parts.

E8. Page 12 / Para 26 : You have specified the last date of delivery and installation. Please specify the last date when the Contract would be finalised with the successful vendor so as to give a reasonable time for delivery and installation?

Reply :- Contract will be awarded to the successful bidder after following regular formalities of the Institute.

F1. In Specification clause 22, it is required that "After the satisfactory completion of the site acceptance tests,..." and Specification clause 23 requires that "This warranty shall remain valid for five years after the goods, have been delivered to the designated destination and installed and commissioned at each destination and accepted by the purchaser in terms of the contract." It seems to indicate that there will be several SATs in different locations. The only details we found were that the relocation will not exceed 3 times during the five year warranty period and the vendor should be responsible for dismantling, relocating the system with the complete test and evaluation and commissioning. We should separately provide the details of relocation charges for each relocation and recommissioning in the quotation (Spec. 11). So it is not clear how to submit the cost of these relocations. Are these option prices where we quote firm fixed prices for the first, second and third relocation?

Reply :- Please refer A2 of this pre-bid minutes.

F2. From the Specification it can be seen that the vendor is only responsible for the two shelters without the vehicle. We'd like to ask whether the lifting equipment needed to load and unload the shelters from vehicles should be included in the proposal.

Reply:- It is not strictly 2 shelters. It could be 1,2 or more as per the design and implementation of the radar system. It would not be possible for IITM to get a

permanent building at all the places for the experiment. So the radar should container mountable. Supplier will be responsible for the arrangements of lifting equipments such as crane, please refer A2.

F3. Other than the quotation and a statement on past experience (Spec. 28), are there any other documents Metstar should provide since there are no specific requirements in the Specification?

Reply :- All the bidders should submit various documents alongwith the quotations. Please go through the tender document.

F4. Specification item 11 states "The system shall be container based, consisting of transportable radar, shelter etc. which will be delivered to the consignee ready for operation virtually at any selected site that is accessible by a truck and/or trailer." This gives no specification on the type of ground and the slopes on which the shelters will be installed. This will make it difficult to decide what leveling and restraining features to include in the shelters. So that all bidders are providing shelters with the same capability (the only fair thing to require), please specify the ground condition and maximum slopes to be accommodated or specify that the IITM will be responsible for the constructions of the foundations at each site.

Reply :- IITM will not build any big, tall structures for the installation of this radar. IITM will explore any possibility to install on the terrace of some identified building during the experiment. Otherwise IITM will look for an open space (with road accessibility for crane etc.). Please refer A2.

F5. We think that Specification item 1.1.6 Detection Capability may be in error. The Specification states that the Detection Capability shall be "-6 dBZ or better at 100 km range using 1 ps pulse width". However, the Specification also contains many other requirements which, taken together, define the Detection Capability of the radar. These requirements are:

- A. Operating Frequency - 5.6 01-1z (which makes the wavelength, lambda, = 5.36 cm)**
- B. Transmitter Peak Power - 250 kW**
- C. Pulse Width - 1 microsecond**
- 11 Horizontal and Vertical Beam Width - 1 degree**
- E. Antenna Gain - 45 dB**
- F. Waveguide and Other Losses - (assuming operation in Horizontal only Transmit and Receive) 3.6 dB**
- G. Receiver Sensitivity - 110 dBm for 1 us pulse width**
- H. Attenuation at C-Band - 0.016 dB/km**

Putting these parameters into the Weather Radar Equation written as:

Radar Constant $C = ((2.69 * 10^{46} * \text{Lambda}^2) / (\text{Transmitter Peak Power} * \text{Pulse Width} * \text{Horizontal Beam Width} * \text{Vertical Beam Width} * \text{Antenna Gain}^2)) * \text{Waveguide and Other Losses}$

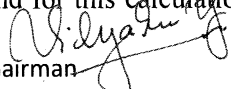
dBZo (defined as the minimum dBZ detectable (at SNR = 0) at a range of 1 km = C * Receiver Sensitivity

And minimum dBZ at 100 km and 1 us pulse width = dBZo + 20*log(range in km) + Attenuation at C-Band * range in km.

Putting all the values into the above equations the calculated minimum dBZ at 100 km and for the 1 microsecond pulse is 0.1 dBZ, far away from the specified value of -6 dBZ.

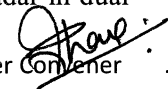
And for this calculation, we used a single polarization mode. If we operate the radar in dual

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polarization mode, the "Waveguide and Other Losses" value goes from 3.6 to 6.6 because the power is split between the H and V channels. So the minimum dBZ value will increase to 3.1 dBZ.

Therefore, to make the specification consistent in its various interrelated parameters, we recommend that the IITM change the Detection Capability requirement from -6 dBZ to less than or equal to +1 dBZ for single polarization operation.

