Minutes of the pre-bid meeting held on 21.08.2020

Ref: Tender Enquiry No. CPU/52/0720/9953 dated 28.07.2020

IMD has invited tenders from Indian bidders in Indian currency INR only, for procurement of Automated Weather Observing Systems (AWOS) at 18 Airports. The competent authority has constituted the Pre-Bid Committee to provide clarification on various tender provisions/clauses, comprising of following members:

1. Shri K.N. Mohan, Sc F, IMD — Chairman
2. Shri Suresh Chand, Sc F, IMD — Member
3. Dr. R.K. Jenamani, Sc F, IMD — Member
4. Shri Gajendra Kumar, Sc F, IMD — Member
5. Shri Sankar Nath, Sc E, IMD — Member
6. Shri C.S. Tomar, Sc E, IMD — Member Secretary

The Pre-Bid meeting was held on 21st August 2020 at 11:00 hours at Mausam Bhawan, Lodi Road, New Delhi-110003. Due to Covid-19 situations, Bidders were also invited to attend the meeting through video conferencing. The following link for the video conferencing was shared with all concerned:
http://webvc.nic.in/flex.html?roomdirect.html&key=7n8uiL11r8

The representative from following firms attended the pre-bid meeting:

1. M/s Sutron Hydromet Pvt. Ltd, New Delhi.
2. M/s Info-Electronics Systems India Pvt. Ltd, New Delhi.
3. M/s Polar Technologies (India), New Delhi.
4. M/s Etengy Pvt. Ltd, Bhubaneswar, Odisha.
5. M/s Efftronics Systems Pvt. Ltd, Vijayawada, Andhra Pradesh.
6. M/s Campbell Scientific India Pvt Ltd, New Delhi.
7. M/s Amsh Product line Pvt Limited, New Delhi.
8. M/s S. S. Trading Corporation, Delhi.
9. M/s Grintex India Limited Gurugram, Haryana.
10. M/s Central Electronics Limited (CEL), Ghaziabad, Uttar Pradesh.
11. M/s Rational Technologies Pvt. Ltd. Sonipat, Haryana.
12. M/s Microstep Monitoring Information Systems India Pvt. Ltd, Bengaluru, Karnataka.
13. M/s Microcomm India Limited, New Delhi.
14. M/s SGS Weather & Environmental Systems Pvt. Ltd, New Delhi.
15. M/s SGS Frangible, Gurugram, Haryana.
16. M/s Saab India Technologies Pvt. Ltd, New Delhi.
17. M/s Microcomm India Limited, New Delhi.
18. M/s Meatech, New Delhi.
19. M/s Sharika Enterprises Pvt. Ltd, Noida, Uttar Pradesh.
20. M/s G.I.L., Gurugram, Haryana.
21. M/s Eagle group, New Delhi.

Replies to the Major queries

Detailed discussions were held with the vendors on the tender published by IMD. Clarifications to various clauses/provisions were provided to them. The bidders also submitted the queries in writing. Major queries were related to Qualification Criteria, Delivery schedule and Extension in date of submission of tender document. Considering the same requests from majority of the bidders, the committee considered to provide some relaxation on these issues. **Details of major queries and reply from IMD are given below:**

Sl No.	Page No.	Tender Clause / Reference	Query/Request of bidders	Reply/ IMD response
1	43	**Para1.2. Eligibility Criteria** The bidder or his counterpart shall have supplied, installed and integrated at least 20 airports (at each airport field integration of Current Weather with RVR system is only considered) of similar standards as specified in this tender document **at different airports** across the globe during **last Five years** ending on **31st March 2020**. A report in this connection should be submitted along with technical bid.	**Para1.2. Eligibility Criteria** Majority of the firms were of the view that the Qualification Criteria (**QC**) for this contract might not be met by majority of Indian companies and will restrict many firms to bid against the tender. To increase the competitiveness among Indian bidders, number of airports as qualification criteria may be decreased.	**Para 1.2. may be read as** "The bidder or his counterpart shall have supplied, installed and integrated at least 10 airports (at each airport field integration of Current Weather with RVR system is only considered) of similar standards as specified in this tender document **at different airports** across the globe during **last Five years** ending on **31st March 2020**. A report in this connection should be submitted along with technical bid."
2	43	**Para 1.3. Eligibility Criteria** The bidder or his counterpart shall submit a report regarding satisfactory performance of AWOS from end users for at least **20** airports in the technical bid during last five years ending on **31st March 2020**. The technical bid should also have the proof of successful commissioning and the performance of the installed systems from the local Met office or Airport officials.	**Para 1.3. Eligibility Criteria** Change in qualification criteria under Para 1.2 will need modification under Para 1.3 for submitting the report.	**Para 1.3. may be read as** "The bidder or his counterpart shall submit a report regarding satisfactory performance of AWOS from end users for at least **10** airports in the technical bid during last five years ending on **31st March 2020**. The technical bid should also have the proof of successful commissioning and the performance of the installed systems from the local Met office or Airport officials."

3	43	**Para 1.4. Eligibility Criteria** The bidder must have successfully integrated data of AWOS with the Aeronautical Fixed Telecommunication Network (AFTN) and Global Telecommunication System (GTS) of world Meteorological Organization (WMO), at international airports (at least **10 airports**) in the last five years, ending on **31st March 2020**. A report in this connection should be submitted along with technical bid.	**Para 1.4. Eligibility Criteria** Majority of the firms were of the view that the Qualification Criteria (QC) for this contract might not be met by majority of Indian companies and will restrict many firms to bid against the tender. To increase the competitiveness among Indian bidders, number of airports for integration of AWOS as qualification criteria may be decreased.	**Para 1.4. may be read as** The bidder must have successfully integrated data of AWOS with the Aeronautical Fixed Telecommunication Network (AFTN) and Global Telecommunication System (GTS) of world Meteorological Organization (WMO), at international airports (at least **4 airports**) in the last five years, ending on **31st March 2020**. A report in this connection should be submitted along with technical bid.
4	58	**Para 7.1.2. Delivery Schedule:** The supplier is required to complete delivery of all the Stores at respective airports within 6 months from date of issue of Supply order.	**Para 7.1.2. Delivery Schedule:** Firms mentioned that since the items needs to be manufactured upon receipt of order. Considering the overall quantities of the AWOS systems and large volume of equipment to be delivered against the above tender, delivery period may be increased.	**Para 7.1.2 Delivery schedule may be read as** The supplier is required to complete delivery of all the Stores at respective airports within 10 months from date of issue of Supply order.
5	1	**Closing date and time for submission of tender:** 08.09.2020 / 1700 Hrs.	Firms requested that due to covid-19 situations and high value tender, needs more time for submission of tender	**Closing date and time for submission of tender increased by three weeks and as follows:** 30.09.2020 / 1700 Hrs. * Extended up to 30-12-2020

The detailed IMD's response to the all other queries raised by various firms in writing, are as follows:

1. M/s Sutron Hydromet Pvt. Ltd, New Delhi.				
Sl No.	**Page No.**	**Tender Clause / Reference**	**Query**	**Reply**
1.1	**26 & 75**	Price Schedule & Annexure VIII. System for measurement of Visibility/MOR and Runway	At Page 26 the quantity for Present Weather sensor is 54 whereas at Page 75 the quantity is 55. Kindly clarify the actual	As per tender published document, quantity of Present Weather Sensor is 52 at both the pages.

		Visual Range as per ICAO requirements including Background Luminance Sensor	quantity required.	
1.2	27	GPS	It is mentioned that the Data logger should be GPS synchronized however against a total of 78 data loggers, only 36 GPS are being asked. Kindly clarify.	Yes, 36 GPS receiver as per tender document
1.3	27	Data Processing & integration Unit (MBR Site):	The tender has asked for 18 numbers of Rack mountable dual server computer and also 18 numbers of Battery Powered Data processor & Integrator (BPDPI). Since UPS is asked for server what is the purpose of having BPDPI.	Battery Powered Data processor & Integrator (BPDPI) to be provided as per tender document. There should be one parallel Battery Powered Data Processor & Integrator (BPDPI) (Powered by battery with adapter) which shall simultaneously obtain data from all runway sites, process and display it on LCD screen. For more details please refer to Para number 6.3.2.16 on Page number 53 of tender document
1.4	27	Data Processing & integration Unit (MBR Site):	Also, if BPDPI is required, is this a single server. Kindly clarify.	It is BPDPI + Duel hot redundant server
1.5	28	Central web server at Pune & Delhi with static IP and its software for viewing & downloading Air-port data from 18 airports	Kindly clarify the medium of telemetry to get the data from 18 Airports to the Web servers.	Medium of telemetry is through Internet facility available at each airport.
1.6	29	Para X. Communication	Here items in 1, 2, 3 and 4 are asked in pairs. Does it mean the total quantity is double of mentioned quantity? Kindly clarify.	Yes. Quantity mentioned in pairs double of mentioned quantity.
1.7	47	6.2.1.1 Wind Sensor	Here the specification is of mechanical type of wind sensor which requires frequent maintenance and also prone to wear and tear. Nowadays ultrasonic wind sensor is preferred type. Kindly clarify.	As per tender document.
1.8	51	Specification for DAS – Serial Ports	Kindly clarify the requirement of 12 numbers of serial ports.	12 or more configurable serial ports (at least 8 Nos. RS232, at least 2 Nos. TTL and at least 2 Nos. RS485) as per tender document.
1.9	51	Specification for DAS – Ethernet Ports	In the specification it is mentioned that communication will be with LOS/Wi-Fi modem and OFC via Ethernet port. So kindly clarify the requirement of 2 Ethernet Port.	Yes additional 2 Ethernet ports for communication as per tender document.
1.10	52	6.3.1.1	We understand each CDPI will consist of 2 servers in Hot redundant mode. Kindly clarify.	Duel Hot Redundant
1.11	52	Central Data Processing and Integrator (CDPI)	Here it is mentioned that "CDPI server time shall be maintained through GPS installed at the roof of MBR / ATC." Is this GPS requirement included in the BOQ? If not how many GPS is required for Indoor Equipment.	Number of GPS receivers is defined at page 27 of tender document. However, if additional GPS receivers are required for indoor equipment, same has to be installed by the bidder depending on the configuration provided by

				bidder as per tender document
1.12	53	Transmissometers	What is the output of the existing Transmissometers. Kindly specify the make and model of the existing Transmissometers.	Make and model of the existing Transmissometers will be shared with qualified bidder L1 after the acceptance of Supply Order.
1.13	66	Annexure-1	The layout of Indoor Equipment is truncated. Kindly provide complete setup.	Layout of Indoor Equipment is attached at Annexure-1
1.14			Is any OFC already available at the AMI to MBR? Or new OFC has to be laid for each AMI to MBR. Kindly Clarify	OFC already available at the AMI to MBR. If not available, it will be arranged by IMD through airport operator.