Reply :- Please read page 1, item 1(6) as below:

Detection Capability:	-6dBZ or better at 100km range using 1µs pulse width at 2 rpm and 2 ms pulse repetition rate.
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While giving the specifications we considered 2 rpm and 2millisec IPP which provides additional process gain of 6dB in single pol. mode

F6. Specification clause 1.111.37, Measurement Accuracies, requires 1 msec absolute accuracy at 250 km (1 mm/hr); Reflectivity not less than 2 dB absolute accuracy at 250 km (1 mm/Hr). It also requires Zdr 0.25 db at 12 mm/hr and differential phase -2 deg at 30 mm/hr. The use of the term "absolute accuracy" for velocity and reflectivity is unusual. Because of the nature of weather returns, these parameters are random variables and the estimates of these quantities produced by the weather radar are only statistical estimates of their mean values. Therefore, the specifications usually specify RIMS accuracies and not absolute accuracies. However, these RIVIS accuracies are not controlled by the parameters of the weather radar but by the way the radar is configured for use by the customer. That is, the accuracies are, for the most part, not determined by the radar itself. Therefore, please explain in more detail what is meant by "absolute accuracy"? Does it mean that statistical variations in the results due to the nature of weather radar signals are ignored and only biases in the parameters due to calibration errors in the radar are specified?

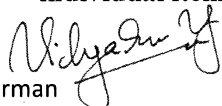
Reply :- In Sr No. 37, it is mentioned for simulated signal condition where the accuracy of the products derived will be determined.

F7. Specification clause 1.IV.39 (7) requires "Provision to store spectral data for each range gate." This requirement has never been included in specifications for dual polarization radars by other users. This requirement is a very heavy user of system resources since there are basically as much spectral data as there is I Q data but the main reason it is not specified is that it can always be regenerated when needed from stored I Q data. Therefore, users save resources for data that cannot be regenerated and do not require this feature in their radar. It is recommended that IITM also not require this feature.


Reply :- I & Q data to be stored continuously for 1 hour. During this time processed data need not be stored/displayed. But offline processing should be supported. Please refer Query A5.

6. The tender document is not clear about what INCO term should be used for the proposal. In various places it mentions FOB, FOR, CIF and DI313. It also mentions air post parcel, ocean freight and air freight. And it is also not clear about whether custom's duty and other taxes must be paid and by whom. It is important that all bidders clearly understand how the project should be bid so that the IITM receives quotes based on the same set of ground rules and they can be fairly compared to determine the low bidder. Therefore, the IITM should clarify all aspects of the shipping and tax issues of this tender.

Reply :- Vendor has to fill and submit the summary sheets in the format given in Annexure -II in the commercial bid only. Detailed breakup of the cost of individual items may be provided in the separate sheet.


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In addition to above clarifications IITM adds following items in the tender document.

1. **Preliminary Design Review (PDR) will be conducted within 45 days of purchase order date.**
2. **Critical Design Review (CDR) will be conducted on a date which is mutually agreed between IITM and supplier. This date will be decided during PDR.**
3. **Critical components for uninterrupted operation of the entire system should be listed in the technical bid document.**
4. **The radar will be installed anywhere in India including at coastal / borders / defense sensitive area of India as per the requirement. Vendor has to certify that Radar quoted by them had necessary permission / clearance to operate in this area. Failing which the bid will be summarily rejected.**

Annexure -I

Revised terms and condition for Payment and Penalties / Liquidated Damages.

After detailed discussion on the requests received from various vendors regarding payment terms and penalties, committee decided to modify the payment and penalty terms and conditions (Point No. 30 page No. 16, Point (g) 1 Page 10, Point (g) 1 Page 10, Point No. 60 Page 19, Point No. 60 Page 19) as below;

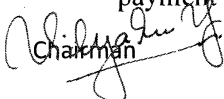
(A) Payment Terms

(1) For RADAR System

a) No advance can be paid.

b) For Imported items: 70% payment shall be made by Sight Draft / an Irrevocable Letter of Credit established in favour of the supplier through the State Bank of India, Main Branch, Camp, Pune 411 001 (India) for the order value, excluding the Agency Commission due to the Indian Agents, against the presentation of original Shipping documents, 10% payment shall be released after completion of satisfactory installation, commissioning, and demonstration of the whole system, after imparting training and Balance 20% will be released upon receipt of Bank Guarantee from Indian nationalized / commercial bank for 20% of total Order value towards performance bank guarantee to be valid for the period of 5 years of warranty including extension if any, from the date of installation. However Letter of Credit/Sight Draft arrangement will be made for 100% order value. If no Bank Guarantee is given, the balance 20% will be paid after assessing, after sales service during warranty period i.e. payment after warranty period. The Agency Commission to the Indian Agent will be paid only after successful installation, commissioning and satisfactory demonstration and acceptance of the items ordered for by the end user.

c) For Indigenous items :- 70% payment shall be made against delivery of indigenous goods, 10% payment shall be released after completion of installation, commissioning and on acceptance test as per Purchase Order at site and balance 20% shall be made after receipt of performance Bank Guarantee from Indian nationalized / commercial bank for 20% of the total order value, to be valid for entire period of 5 years of warranty including extension if any. If no Bank Guarantee is given, the balance 20% will be paid after assessing, after sales service during warranty period i.e. payment after warranty period.