2. **M/s Info-Electronics Systems India Pvt. Ltd, New Delhi.**

Sl No.	Page No.	Tender Clause / Reference	Query	Reply
2.1	1	Para 4.2 Closing date and time for submission of tender: 08.09.2020 / 1700 Hrs.	Assuming IMD would be able to provide answers to all questions raised within one week following the pre-bid meeting, bidders are left with only 6 working days to submit the proposal and bid bond. It is accordingly requested that while providing response to the questions please allow a minimum of 3 weeks to submit the proposal and extend the due date of closing accordingly.	**Please refer to the Reply to the major queries on Page-1 to 3 of this document.**
2.2	9	Para 8.2 Price Bid There are several clauses and conditions in the RFP document that are not applicable when the bids are being invited on line. Such corrections have not been made in the standard template of IMD RFP that was designed for physical submission of proposals. As such either the RFP document needs to be rewritten by IMD or a clarification be issued that clauses and conditions not applicable with on line submission stand deleted / withdrawn. Some such typical examples are asking for breakup prices on page 9 whereas the online bidding does not permit any addition to line items of the bid format.	As such either the RFP document needs to be rewritten by IMD or a clarification be issued that clauses and conditions not applicable with on line submission stand deleted / withdrawn. Some such typical examples are asking for breakup prices on page 9 whereas the online bidding does not permit any addition to line items of the bid format.	All the clauses and conditions of tender document are applicable. Breakup of prices has to be provided as mentioned in the tender document and as required in online bidding process.
2.3	13	Para 1 GCC Bidders shall have to agree/accept all the terms and conditions of tenders including payment terms etc. Acceptance shall be unconditional and bidders shall have no claim and right in future on their terms if any.	Does IMD imply that if a prospective bidder intends differing on some terms in the RFP, he has no right to bid? If so, how does he express deviations, if any?	If bid is not submitted as per tender documents and Pre-bid minutes, it will be rejected.
2.4	14	Para 8 Earnest Money Deposit (EMD) The EMD shall be furnished in the form of Bank	We believe that the referenced Annexure should be III (rather than IV). Please confirm.	As per tender document

		Guarantee (BG) (as per Annexure-IV) ...		
2.5	16	Para 11 Delivery Schedule Date, on which **all the stores** as per supply order have been delivered to the consignee shall be treated as final date of delivery of stores for calculating liquidated damages etc.	Please confirm as to why all the stores when divided delivery is allowed.	Divided delivery is not acceptable. All the items have to be delivered as per tender document.
2.6	17	Para 15. LD Clause The delivery date, unless delivery is divided, on which all the items/ stores/ materials/ services etc. as per supply/purchase order are delivered shall be taken into account for penalty/LD purpose	To what extent is divided delivery acceptable? Is the same at the option of bidder? Delivery on the basis of counting each airport as one job is the most logical divided delivery.	All the items have to be delivered as per tender document. Divided delivery is not acceptable.
2.7	21	Para 23. Deliverables The tenderer shall submit the final list (List of Deliverables) of their proposal in given below format for all the stores, H/w, S/w, items, subunits etc. and all other services which bidder is going to offer in their technical proposal to meet the requirement under "List of requirement & Technical specifications" of this tender document.	Not compatible with on line bidding as same permits entry of data in specified cells only.	Tender has to be submitted online as per procedure of Central Public Procurement Portal website www.eprocurement.gov.in.
2.8	26	Price Schedule PRICE SCHEDULE (Financial Bid format) TO BE SUBMITTED BLANK WITH TECHNO-COMMERCIAL BID AND WITH PRICE IN THE FINANCIAL BID The bidder shall use their own letter head for quoting the prices.	Bidding process does not allow using letter head for quoting the prices.	No deviation. Tender has to be submitted online as per procedure of Central Public Procurement Portal website www.eprocurement.gov.in.
2.9	26	Price Schedule & Para 8 List of Deliverables & Annexure-VIII The Price Schedule on page 26, under Section I (Sensors), item 6 (System for measurement of Visibility/MOR and Runway Visual Range as per ICAO requirements including Back Ground Luminance Sensor) and the List of Deliverables on page 61, under Section I (Sensors), item 6 (System for measurement of Visibility/MOR and Runway Visual Range as per ICAO requirements including Back Ground Luminance Sensor) both state a quantity of 54 sets. However, in Annexure – VIII (Table of Reference for Field Instruments) on page 75, the quantity listed is 55.	Please confirm the number of sets required for the System for measurement of Visibility/MOR and RVR including Back ground Luminance Sensor.	Number of sets required for the System for measurement of Visibility/MOR and RVR including Back ground Luminance Sensor are already defined in the tender document.
2.10	37	Annexure-VI (OEM) MANUFACTURER'S	What clauses are intended to be filled up in the blank spaces	Tender has to be submitted online as per

		AUTHORIZATION FORM The form states CAMC as per clause _____of the general Conditions of Contract and Clause _____ of ..... It also says that the **OEM hereby extend our full guarantee, warranty and under CAMC as per clause _____of the general Conditions of Contract and Clause _____ of the Special Conditions of Contract for the goods and services offered by the above firm**	provided?	procedure of Central Public Procurement Portal website www.eprocurement.gov.in
2.11	**43**	QUALIFICATION CRITERIA FOR BIDDING ...Para 1.1 It is stated that The bidding firm or, leading firm in case of joint venture (hereafter referred as the bidder).	If it is a bid from the JV, how can the leading firm alone be called the bidder? It is very confusing. Members of the JV jointly or individually are supposed to be the bidder. They are jointly and severally responsible for the execution of the project.	As per tender document.
2.12	**43**	QUALIFICATION CRITERIA FOR BIDDING ...Para 1.2 The bidder or his counterpart shall have supplied, installed and integrated at least 20 airports (at each airport field integration of Current Weather with RVR system is only considered) of similar standards as specified in this tender document at different airports across the globe during last Five years ending on 31st March 2020. A report in this connection should be submitted along with technical bid.	For this QC and the related para 1.3, 1.4, we have the following question: We believe that the Qualification Criteria (**QC**) for this contract is unrealistic and might not be met by any company but certainly not more than a couple of companies. For example: If you have installed even 5 to 10 systems in the past 10 years with a couple of them with RVR, that should be sufficient to qualify you. In our case, we would have installed 10 systems at Indian Heliports by early next year, but we will still not qualify with this QC. Please confirm that you are prepared to modify the QC to match the recommendation provided above. Otherwise, you will be restricting competition and end-up paying considerably more for your requirement. There is also a possibility that nobody qualified or only one qualified company will participate in which case you will be wasting up to 6 months to rationalize QC and Payment T&C.	**Please refer to the Reply to the major queries on Page-1 to 3 of this document.**
2.13	**43**	QUALIFICATION CRITERIA FOR BIDDING ...Para 1.3 The bidder or his counterpart shall submit a report regarding satisfactory performance of AWOS from end users for at least 20 airports in the technical bid during last five years ending on 31st March 2020. The technical bid should also have the proof of successful commissioning and the performance of the installed	The bidder or his counterpart shall submit a report regarding satisfactory performance of AWOS from end users for at least **20** airports in the technical bid during last five years ending on **31st March 2020**. The technical bid should also have the proof of successful commissioning and the performance of the installed systems from the local Met office or Airport officials.	**Please refer to the Reply to the major queries on Page-1 to 3 of this document.**

		systems from the local Met office or Airport officials.		
2.14	43	QUALIFICATION CRITERIA FOR BIDDING ...Para 1.4 The bidder must have successfully integrated data of AWOS with the Aeronautical Fixed Telecommunication Network (AFTN) and Global Telecommunication System (GTS) of world Meteorological Organization (WMO), at international airports (at least 10 airports) in the last five years, ending on 31st March 2020. A report in this connection should be submitted along with technical bid.	Integrating data between systems is a major part of our business whether it is between AWOS and AFTN and/or GTS, we can do that. We receive and send a variety of meteorological data between our high-quality forecasting workstations and client specified systems. To state that the vendor must have interfaced 10-AWOS systems with AFTN is an unnecessary QC. This needs to be relaxed to "the Bidder must have demonstrated capability to integrate meteorological data between systems."	**Please refer to the Reply to the major queries on Page-1 to 3 of this document.**
2.15	43	QUALIFICATION CRITERIA FOR BIDDING ...Para 1.5 The bidders shall have necessary financial resources to successfully execute the projects on turnkey basis. The annual turnover of the firm should be at least INR 150 Million during each of the past three years ending 31st March 2020, as the case may be as per the financial calendar being followed.	Since companies could bid this project as a Joint Venture (JV) in which all partners are jointly and severally responsible, the financial T&C must apply to the overall JV team and not only the company representing the JV because of its presence in India and having done similar projects in India. Please let us know whether you will accept that the Financial QC applies to the JV and not only the company representing the JV. Especially when India is trying to develop Small and Medium Enterprises (SME's) in India, this flexibility is very important.	As per tender document.
2.16	43	QUALIFICATION CRITERIA FOR BIDDING ...Para 1.8 a The average annual financial turnover of 'The bidder' during the last three years, ending on 31-03-2020, should be at Rs. 150 million as per the annual report (audited balance sheet and profit & loss account) of the relevant period, duly authenticated by a Chartered Accountant/Cost Accountant in India	Same as above because bidder is the JV.	As per tender document.
2.17	45	Para 4.7 k Communication system for transmission of data from field site to indoor through wireless & OFC	Please indicate if OFC cabling from planned field site to indoor already exists in each airport. If not so, that would involve important engineering, logistics, financial and formal aspects to consider, in the sense that it would require collaboration and permissions from local AAI Offices because of required construction work on airport property and possible disruptions of certain operations, all of which would have to be planned and coordinated together with AAI. Accordingly, please indicate: - How would IMD plan to have	OFC already available at the AMI to MBR. If not available, it will be arranged by IMD through airport operator.

			that installed, - Will that be part of the scope of the project, - Or would that be implemented by the airport authorities or IMD?	
2.18	**45**	Para 4.7 n Battery Operated Data Processor & Integrator (BPDPI) for acquiring & processing data from multiple runways useful during failure /Maintenance of CDPI.	Would this actually be a third, parallel CDPI installed in a laptop?	As per tender document.
2.19	**46**	Para 5.2 Participate and actively contribute to civil & electrical work required for the installation of frangible mast of 10-metre height, sensors and communication links at selected AMI sites beside the runway and also related works in the receiving end/server end, along with at various display locations in the premises.	What is the precise scope of "participate and actively contribute" in the case of the electrical work? Electrical work would require collaboration and permissions from local AAI Offices because of required work on airport property and possible disruptions of certain operations, all of which would have to be planned and coordinated together with AAI.	Permissions from local AAI Offices for required work on airport premises will be arranged by IMD.
2.20	**46**	Para 5.10 Interfacing existing Transmissometer with CDPI & BPDPI and display MOR/RVR as per ICAO with user selection for existing Transmissometer or the RVR system offered in response to this tender.	For proper evaluation of work to be undertaken by bidder, can IMD / AAI provide details of the existing transmissometers involved in this requirement?	Make and model of the existing Transmissometers will be shared with qualified bidder L1 after the acceptance of Supply Order.
2.21	**46**	Para 5.11 It is stated that Facilitate testing of each AWOS at factory premises shall be provided.	We believe that because all systems are almost identical, FAT for one system should be sufficient and will be more cost-effective. Do you agreed with this recommendation.	As per tender document.
2.22	**48**	Para 6.2.1.4 (d) Resolution = 0.1 hPa. However, there is a "0.2" written underneath this specification.	Please confirm that the 0.2 was inserted by mistake and can be removed.	Yes, 0.2 is inserted by mistake under Para 6.2.1.4 and treated to be removed.
2.23	**50**	Para 6.2.2.1 DAS shall accept output from above sensors and GPS signal for time synchronization. It shall be flexible and must offer multiple communication methods (Wireless and through OFC cable). The primary communication will be over long-distance OFC via Ethernet port (IP based communication).	Please indicate if OFC cabling from planned field site to indoor already exists in each airport. If not so, that would involve important engineering, logistics, financial and formal aspects to consider, in the sense that it would require collaboration and permissions from local AAI Offices because of required construction work on airport property and possible disruptions of certain operations, all of which would have to be planned and coordinated together with AAI. Accordingly, please indicate: - How would IMD plan to have that installed, - Will that be part of the scope of the project, - Or would that be implemented	OFC already available at the AMI to MBR. If not available, it will be arranged by IMD through airport operator.

			by the airport authorities or IMD?	
2.24	53	Para 6.3.2.14 CDPI should be configurable and capable of obtaining data from Aviation Instrument systems installed at additional runway sites as & when constructed by AAI without any additional cost to IMD.	Q1: "Aviation Instruments installed at additional runways" have not been described, and as such, the possible customization requirements of the delivered AWOS to comply cannot be qualified or quantified. Please clarify. Q2: "as & when constructed by AAI" seems to imply an indefinite time and scope, something that cannot be committed to by bidders. Please clarify. Q3: "without any additional cost to IMD" As per Q1 and Q2, the ambiguity in the scope of this requirement does not allow bidders to qualify or quantify the resources, components, engineering or other that may be needed to comply, hence it is not possible for bidders to commit to covering any associated costs.	As per tender document.
2.24	53	Para 6.3.2.16 BDBPI unit should be configurable and capable of obtaining data from Aviation Instrument systems installed at additional runway sites as & when constructed by AAI without any additional cost to IMD.	"Aviation Instruments installed at additional runway sites" have not been described, and as such, the possible customization requirements of the delivered AWOS to comply cannot be qualified or quantified. Please clarify.	Details of Aviation Instruments installed at additional runway sites will be shared with qualified bidder L1.
2.25	53	Para 6.3.2.16 BDBPI unit should be configurable and capable of obtaining data from Aviation Instrument systems installed at additional runway sites as & when constructed by AAI without any additional cost to IMD.	"as & when constructed by AAI" seems to imply an indefinite time and scope, something that cannot be committed to by bidders. Please clarify.	As per tender document.
2.26	53	Para 6.3.2.16 BDBPI unit should be configurable and capable of obtaining data from Aviation Instrument systems installed at additional runway sites as & when constructed by AAI without any additional cost to IMD.	"Without any additional cost to IMD". The ambiguity in the scope of this requirement does not allow bidders to qualify or quantify the resources, components, engineering or other that may be needed to comply; hence it is not possible for bidders to commit to covering any associated costs.	As per tender document.
2.27	58	Para 7.5 (b) It is stated that FAT will be carried out by Five IMD officials for 18 (Eighteen) systems for a period of 15 days.	Please see comment on para 5.11 on Page 46..	Please see Para 7.5 at Page no. 58. Travel & Stay Expenses will be borne by Government of India.
2.28	59	Para 7.6 Comprehensive Warranty It is stated that the Firm shall provide a comprehensive warranty for three years, from the date of commissioning of the total integrated system	As date of commissioning of all systems shall be staggered, please confirm that each system shall have its own date of warranty commencement.	Comprehensive Warranty will start airport wise from the date of commissioning for each airport.
2.29	59	Para 7.7	This is not in order. The Bond should be for 5% of the yearly	As per tender document.

		Comprehensive Annual Maintenance Contract It is stated that Firm shall submit a security bond of 5% of the contract value for entering into the Comprehensive AMC contract (CAMC).	AMC value.	
2.30	**60**	Para 7.10.1 It is stated that 60% of the supply order value will be paid to firm against following	The payment terms are very unfair. When the equipment is delivered and IMD has already received a 10% Performance Bond (**PB**), why would 40% (effectively 50% with PB included) be kept by the client. In addition, the bid is in INR and much of the equipment is imported which carries its Exchange Rate Risk (ERR). With a 10% Performance Bond, payment terms should be 90% on equipment delivery, but certainly no worse than 80% on equipment delivery. For AMC Performance Bond, the value should be based on the AMC Contract Value and not overall Contract Value. Please also confirm 100% of taxes payable shall be paid with the first payment.	As per tender document.
2.31	**60**	Para 7.10.1 & 7.10.2 It is stated that 60% of the supply order value will be paid to firm against following ..... and Balance 40% amount of the purchase order price for supply of goods & accessories and Training will be paid on successful completion of following	Please see our comment above against Para 7.10.1 on Page 60.	As per tender document.
2.32	**65**	Para 5b As per 7.5.1, Travel & Stay Expenses will be borne by Government of India. But as per 5b on page 65 it says **All expenses for Factory Acceptance for 18 systems for Five officials at OEM place for 15 days including their Travel & per diem are to be quoted.**	Please confirm whether the Travel & Stay expenses for the Factory Acceptance Test (FAT) are to be borne by IMD or are to be quoted by the bidder.	Please see Para 7.5 at Page no. 58. Travel & Stay Expenses will be borne by Government of India.
2.33	**66**	Annexure-I BLOCK DIAGRAM OF FIELD AVIATION WEATHER OBSERVING SYSTEM (AWOS).	The text is cut in the two boxes listed on the right hand side of the diagram. Please update the diagram accordingly.	Layout of Indoor Equipment is attached at Annexure-1.
2.34	**66**	Annexure-I INDOOR UNITS OF AWOS	The diagram is incomplete and the boxes at the bottom of the page have been cut off. Please update the diagram accordingly.	Layout of Indoor Equipment is attached at Annexure-1.
2.35	**68**	Para 2, a) The comprehensive Lightning & Sure Protection System shall include... The Power Supply surge protection applicable at each distribution board which will	Does this refer to existing airport distribution boards? Electrical work on those would require collaboration and permissions from local AAI Offices because of required work on airport property and possible	Permissions from local AAI Offices for required work on airport premises will be arranged by IMD.

		supply power to the equipment and accessories.	disruptions of certain operations, all of which would have to be planned and coordinated together with AAI.	

3. M/s Polar Technologies (India), New Delhi.

Sl No.	Page No.	Tender Clause / Reference	Query	Reply
3.1	44	6.2.1.6 System for visibility/MOR and Runway Visual Range (RVR System)	Could you find out whether they require a Transmissometer type or Forward Scatter type of sensor?	System reporting MOR & RVR as per ICAO requirements & specifications as per the Tender document.
3.2		Closing date and time for submission of tender: 08.09.2020 / 1700 Hrs.	We request you to kindly extend the submission date for 2 weeks.	**Please refer to the Reply to the major queries on Page-1 to 3 of this document.**
3.3			We request IMD to provide the Annexure 1 again since we cannot read the block diagrams properly. Especially the indoor unit details.	Layout of Indoor Equipment is attached at Annexure-1.
3.4			We have read the technical part of the tender again. Some concern around 6.3.2.16 and 6.3.4.1 We could not fully comply. With our system, our equivalent of the slave display unit (Aeroview page of our CAOBS Chrome AWOS software), as described in 6.3.4 of the tender, would have to be connected to the "CDPI" only (AWOS server) and not the "BPDPI". Besides ideally it would not be a panel PC but rather a PC or workstation.	As per tender document.