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d) To ensure due performance of the contract, the successful bidder has to furnish the Performance Security in the form of bank guarantee for 10% of the Order value from the Indian nationalized / commercial bank before execution of ordered work but not later than 21 days from the date of receipt of the Purchase Order. The same will be returned to the successful bidder only after completion of satisfactory installation, commissioning, demonstration of the whole system.

(2) **Payment for Warranty Service (Extended Warranty 2-5 years):** - Payment for the warranty will be made yearly on successful completion of each year of warranty.

(B) Liquidated Damages and Penalties :-

(1) **Liquidated Damages :-** In the event of the failure by the supplier to supply, install, commission and secure satisfactory acceptance of the system by the purchaser before the operation date i.e. (30.04.2015), the Supplier is liable to pay liquidated damages of one percent of total contract value per every week delay beyond the due date subject to a maximum of 10% and such money will be deducted from any money due or which may become due to the supplier. To secure acceptance in full or part at its sole discretion without prejudice to the purchaser's other remedies under the contract, provided however, that no such deduction shall be made if the delay is on account of the purchaser.

(2) If the failure of the radar system during Intensive Observation Period (June to September) is more than 48 and more than 15 days during rest of period, IITM reserve the right to impose the penalty of 1% of the order value per week maximum upto 10% of the order value. Such money will be deducted from any money due or which may become due to supplier or its agent.

Annexure-II

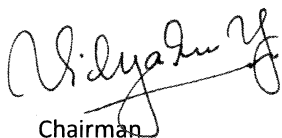
Format of Summary Sheet (To be included in the Commercial bid only)				
Indian Institute of Tropical Meteorology, Pune				
PS/125/70/2013				
Sr. No	Specifications	Qty.	Foreign Currency Component	Indian Rupee Component
1	C-Band Radar: (i) Splitup on all components (Hardware, software, container, Diesel generator, UPS, workstation, essential and critical spares, toolkits, calibration tools, troubleshooting tools, any other system/subsystem, container etc may be mentioned here)	01 Set		
2	Total Price EX-WORKS			
3	Documentation and FOB Charges			
4	Total Price FCA/FOB			
5	Air/Sea Freight & Insurance Charges			
6	Total Price CIP/CIF			
7	Customs Clearance & Unloading Charges at site			
8	Customs & Excise Duty			
9	Total Price DDP			
10	TAXES			

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11	Any Other Charges,			
12	Sub Total for System - I			
13	Installation, commissioning & training charges			
14	Service Tax			
15	Sub Total for Installation - II			
16	Year wise splitup charges for an Engineer for operation and maintenance of the RADAR during IOP. The Technical bid should include details on the level of expertise the appointed engineer will have. -III			
17	Comprehensive warranty for First Year			
18	Comprehensive warranty for Second Year			
19	Comprehensive warranty for Third Year			
20	Comprehensive warranty for Fourth Year			
21	Comprehensive warranty for Fifth Year			
22	Total Warranty for 05 Years			
23	Service Tax			
24	Sub Total for Warranty - IV			
25	Comprehensive AMC Charges for First Year			
26	Comprehensive AMC Charges for Second Year			
27	Comprehensive AMC Charges for Third Year			
28	Comprehensive AMC Charges for 3 Years			
29	Service Tax			
30	Sub Total for AMC Charges for 3 Years - V			
31	Relocation and Commissioning Charges per instance			
32	TAXES			
33	Sub Total for Relocation Charges – VI			
34	TOTAL (I + II + III + IV+V+VI)			
35	Validity			
36	Delivery Period			
37	Country of origin			
38	Payment term			
39	Agency Commission – VII			
40	GRAND TOTAL (I + II + III + IV + V + VI+VII)			
	Optional Items:			
	VAT / CST			
	Total for Optional Items – VIII			
41	Note: Any Other Charges may be indicated in the commercial bid. L1 bidder will be decided on GRAND TOTAL mentioned at Sr. No. 40			
	Details of supplies for Import Items and Indigenous items may be indicated separately along with their quantity and unit price.			



Chairman

Seal and Signature of Vendor


Member Convener