4. M/s Etengy Pvt. Ltd, Bhubaneswar, Odisha.

Sl No.	Page No.	Tender Clause / Reference	Query	Reply
4.1	43	1.1. The bidding firm or, leading firm in case of joint venture (hereafter referred as the bidder) shall be OEM or a distributor of OEM or system integrator having Manufacture's authorization and backup support of OEM. If the bidder is not OEM then manufacturer's authorization letter must be submitted along with technical bid.	Can the Joint venture of two Indian firms with an authorization certificate of foreign OEM bid the tender?	As per tender document.
4.2	43	1.3 The bidder or his counterpart shall submit a report regarding satisfactory performance of AWOS from end users for at least 20 airports in the technical bid during last five years ending on 31st March 2020. The technical bid should also have the proof of successful commissioning and the performance of the installed systems from the local Met office or Airport officials.	Please clarify local met/airport official term? Kindly reduce the experience criteria as "The bidder submit report regarding satisfactory performance of 20 AWOS system instead of 20 airports".	**Please refer to the Reply to the major queries on Page-1 to 3 of this document.**
4.3	43	1.4 The bidder must have successfully integrated data of AWOS with the Aeronautical Fixed Telecommunication Network	Kindly consider the bidder's OEM experience certificate/report for this clause.	**Please refer to the Reply to the major queries on Page-1 to 3 of this document.**

		(AFTN) and Global Telecommunication System (GTS) of world Meteorological Organization (WMO), at international airports (at least 10 airports) in the last five years, ending on 31st March 2020. A report in this connection should be submitted along with technical bid.		
4.4	**43**	1.8 Financial Standing – under all conditions a) The average annual financial turnover of 'The bidder' during the last three years, ending on 31-03-2020, should be at Rs. 150 million as per the annual report (audited balance sheet and profit & loss account) of the relevant period, duly authenticated by a Chartered Accountant/Cost Accountant in India.	As a joint venture can we share the turnover of the partner firm ?	As per tender document.
4.5	**47**	6.2.1.3. Relative Humidity Sensor a) Type of sensor Solid State Capacitive	Accuracy of solid state capacitive is not perfect, so we should prefer for thin paper capacitive.	As per tender document.
4.6	**50**	7.10 Payment Terms & Conditions 7.10.1. 60% of the supply order value will be paid to firm against following:	Payment should be released after completion of each site.	As per tender document.
5. **M/s Efftronics Systems Pvt. Ltd, Vijayawada, Andhra Pradesh.**				
Sl No.	**Page No.**	**Tender Clause / Reference**	**Query**	**Reply**
5.1	**39**	1.2 The bidder or his counterpart shall have supplied, installed and integrated at least 20 airports (at each airport field integration of Current Weather with RVR system is only considered) of similar standards as specified in this tender document at different airports across the globe during last Five years ending on 31st March 2020. A report in this connection should be submitted along with technical bid.	**Kindly change as:** The bidder or his counterpart shall have supplied, install and Integrated at least 17 Automatic weather sensors at different sector across the globe during last Five years ending on 31st March 2020. A report in this connection should be submitted along with technical bid.	**Please refer to the Reply to the major queries on Page-1 to 3 of this document.**
5.2	**39**	1.3 The bidder or his counterpart shall submit a report regarding satisfactory performance of AWOS from end users for at least 20 airports in the technical bid during last five years ending on 31st March 2020. The technical bid should also have the proof of successful commissioning and the performance of the installed systems from the local Met office or Airport officials.	**Kindly change as:** The bidder or his counterpart shall submit a report regarding satisfactory performance of AWOS from end users for at least 17 Automatic weather sensors at different sector in the technical bid during last five years ending on 31st March 2020. The technical bid should also have the proof of successful commissioning and the performance of the installed systems from the officials.	**Please refer to the Reply to the major queries on Page-1 to 3 of this document.**
5.3	**39**	1.4 The bidder must have successfully integrated data of AWOS with the	**Kindly change as:** As per notification published by Ministry of Finance, Govt of India	**Please refer to the Reply to the major queries on Page-1 to 3 of this**

		Aeronautical Fixed Telecommunication Network (AFTN) and Global Telecommunication System (GTS) of world Meteorological Organization (WMO), at international airports (at least 10 airports) in the last five years, ending on 31st March 2020. A report in this connection should be submitted along with technical bid.	on15-05-2020. Foreign companies are to be disallowed to bid. Government build a step towards Self-Reliant India and support MAKE in India **Kindly delete this clause** and this will also help MSMEs to increase their business	**document.**

6. M/s Campbell Scientific India Pvt Ltd, New Delhi.

Sl No.	Page No.	Tender Clause / Reference	Query	Reply
6.1	49	6.3.2.13 Central Data Processing and Integrator (CDPI)	Tender Indicates interfacing into existing transmissometers. How many, and what brand, of existing transmissometers are there to interface	Make and model of the existing Transmissometers will be shared with qualified bidder L1 after the acceptance of Supply Order.
6.2	44	6.2.1.4	Atmospheric Pressure Sensor Must the barometric pressure sensor be an uncommonly used in aviation "Class A" type, which only one or two global manufactures build these and will only serve to greatly reduce the number of bidding participants; or will any standard Aviation-Grade barometers be accepted which already meet or exceed all the other pressure specification requested?	As specified in tender document
6.3			Since the tender is a big size and to submit the competitive bid the tender submission provided seems very less so request to execute the submission date.	**Please refer to the Reply to the major queries on Page-1 to 3 of this document.**
6.4			We would like to request to give an extension of the installation and delivery window. As the required time window is short period-delivery in 6 months and installation 3 months to execute such a big project and requirements?	**Please refer to the Reply to the major queries on Page-1 to 3 of this document.**
6.5	42	4.11	Can IMD give example files of the IDESK and Date9 formatted files.	Details will be shared with qualified bidder L1 after the acceptance of Supply Order.
6.6	42	4.12	Can IMD give example file(s) of the 'current weather register' files defined by IMD?	Details will be shared with qualified bidder L1 after the acceptance of Supply Order.

7. M/s Amsh Product line Pvt Limited, New Delhi.

Sl No.	Page No.	Tender Clause / Reference	Query	Reply
7.1			There are no integrated manufacturer of AWOS as per the requirement and also confirming to ICAO/WMO compliant in India, hence how this tender has structured for procurement of AWOS in INR.	As per Govt. of India guidelines, The tender is for procurement from Indian bidders in Indian currency INR only.
7.2			There are very few reputed manufacturer of AWOS globally with proven track of supply/installation of genuine	As per Govt. of India guidelines, The tender is for procurement from Indian bidders in Indian

			AWOS System, hence most of the vendors from India would be forced to source the solution from abroad, hence there would be major outflow of funds and under the current severe financial crunch that is being experienced due to COVID-19 it is very difficult to sustain such an major funds outflow.	currency INR only.
7.3			The Earnest Money Deposit is also very high, the EMD exemption provisions that has been stated in the tender is applicable to only to manufacturer of the intended product, which is not happening in reality. Therefore, please clarify that if any vendor is registered as service provider under MSME are exempted from depositing the high value bid security.	This is a tender for procurement of goods, so the bidders registered for supply of specific goods are exempted from EMD submission.
7.4			Reference is also made to clause number 7 of the RFP document as listed under the Eligibility & Qualification Criteria for Tenderers, it has been emphasized that Global Tender Enquiry has been disallowed by Government of India, under the same context the Department of Expenditure, Ministry of Finance has also made exception that the product/solution that is not available or manufactured in India, such Imports would be allowed provided the procurement agency seek the due approval from the competent authority as described in the said order, the question arises as to why this option is not exercised by IMD and putting immense financial burden on MSME/SME units by imposing the conditions of INR conditions.	As per Govt. of India guidelines, The tender is for procurement from Indian bidders in Indian currency INR only.
7.5			As AWOS is very complex system, which requires the expertise of OEM who has loads of experience of supplying and installing such an complex system, hence the mode of procurement needs to be re-looked from INR to GTE.	As per Govt. of India guidelines, The tender is for procurement from Indian bidders in Indian currency INR only.
7.6			Due to prevailing pandemic still many countries are imposing the strict lockdown and work from home, as a result the overall business has impacted greatly and work is not happening in close tandem, added to this there is summer vacation in Europe and also many companies are not functioning fully in USA and other parts of world, hence the due date of tender may be extended by another one month to ensure the proper and compliant submission.	**Please refer to the Reply to the major queries on Page-1 to 3 of this document.**
7.7	**23**	II.5, Weather proof termination	6.2.2.1(p46) says all sensors. III.2 (p58) says all sensors except	Battery backup support for all field sensors,

		box with battery & battery charger of suitable capacity for supply of power to Data logger, Wind, Temperature & Humidity, pressure sensors and communication Modem for 24 hrs	RVR. This 11.5 spec excludes ceilometer and RVR. What sensors require 24 hr backup? Are there any backup requirements for other sensors? Please provide a backup time requirement by sensor. Heaters and/or fans that are associated with sensors are not connected to battery backup connections to save energy. Is this acceptable?	including communication equipment and DAS itself is required for minimum 24-hour duration. For more details, please refer to Para 6.2.2.2 on Page 60 of tender document and other clauses of RFP.
7.8	**23**	III.2, Battery back-up facility for DAS and all sensors (Except RVR) for 24 hrs or better	Does the RVR require its own battery backup and if so, for what length of time?	As per Tender document.
7.9	**23**	III.3, GPS receiver	There are 36GPS associated with the DAS. There are no GPSs associated with the CDPI.6.3.2 require two GPSs per site for the CDPI. Are the GPS receivers online three intended to be for the CDPI? If not, where are the GPSs for the CDPI in the stores list?	As per Tender Document
7.10	**24**	VI.3, 42-inch LED display with zoom control facility for display of single or multiple runway data as per user selection.	Is "zoom control" the ability to select which runway or runways data shall be displayed? If not, please define "zoom control" in detail.	Zoom control facility is for display of single or multiple runway data as per user selection
7.11	**24**	VI.4, 42-inch Slave display for passenger lounge	Is this a secondary monitor for the 42" LED display stated in VI.3? Please clarify Which computing device (from the BOQ) is associated with the display?	This is the secondary slave display in passenger lounge similar to VI.3
7.12	**26**	XII.5b, All expenses for Factory Acceptance for 18 systems for Five officials at OEM place for 15 days including their Travel & per diem	Please describe the components and values of the different items covered under the term "per diem"	Please see Para 7.5 at Page no. 58. Travel & Stay Expenses will be borne by Government of India.
7.13	**59**	IX.1, All licensed (system and application) software with License Nos. and CD's including web-based monitoring and remote maintenance and virus protection software	What level of virus protection, if any, is required on Linux? Full time or on demand? Commercial or open-source?	Virus protection of all licensed software (system and application).
7.14	**59**	IX.1, LAN Extender	What is the specific application for the LAN Extender? What type of LAN Extender is required? What media is to be used with the extender?	LAN extender is required to extend network segment beyond its limitation. Type and Media of LAN extender may be decided by bidder.
7.15	**28**	PRE-CONTRACT INTEGRITY PACT: ....represented by Shri.....Chief Executive Officer (hereinafter called the BIDDER/Seller" which expression shall mean and include unless the context otherwise requires, his successors and permitted assigns)....	Does All Weather, Inc. or our Indian partner enter into the Integrity Pact?	As per Govt. of India guidelines, the tender is for procurement from Indian bidders in Indian currency INR only. Pre-Contract Integrity Pact to be signed by the Indian bidder.
7.16	**41**	4.4, shall be able to seamlessly integrate the additional sensors (industry standard ones only) mentioned above, both hardware-wise and software-wise	Please define the list of industry standard sensors including the manufacturer and model to be supported.	The proposed system shall be able to seamlessly integrate the additional sensors (industry standard ones only), both hardware-wise and software-wise, if required.
7.17		4.6,	Please define the list of critical	As per tender document

	41	shall have redundancy in critical components so as to reduce downtime and increase MTBF	components that bidders are required to provide redundancy for.	
7.18	41	4.7k, Communication system for transmission of data from field site indoor through wireless & OFC	Wi-Fi is specified for both tablet connections and DAS backup. Can these be separate networks? Please explain.	Through Optical Fiber Cable (OFC) and Wireless communication. The Data communication to Tablet is through indoor wireless system.
7.19	41	4.7n, Battery operated Data Processor& Integrator (BPDP) for acquiring & processing data from multiple runways useful during failure/maintenance of CDPI.	Does the BPDPI require a fiber-optic connection, or can it be Wi-Fi only?	Through Optical Fiber Cable (OFC) and Wireless communication.
7.20	41	4.8, Data stream analysis and ingest to AAI or IMD AMSS will be the responsibility of the vendor.	Please supply samples of raw serial data messages so that we can determine what, if any, differences there are from ATFN. Please also supply "Wireshark" captures of a successful FTP data upload and TCP/IP socket connection. These are needed to determine level of effort and therefore pricing.	Details will be shared with qualified bidder L1 after the acceptance of Supply Order.
7.21	42	4.10, Provision to display graphs of actual values for different weather parameters for past week/ past one month / user selectable duration.	Please provide examples of Display on what is anticipated.	Details will be shared with qualified bidder L1 after the acceptance of Supply Order.
7.22	42	4.11-12, Provision of auto generation of Aerodrome MET summary in IDESK and Date9 format. The formats will be provided by IMD. Provision to generate digital current	Please provide the formats of these files. They are needed to understand level of effort for the requirements and therefore price.	Details will be shared with qualified bidder L1 after the acceptance of Supply Order.
7.23	42	5.2, Participate and actively contribute to civil & electrical work required for the installation of frangible mast of 10-metre height, sensors and communication links at selected AMI sites beside the runway and also related works in the receiving end/server end, along with at various display locations in the premises.	Does participate and actively contribute to civil and electrical work mean that IMD will be doing most of the civil works and bidder will "actively supervise"? Please define participate and actively contribute.	Civil & Electrical work for installation has to be carried out by bidder. However, these have to be carried out in coordination with AAI & IMD. Permissions from local AAI Offices for required work on airport premises will be arranged by IMD. Bidder has to actively contribute in getting the permissions for executing the work at airport premises.
7.24	42	5.8, Provide application software for auto generation and dissemination of METAR/SPECI as per ICAO annexure -3, and routine/special Met Reports as per IMD specifications. (Application software for this purpose shall facilitate editing, approving and authenticating the auto generated messages before queuing them for auto-dissemination.)	Please provide IMD specifications for routine/special Met Reports. We need to understand how these differ from ICAO MET REPORT/SPECIAL in order to determine pricing.	Details will be shared with qualified bidder L1 after the acceptance of Supply Order.
7.25	42	5.9, Interface the AWOS with the AFTN and Aviation Message	Is the customer asking for transmission of data on AFTN and AMHS simultaneously? Or is	Duplex communication system is a point-to-point system that can

		Handling System (AMHS) for auto-dissemination of METAR/SPECIs by establishing duplex communication channel through which will be available for manual exchange of other operational messages too.	the customer asking for bidirectional communication? If the customer is asking for bidirectional communication, is that required for AFTN, AMHS, or both? Please provide a list of "other operational messages" which may need to be "manually exchanged" What are the requirements for logging and/or displaying the data received on AFTN/AMHS?	communicate with one another in both directions. Further details will be shared with qualified bidder L1 after the acceptance of Supply Order.
7.26	**42**	5.10, Interfacing existing Transmissometer with CDPI & BPDPI and display MOR/RVR as per ICAO with user selection for existing Transmissometer or the RVR system offered in response to this tender	Please provide specifications, manufacturer, model number, and manual for the existing transmissometers. Please also provide data captures from the existing transmissometers all operating modes.	Details will be shared with qualified bidder L1 after the acceptance of Supply Order.
7.27	**43**	6.1.5, DAS of the AWOS shall also be of scalable architecture such that it shall be able to accommodate one more full set of sensors at the field site arising out of airport expansion/ alterations.	AWI designs generally add an additional DAS for an additional set of sensors. The single (or redundant) CDPI communicates with all DAS units on the airfield. Does adding a second DAS qualify as the expansion means? Or is it required to have the ability to connect a duplicate set of sensors to each DAS?	It is already defined that architecture should be scalable such that it shall be able to accommodate one more full set of sensors at the field site arising out of airport expansion/ alterations.
7.28	**44**	6.2.1.4.d, Atmospheric Pressure Sensor Resolution	What is "0.2" in small font representing?	0.2 is inserted by mistake under Para 6.2.1.4 and treated to be deleted.
7.29		6.2.1.6, System for visibility/MOR and Runway Visual Range (RVR System) Measured and Derived Parameters	Item II which refers to MOR and RVR accuracies, is the RVR accuracy stated to be applied to the calculations utilized in the CDPI software? Or is this a sensor specification?	Accuracies of Measured and Derived Parameters of MOR and RVR defined under Para 6.2.1.6 on Page 49
7.30	**44**	6.2.1.6, System for visibility/MOR and Runway Visual Range (RVR System)	Is there a preferred technology for measuring visibility in India? I.e. forward scatter technology vs Transmissometer technology or a combined technology. Please advise.	System for measurement of MOR & RVR as per ICAO & As per Specifications in Tender Document.
7.31	**44**	6.2.1.6.I.a, A suitable output indicating MOR/Visibility and BLM value through any of the ports - RS-232/ RS-485/ USB/RJ4S capable for interfacing with both wireless and cable modem for transmission to MBR	AWI system supportRS-232, RS-485, and use Ethernet to interface with wireless and cable modems. Is the sensor required to have all of the listed outputs, or outputs as needed to interface with both wireless and cable modem?	As per tender document
7.32	**46**	6.2.1.7, Visibility (MOR) and Present Weather	Is visibility from the combined visibility and present weather sensor to be utilized or reported in anyway? If so, how?	As per tender document
7.33	**46**	6.2.2, DAS shall be user configurable to accept data from third party sensors (either analog or digital O/P) of any make & model other than those being offered.	Please provide a list of all for which the customer desires connectivity. The list should include the manufacturer and model number for each. Please provide data captures from any digital third party sensors in all operating modes.	As per tender document
7.34	**47**	6.2.2.2.2, Memory: At least 32MB flash memory expandable via SD Card	The use of the flash memory listed in this requirement is assumed to be for data logging. Is it acceptable to have all of the data logging memory located on the external flash memory?	As per tender document

7.35	47	6.2.2.2.3, Power Supply : 10 — 14 V DC	For a battery powered system, 10V DC is a voltage where batteries start to fail. Is it acceptable to have a input power range from 11 V DC to 30 V DC or greater?	As per tender document
7.36	47	6.2.2.2.4, Internal Battery : Li-ion	Lithium ion batteries don't cover the required outdoor operating temperature range. Confirm whether Li-ion is a hard requirement or if other battery chemistries are acceptable.	As specified in tender document
7.37	47	6.2.2.2.5, Serial Ports: 12 or more configurable serial ports....	Is it acceptable to provide serial ports that accommodate the sensor suite being provided? That would be a combination of RS232, RS422 and RS485 ports. TTL based sensors are not recommended as they will not meet ESD or Surge requirements elsewhere in the requirements document.	12 or more configurable serial ports (at least 8 Nos. RS232, at least 2 Nos. TTL and at least 2 Nos. RS485) as per tender document.
7.38	47	6.2.2.2.8, USB 3.0	The USB port is used to access logged data or provide a means to log data and for the set type of operations, USB3.0speeds are not required. USB2.0 speed will be sufficient for these activities. Is it acceptable to provide USB 2.0?	As per tender document
7.39	47	6.2.2.2.13, Keyboard & Display	With other customers, we have found that touch screen devices at the equipment tower locations are not reliable. Is it acceptable to provide an alternate input mechanism via a keypad and rotatory selector knob and enter buttons?	As per tender document
7.40	47	6.2.2.2.22, RTC: In built RTC synchronized with GPS receiver and Li-ion battery support.	Lithium ion batteries don't cover the required outdoor operating temperature range. Confirm whether Li-ion is a hard requirement or if other battery chemistries are acceptable.	As per tender document
7.41	48	6.3.1.1, Indoor units consist of Dual Hot redundant CDPI, Work Stations with LED monitors of 21inch and slave displays. It shall also contain a Battery Power Operated Data processing and Integrator (BPDPI) unit which process all numeric data from multiple runway sites and display. The unit is useful in processing & display of data from multiple runway sites during server breakdown due to any reason	Is the purpose of the BPDPI to provide a backup AWOS functionality? Or is it to provide a third layer of redundancy for the CDPI rack in the event the dual servers in the CDPI rack are taken out of service? is the BPDPI independent of the CDPI including having its own local and remote displays? Is the BPDPI required to issue all of the reports as would the CDPI (METAR, SYNOP, etc.)? Is it required that the workstations/tablets automatically failover from the CDPI output to the BPDPI output?	Battery Powered Data processor & Integrator (BPDPI) to be provided as per tender document. There should be one parallel Battery Powered Data Processor & Integrator (BPDPI) (Powered by battery with adapter) which shall simultaneously obtain data from all runway sites, process and display it on LCD screen. For more details please refer to Para number 6.3.2.16 on Page number 53 of tender document
7.42	48	6.3.2, CDPI server time shall be maintained through GPS installed at the roof of MBR / ATC	What maximum cable distance will we need to support from the CDPI to the roof?	Depends on the distance between CDPI and roof of MBR / ATC.
7.43	48	6.3.2, CDPI server time shall be maintained through GPS installed at the roof of MBR / ATC	For the GPS devices mentioned in 6.3.2 that are to provide time synchronization for the CDPI, how far will the roof of the MBR/ATC be from the CDPI equipment rack?	Depends on the distance between CDPI and roof of MBR / ATC.

7.44	48	6.3.2.2, 1-minute and 10-minute running average of MOR, RVR shall be computed using MOR and Background Luminance value obtained from field DAS. CDPI shall obtain Runway Light Intensity Information either on serial or from Ethernet port	Who is the manufacturer of the runway light system and what model is in use? Please provide output format, example output, and connectivity (media, type), and protocol information.	Make and model of the system will be shared with qualified bidder L1 after the acceptance of Supply Order.
7.45	48	6.3.2.6, Compute horizontal wind shear from three wind instruments on side of each Runway.	What algorithm should be used to compute horizontal wind shear from three wind instruments for this tender?	Details will be shared with qualified bidder L1 after the acceptance of Supply Order.
7.46	48	6.3.2.8, CDPI shall generate ATIS information and able to interface to the DATIS server of Airport Authority of India	Is the information to be sent to an external ATIS server? If so, what manufacturer and what format (e.g., METAR or METREPORT, line termination, protocol/transport, trailing equal symbol, etc.) does the external ATIS system require? How will the AWOS connect to the external ATIS and D-ATIS? Alternately, is it expected that the AWOS provide the actual ATIS data (not just weather) and provide the voice output as well as D-ATIS data to send to the central server? If the customer requires output to an existing ATIS system, please provide ATIS input requirements.	Details will be shared with qualified bidder L1 after the acceptance of Supply Order.
7.47	48	6.3.2.9, CDPI shall take data from Observer workstation for which sensors are not available or faulty. It shall also obtain manual data such as cloud information TREND, REMARKS, TAF etc. which are entered manually.	Please clarify what the customer intends for this requirement. Under what conditions is the CDPI taking over? Why is the CDPI taking over? How is it intended that the CDPI (server) acquire automated data?	As per tender document
7.48	48	6.3.2.10, All technical parameters of the systems and status of field systems shall be sent to maintenance work station.	Please identify all technical parameters that need to be sent to the maintenance workstation.	As per tender document
7.49	48	6.3.2.11, CDPI shall have facility to upload data and health parameters of field equipment into the IMD web server at user defined intervals using FTP or http protocol.	Section 6.3.5.5 (p53) says only FTP is permitted. 6.3.1.11 indicates http is permitted. Is HTTP POST acceptable? Please provide format for which we shall upload data and health parameters, including the data points and parameters desired.	Details will be shared with qualified bidder L1 after the acceptance of Supply Order.
7.50	48	6.3.2.13, CDPI shall acquire data from existing Transmissometers installed at airports and display MOR/RVR as per ICAO regulations	Please provide make and model of transmissometer at EACH airport and format of data. Including data captures in all operating modes Please provide make and model of all current equipment at each airport that is expected to be interfaced with	Make and model of the existing Transmissometers will be shared with qualified bidder L1 after the acceptance of Supply Order.
7.51	48	6.3.2.15, In case of failure of field Data logger /field system, in order maintain zero down time,	Is a router needed to interface between different networks of the two weather systems provided by the airport? If so, will it be	Details will be shared with qualified bidder L1 after the acceptance of Supply Order.

		CDPI should have the facility to take data from IMD current Weather Instrument systems & Drishti Systems. Required IP & Port No and Data string format (both in ASCII or Hex data format) will be provided by IMD	provided by IMD? Please provide the format, port, and protocol for current weather instrument and Drishti systems.	
7.52	**48**	6.3.2.16, There should be one parallel Battery Powered Data Processor & Integrator (BPDPI) (Powered by battery with adapter) which shall simultaneously obtain data from all runway sites, process and display it on LCD screen. BPDPI shall be programmed for computing QNH from QFE and other station specific & ICAO standard atmospheric table. This Unit shall process and generate all numeric values for all aviation requirements. This BPDPI unit shall consume less Power and with battery support shall work for one day without ac mains power. This unit shall also be useful in case of server failure due to some reason. The unit shall also have an inbuilt or external memory to store data required for all operational requirements for aviation for a period of seven days. BPDPI unit should be configurable and capable of obtaining data from Aviation Instrument systems (of same make & model offered) installed at additional runway sites as & when constructed by AAI without any additional cost to IMD.	Is the BPDPI a complete backup system, including independent LCD displays in operational areas?	Battery Powered Data processor & Integrator (BPDPI) to be provided as per tender document. There should be one parallel Battery Powered Data Processor & Integrator (BPDPI) (Powered by battery with adapter) which shall simultaneously obtain data from all runway sites, process and display it on LCD screen. For more details please refer to Para number 6.3.2.16 on Page number 53 of tender document
7.53	**50**	6.3.4, Slave Displays	Is the intent of the10.1" tablet to connect to the 42" LED Display and/or to the 42" Passenger Display? If so, what is the distance from the tablet to the display and what is the preferred mounting method for the10.1" table to attach to the display?	Slave displays are for viewing required data from either single runway or multiple runways with zooming facility as per user selection.
7.54	**50**	6.3.4, Slave Displays	Is the intent of the slave displays to all be standalone computing devices? Meaning that all displays have an inbuilt computer that will accept incoming data and process it for the purpose of display to the various users. If so, what are the minimum specifications for the 42" Display computing devices? What is the preferred communication mechanism? (i.e. wireless or copper Ethernet)	Slave displays are for viewing required data from either single runway or multiple runways with zooming facility as per user selection.
7.55	**50**	6.3.4.1, Slave Display unit consists of Wireless router and Tablet PC with suitable LED display. The specifications of	This is the only place the BPDPI is specified as being required to send data to external displays. This implies many new network and communication	As per tender document

		both Wireless router and Tablet PC are given in Annexure- V. The Slave Display shall have provision for dynamically configuring information to be displayed by obtaining data from CDPI or BPDPI.	requirements. Is this assumption correct? Will the BPDPI now require a static IP address? Can the BPDPI be Wi-Fi only?	
7.56	**50**	6.3.4.2.1, Wireless Router Specifications	Will the wireless routers be connected to the CDPI rack? If so, what is the maximum distance? If not, is the intent to provide a mesh network for the wireless routers?	To obtain processed Numerical & Graphical data and to establish Wireless connectivity with Tablet PC within 300 m Range Line of Sight.
7.58	**50**	6.3.4.2.1, Wireless Router Specifications	What is the maximum distance of a power source for each wireless router location? Is POE a suitable approach to power the devices?	To obtain processed Numerical & Graphical data and to establish Wireless connectivity with Tablet PC within 300 m Range Line of Sight.
7.59	**50**	6.3.4.2.4, 42-inch LED Display at Passenger Lounge Receive Data containing wind, temperature, Humidity, Visibility & RVR, Rainfall intensity and satellite images from remote server through Internet only. The parameters to be displayed shall be user selectable.	Is the intent that the "Internet" connection be to the Pune/Delhi central server only, or does this "rainfall intensity and satellite images" specification imply the existence of a separate public data connection? Please provide the format and content of all data intended to be retrieved from the Internet.	Display the data containing wind, temperature, Humidity, Visibility & RVR, Rainfall intensity and satellite images from remote server of the proposed system through Internet only.
7.60	**50**	6.3.4.2.4, 42-inch LED Display at Passenger Lounge Receive Data containing wind, temperature, Humidity, Visibility & RVR, Rainfall intensity and satellite images from remote server through Internet only. The parameters to be displayed shall be user selectable.	What system does the "rainfall intensity and satellite images" originate from? What is the update rate of this information? Does the information need to be kept historically? If so, what is the length of time to keep the information?	Details will be shared with qualified bidder L1 after the acceptance of Supply Order.
7.61	**51**	6.3.5, Software Requirements	Section 6.3.5 introduction talks about end- user displays, but all sections under6.3.5 seem to talk about background processes, auto-login, and other issues that apply to the central processor. Is 6.3.5 talking about requirements for end-user software or the central processor software?	As per tender document
7.62	**52**	6.3.5.9, The system shall not transmit invalid data.	Should the system allow users to manually submit reports that appear to have problems or use unknown codes?	As per tender document
7.63	**52**	6.3.5.3.3, There shall be web-based data retrieval facility	Please provide more detail on the requirements of the web-based data retrieval facility. What data should be retrievable? In what format?	As per tender document
7.64	**52**	6.3.5.3.4, A data back-up facility also shall be the part of the CDPI system	Do 6.3.5.3.5 and 6 refer to 6.3.5.3.4? Should they be subsidiary requirements? If not, please clarify the relationship between those three requirements.	As per tender document
7.65	**53**	6.3.5.5, Firm shall programme the CDPI server for auto uploading of AWOS data and	Section 6.3.2.11 on page 49 suggests that HTTP is acceptable. Is it acceptable to only upload data by HTTP/S	As per tender document

		its health parameters into the web server at IMD, Pune through FTP. All the stations will have static IP. The IMD, Pune server will accept data from the designated static IP only.	POST?	
7.66	**53**	6.3.5.5, Firm shall programme the CDPI server for auto uploading of AWOS data and its health parameters into the web server at IMD, Pune through FTP. All the stations will have static IP. The IMD, Pune server will accept data from the designated static IP only.	6.3.5.5 Only references the server to be installed at Pune. Annexure IV – item VII indicates that there are servers at both Pune and Delhi. Is the data to be sent to the server installed in Delhi as well?	As per tender document
7.67	**53**	6.3.5.6, All software shall be with enterprise license, media, documentation and warranty.	In section 6.3.5.6, does the enterprise License statement include the operating system? Or is this only for the application so, fte? Please provide the definition of Application software? Please provide the definition of "enterprise license"	As per tender document
7.68	**62**	Annexure I, N/A	Please provide an updated image. The image provided in the tender is cutoff at the bottom.	Layout of Indoor Equipment is attached at Annexure-1
7.69	**N/A** **N/A**	N/A	Please provide a detailed drawing of each airport and the interconnectivity of the computers, data acquisition systems and sensor.	Details will be shared with qualified bidder L1 after the acceptance of Supply Order.
7.70	**N/A** **N/A**	N/A	Please provide a detailed airport layout map of where the sensors and computers are located. Please provide lengths of runs.	Details will be shared with qualified bidder L1 after the acceptance of Supply Order.

8. **M/s S. S. Trading Corporation, Delhi.**

Sl No.	**Page No.**	**Tender Clause / Reference**	**Query**	**Reply**
8.1	**41**	4.7 (g)	Each AWOS should consist of System for measurement of MOR/Visibility and RVR as per ICAO requirements (Hear after named as RVR instrument). Query: The technical specification is requesting RVR system, but are not specifying which is the requested technology (Forward Scatter Meters or Transmissometer). Please clarify which technology is required.	System for measurement of MOR & RVR as per ICAO & As per Specifications in Tender Document
8.2			Please clarify if the tender is willing to use for each airport combination of different technology (Existing Transmissometer and Forward Scatter meter) for the RVR estimation?	Combination of both Technology
8.3	**42**	5.10	Interfacing existing Transmissometer with CDPI & BPDPI and display MOR/RVR as per ICAO with user selection for existing Transmissometer or the RVR system offered in response to this tender. Query: Since the tender specs are asking for the integration of	Make and model of the existing Transmissometers will be shared with qualified bidder L1 after the acceptance of Supply Order.

			the existing Transmissometer, due to this can we assume that Transmissometer type RVR is required?	
8.4			Requirements of integration of existing Transmissometer sensor, please provide the relevant information about the characteristic of these sensors such as: the used protocol, the brand, the model, the year of installation, the ICD document. Number of installed sensors etc.	Make and model of the existing Transmissometers will be shared with qualified bidder L1 after the acceptance of Supply Order.
8.5	**46**	6.2.1.7 (f)	Type, amount and rate/intensity of precipitation, size and phase of hydrometeors along with fog, mist, haze, smoke, sand etc. as per WMO manual on codes Table 4680 (Pl. see Para 4.2.6 for reference). Query: The Present Weather sensors specs are listed which include among other the "size and phase of hydrometeors" please confirm that the tender is expecting to detect such parameter from the Present Weather sensor.	As per tender document
8.6	**51**	6.3.5.2	Please confirm that "templates for manually generating the NOTAM report" shall be included.	As per tender document
8.7	**56**	7.10.2	Please clarify if the Balance 40% amount of the purchase order price for supply of goods & accessories and Training will be paid after the successful completion of the all 18 Airports, or will be divided in sub lots.	As specified in tender document
8.8			What is the time schedule for the installation of the 18 airports? What is the deploy program? Will IMD follow a priority plan, or regional plan?	As per tender document
8.9	**39**	1.5 and 1.8 (a)	Financial Qualifying Criteria: The average annual financial turnover of "The bidder" during the last three years, ending on 31-03-2020, should be at Rs. 150 million as per the annual report (audited balance sheet and profit & loss account) of the relevant period, duly authenticated by a Chartered Accountant/Cost Accountant in India. Query: In all other points related to qualification criteria IMD is allowing bidder or his counterpart i.e. his Principal / OEM but in these two points it is not mentioned that OEM's financial will also be considered. It should be amended and OEM's financials turnover should be allowed as financial qualifying criteria along with the bidder. As this provision is mentioned in Manual for Procurement of Goods 2017 Ministry of finance department of expenditure	As per tender document

			ANNEXURE 9: SAMPLE PREQUALIFICATION CRITERIA. (Copy attached for reference).	
8.10	**39**	1.2, 1.3, 1.4	Since the tender is requesting documents that involves other foreign entities from different countries (i.e. reference letters) which are taking more time than expected due to the pandemic situation so we request you for a deadline extension of 4 weeks to be able to collect all the relevant requested document.	As per schedule and notifications of tender document published on IMD website www.imd.gov.in & Central Public Procurement Portal website www.eprocurement.gov.in

9. **M/s Grintex India Limited Gurugram, Haryana.**

Sl No.	**Page No.**	**Tender Clause / Reference**	**Query**	**Reply**
9.1	**3**	General Section I – GIT Clause 4 The tenderer shall bear all the costs and expenditure incurred and/or to be incurred by them in preparation, and uploading their tender including attending the pre-bid conference and or arranging demonstration of Product/Services or Field trials that may be deemed necessary by the Purchaser.	We would like to share that Field trials for entire AWOS system may not be feasible prior to award of contract. However, a site visit to existing installed AWOS system can be organised for the customer team if required. Kindly provide a adequate advance notice for the same if opted by the customer. Also, please share the expectation or specific details of the demonstration required to be showcased during field trials	As per tender document
9.2	**5**	General Section I – GIT Clause 8.2 (ii) Price Bid shall be preferred as per price schedule format in INR only (as per Annexure IV)	There will be substantial items from the IMD RFP deliverables which are required to be imported/ sourced from overseas in foreign exchange (forex). Since forex exchange are exposed to rate variation, a risk mitigation mechanism is required by the bidder. We therefore request IMD to permit payment of the overseas items/ hardware/ services in Foreign currency (USD/EURO/GBP/SEK) or incorporate a suitable forex rate variation clause in the IMD Tender	As per Govt. of India guidelines, The tender is for procurement from Indian bidders in Indian currency INR only.
9.3	**6**	General Section I – GIT Clause 9 Signing and uploading of Tender: Currently the bid submission date is 8th Sep 2020.	Due to complexity and involvement of various OEMs of sub-components of the AWOS system, we require to coordinate and get offers from various suppliers and we are facing delays in receiving of offers due to Covid-19 scenario. And also considering the limitation of resources at OEM site due to Covid-19 scenario and in order to prepare a comprehensive techno-commercial proposal for your Tender, we request IMD to extend the bid submission date by atleast 4 weeks until 8th Oct 2020.	**Please refer to the Reply to the major queries on Page-1 to 3 of this document.**
9.4	**7**	General Section I – GIT Clause 12.2 The technical presentation in the presence of committee may be held in IMD. The committee will seek clarifications on	We request IMD to provide adequate advance notice of **4 weeks** for arranging the necessary experts and their travels for the presentation, if required. Due to Covid-19 scenario, many travel restrictions	As per tender document

		design, performance and other technical points during presentation.	are prevalent.	
9.5	8	General Section I – GIT Clause 14 Inspection, Testing and Factory acceptance test (FAT)	We request IMD to provide adequate advance notice for FAT conduct visit, if required. Due to Covid-19 scenario, we may need sufficient time to prepare the goods for FAT readiness prior to dispatch in a timely manner.	As per tender document
9.6	11	General Section I – GIT Clause 9 Performance Security: Successful bidder shall submit performance security within thirty (30) days from date of dispatch of supply order/award of contract by the purchaser or within twenty-one (21) days from the receipt of supply order by the supplier whichever is earlier.	We would request that Performance Security for MSME or NSIC registered organizations can be accepted upon completion of the delivery at the Airports or site readiness declaration whichever is later. This can help to bring more competitiveness in the procurement cost for IMD.	As per tender document
9.7	12	General Section I – GIT Clause 13 Warranty: The warranty shall be Onsite warranty for three years after successful commissioning of systems.	We request that IMD to consider to amend the warranty clause as below - The warranty period for 36 months after successful commissioning of each system or 40 months for date of delivery at site which is earlier. Since if any site readiness is delayed for reasons not attributable to the bidder, the warranty will lapse at stores for no fault of the bidder.	Comprehensive Warranty will start airport wise from the date of commissioning for each airport.
9.8	15	General Section II – GCC Clause 19.1, 19.2 & 19.3 Terms and Mode of Payment: Cases where installation & Commissioning to be done by supplier 19.1 Cases where installation & Commissioning to be done by supplier: Sixty percent (60%) payment of total value of stores would be made after proof of dispatch of stores to each site on F.O.R basis & FAT certified by supplier & accepted by buyer. 19.2 Balance remaining 40 % of total value of stores shall be made after issuing certificate for installation, commissioning and acceptance of stores by the consignee. 19.3 100% payments towards services like FAT, Training, Transportation, SAT, Installation & commissioning charges etc. if any after their executions and completions. Necessary documents must be submitted for the release of payments.	The payment terms of 60% upon proof of dispatch of stores to each site on FOR basis and balance 40% of total value of stores after acceptance is very tight for MSME company like us wherein 100% is to be paid in advance to all OEMs, especially overseas. Therefore, we request IMD to consider following payment terms: - **80% of stores** upon proof of dispatch of stores to each site on F.O.R. Basis along with 100% payment of the GST, FAT, transportation since these are already provided. - **20% of stores** after acceptance of the system. - For any reasons not attributable to supplier, if the site readiness is delayed beyond 60 days, the remaining **20%** of stores can be paid and 100% of the Training, SAT, Installation and commissioning charges, etc. can be paid after acceptance of the system. - Claims documents competed in all respect, once submitted by supplier, shall be processed within a reasonable time of **30 days** upon submission to respective consignee or any incomplete documents intimation to be provided within seven days from receipt.	As per tender document

9.9	15	General Section II – GCC Clause 19.4 Payment towards Annual Maintenance Contract Charges: The supplier shall send its claim for payment in writing, when contractually due, along with relevant documents etc., duly signed with date, to respective consignees.	We request IMD to include below clause: - Claims documents competed in all respect, once submitted by supplier, shall be processed within a reasonable time of 30 days upon submission to respective consignee or any incomplete documents intimation to be provided within seven days from receipt.	As per tender document
9.10	19	Annexure-1 Checklist Clause 4 Have you enclosed Tender Terms & Conditions Acceptance Form duly filled and signed (i.e. terms and conditions are acceptable) with original set of tender. Tenders may be ignored if not signed.	Please confirm that the signed all pages of tender copy is not required for submission online as a part of Techno- Commercial bid part 1. Please clarify on original set of tender to be enclosed online.	As per tender document
9.11	27	Price bid format Note/ Instructions: i. The bidder shall use their own letter head for quoting the prices.	We understand that price bid is to be submitted in the excel sheet BOQ where in only Bidder name and values are to be entered and uploaded online. We found no provision for uploading Price bid in pdf on Bidder's letterhead online portal for other tender on CPPP. Please clarify.	Tender has to be submitted online as per procedure of Central Public Procurement Portal website www.eprocurement.gov.in
9.12		RFP BOQ BOQ_602451	In the BOQ excel sheet price format, in column F there is a default estimated rate given against each of the line item as "100" which is confusing. IMD may like to review and clarify the purpose of the same.	Tender has to be submitted online as per procedure of Central Public Procurement Portal website www.eprocurement.gov.in
9.13	39	Clause 1 QUALIFICATION CRITERIA FOR BIDDING WHEN TENDERS ARE INVITED ON THE BASIS OF THIS RFP - 1.4 The bidder must have successfully integrated data of AWOS with the Aeronautical Fixed Telecommunication Network (AFTN) and Global Telecommunication System (GTS) of world Meteorological Organization (WMO), at international airports (at least 10 airports) in the last five years, ending on 31st March 2020. A report in this connection should be submitted along with technical bid.	We understand that bidder can submit in the name of OEM in line with clause 1.2 & 1.3 of page 39. Please confirm if this experience qualification can be met by OEM.	As per Govt. of India guidelines, The tender is for procurement from Indian bidders in Indian currency INR only.
9.14	41	Clause 4.6 Shall have redundancy in critical components so as to reduce downtime and increase MTBF.	Kindly clarify on the critical components which needs redundancy.	As per tender document
9.15	42	Clause 5.2 Participate and actively contribute to civil & electrical work required for the installation of frangible mast of 10-metre height, sensors and communication links at selected AMI sites beside the runway and also related	Kindly clarify on the scope of bidder considering the input power (electrical) and OFC (Communication links) will be provided by IMD.	Input power (electrical) and OFC (Communication links) will be provided by IMD.

		works in the receiving end/server end, along with at various display locations in the premises.		
9.16	42	Clause 5, sub para 5.6 The Local Area Network cabling will be provided by the Intender (IMD) at each airport as per the local requirement.	Please confirm that IMD will also provide the OFC/ Communication media - between the AMI sites and all different indoor sites of AWOS - within all indoor sites of AWOS. No OFC/ LAN cabling towards supply or its laying is to be considered by bidder.	OFC already available at the AMI to MBR. If not available, it will be arranged by IMD through airport operator.
9.17	43	Clause 5, sub para 5.14 Arrange loading, unloading and transportation of the equipments and accessories to different airport sites.	Please confirm that IMD - to arrange adequate & conditioned storage space for AWOS stores under lock and key. - to arrange all necessary permits and entry permission to free access airports site for the supplier/its staff/representatives	Permissions from local AAI Offices for required work on airport premises will be arranged by IMD.
9.18	43	Clause 5, sub para 5.17 Offer Three years on-site warranty from the date of commissioning and five years Comprehensive Annual Maintenance Contract (CAMC) upon completion of warranty period.	Please confirm that IMD to arrange all necessary permits and entry permission to free access airports site for the supplier/its staff/representatives during the entire duration of the project for providing timely services during warranty & CAMC period.	Permissions from local AAI Offices on airport premises will be arranged by IMD during the entire duration of the project for providing timely services during warranty & CAMC period.
9.19	46	Clause III, Operating Environmental Conditions a) Temperature -20°C to 60°C b) Humidity 0 % to 100 % RH non-condensing c) Wind Speed survival 60 m/s Note: System should withstand the harsh environment condition, resistance to salinity, 100 per cent precipitation and comply with EN50081 and EN50082 or equivalent conditions.	Please confirm that these conditions are applicable for Visibility/MOR and Runway Visual Range (RVR System) only.	As per tender document
9.20	46	Clause 6.2.2 DAS Data Acquisition System (DAS) DAS shall accept output from above sensors and GPS signal for time synchronization. It shall be flexible and must offer multiple communication methods (Wireless and through OFC cable).	1. We understand that OFC cable supply and laying will be responsibility of IMD. 2. OFC will be terminated at maximum distance of 5 mtr from equipment rack and mast. Please confirm.	OFC already available at the AMI to MBR. If not available, it will be arranged by IMD through airport operator.
9.21	48	Clause 6.3.1.5 Display system consisting of Wireless routers, 10.1-inch Tablet PCs with stand, 40-inch LED display for display of runway parameters as per user selection.	As per page 59 of List of Deliverable items, the size of the monitor is 42 inch LED display for runway parameters. However as per this clause on page 48, it is reflecting as 40 inch. Please clarify.	42 inch display
9.22	48	Clause 6.3.1.6 42" (inch) LED display for passenger Lounge.	We understand that the infrastructure for extending the media connectivity to the Passenger Lounge will be provided by IMD. If not, kindly provide the maximum cable routing distance from CDPI site to passenger lounge in meters.	Details will be shared with qualified bidder L1 after the acceptance of Supply Order.

9.23	**48-49.**	Clause 6.3.2.16 Battery Powered Data processor & Integrator (BPDPI)	Details of BPDPI may be provided by IMD.	For more details please refer to Para number 6.3.2.16 on Page number 53 of tender document
9.24	**54**	Clause 7.1 Delivery Terms: Delivery Schedule: The supplier is required to complete delivery of all the Stores at respective airports within 6 months from date of issue of Supply order.	Considering the overall quantities of the AWOS systems tendered (18 nos.), we request IMD to consider below delivery period since the items needs to be manufactured by the OEM upon receipt of order. 1. First 6 AWOS within **6 months** from Award of PO (APO). 2. Next 6 AWOS system within **9 months** from APO. 3. Next 6 AWOS system within **12 months** from APO.	**Please refer to the Reply to the major queries on Page-1 to 3 of this document.**
9.25	**54**	Clause 7.2 Installation Terms: All the systems shall be installed within three (3) months from the date of delivery of stores at respective site	Considering the overall quantities of the AWOS systems tendered (18 nos.), we request IMD to consider below installation period since the items needs to be manufactured by the OEM only after receipt of order and site readiness to be arranged by IMD including communication media and power connection for AWOS indoor and field sites which we understand is time consuming process within airport area due to sensitivity and security. 1. First 6 AWOS within 9 months from APO or 3 months from site readiness date (SRD) whichever is later. 2. Next 6 AWOS system within 12 months from APO or 3 months from SRD whichever is later. 3. Next 6 AWOS system within 15 months from APO or 3 months from SRD whichever is later.	As per tender document
9.26	**55**	Clause 7.7 Proportionate Amount for CAMC will be paid to the firm once in six months after getting successful maintenance certificate from the station concerned and after deducting applicable penalty (if any).	We request IMD to consider below payment terms for CAMC amount: Every six months claims documents competed in all respect, once submitted by supplier, shall be processed within a reasonable time of 30 days upon submission to respective consignee or any incomplete documents intimation to be provided within seven days from receipt.	As per tender document
9.27	**56**	Clause 7.10 Payment terms	The payment terms of 60% upon proof of dispatch of stores to each site on FOR basis and balance 40% of total value of stores after Acceptance is very tight. We request IMD to consider following payment terms: - **80% of stores** upon proof of dispatch of stores to each site on F.O.R. Basis along with 100% payment of the GST, FAT, transportation since these are already provided. - **20% of stores** after acceptance of the system. - For any reasons not	As per tender document

			attributable to supplier, if the site readiness is delayed beyond 60 days, the remaining **20% of stores** can be paid and 100% of the Training, SAT, Installation and commissioning charges, etc. can be paid after acceptance of the system. - Claims documents competed in all respect, once submitted by supplier, shall be processed within a reasonable time of **(Thirty) 30 days** upon submission to respective consignee or any incomplete documents intimation to be provided within **seven (7)** days from receipt	
9.28	**58**	Clause VI Slave Display Units: Wireless router for 300 mts with Battery backup for 30min.	Potential OEM's have confirmed that there is no wireless router which can provide a coverage of 300 mtrs as required by IMD. Also, we understand that this modem will be used for connecting Tablet PC (slave display only) which will be within 10-50 meters of range. Hence, it is requested to change the wireless router coverage limit to 150 mtrs. which are readily available.	As per tender document
9.29	**59**	Clause X Communication: Wireless modems (License free band) for data communication between AMI sites to ATC and MBR	In the RFP, there are no technical specifications for the wireless modems. Also, as per Annexure I it is required to communicate for 6 kms. We understand that the media of RF communication between two modems will be provided by IMD and only modem (in pairs) is to be provided by bidders. Please confirm.	Quantity mentioned in pairs double of mentioned quantity.
9.30	**68**	Annexure V Tablet PC Specification Point 2: Processor - Intel core i5 or latest Point 6: Screen Resolution: 2560 x 1600 pixels or better Point 7: Screen Size - 10.1 inch Diagonal	We understand that Tablet PC with 10.1-inch diagonal display screen, screen resolution and Intel Core i5 is very restrictive in nature and is leading to a single OEM scenario. We are not getting proper response for this product from OEM. We therefore request IMD to accept other options for processors, screen resolution and display size of 10.1 inch or above or IMD to consider modifying the technical requirement suitably.	As per tender document
9.31	**70**	Annexure VII SPECIFICATIONS OF UPS Point 2: The UPS shall be branded like APC, Tata Libert, Socomec etc.	We understand that bidder is allowed to offer other reputed brands of UPS as well instead of APC, Tata Libert, Socomec, etc. Please confirm.	As per tender document
9.32	**70**	Annexure VIII Tables of reference for field instruments 1. New Delhi Airport 2. Kolkata Airport 3. Bangalore Airport	Please clarify the quantity of System for Visibility/MOR & RVR incl. BLM at -New Delhi Airport 29-11 Runway: 5 nos. -New Delhi Airport 29-11 New Runway: 5 nos. -Bangalore Airport New Runway: 4 nos. -Kolkata Airport 01R-19L Runway : 5 nos.	As per Page number 75 of tender document
9.33	**44**	Clause 6.2.1.6	We understand that the color of	As per tender document

		i) Colour and type of mast White and Frangible	the mast has to be red and white and not only white. Please confirm.	
9.34	**44**	Clause 6.2.1.6 System for visibility/MOR and Runway Visual Range (RVR System)	Kindly clarify the source of power and backup power requirement for RVR system.	As per tender document
9.35	**58**	III DAS Point 3: GPS Receivers - 36 nos.	IMD to specify the location for GPS installation for 36 nos count.	As per tender document
9.36	**42**	Clause 5.10 Interfacing existing Transmissometer with CDPI & BPDPI and display MOR/RVR as per ICAO with user selection for existing Transmissometer or the RVR system offered in response to this tender.	We request IMD to clarify on below points: 1. Interface details of the existing Transmissometer. 2. How to validate data for existing Transmissometer (not supplied by bidder) during conflicts or performance issue if any.	Make and model of the existing Transmissometers will be shared with qualified bidder L1 after the acceptance of Supply Order.
9.37	**61**	List of deliverable XII (5b) All expenses for Factory Acceptance for 18 systems for Five officials at OEM place for 15 days **including their Travel & per diem.**	Please clarify if the cost of Five officials at OEM place for 15 days is to considered by the bidder since Page 26, Point XII 5b and Page 61 List of deliverables XII 5b is in conflict with clause on Page 54, clause 7.5.1. (b), it is the responsibility of the Government of India.	Please see Para 7.5 at Page no. 58. Travel & Stay Expenses will be borne by Government of India.
9.38	**55**	Clause 7.6 & 7.7.3 Comprehensive Warranty and CAMC: Multi-functional Devise (Printer/Scanner/FAX **including printer Cartridge**)	We understand that we have no control on the usage of the consumable items such as printer cartridge, papers, etc. Hence we request that Printer Cartridge cannot be included in the bidder's scope of work during Comprehensive warranty and CAMC period. Please confirm.	One set of Printer cartridges to be provided by the bidder.
9.39	**47**	Clause 6.2.2.2. Specification for DAS: Point 2: Memory: At least 32MB flash memory expandable via SD card Point 10: SD card & USB thumb drive sufficient to store data of at least 3 months.	1. We understand that any type of extended memory such USB Disk, SD Card, etc. should be sufficient as it depends design of the DAS. Please confirm. 2. We understand that any type of extended memory such USB Disk, SD Card, etc. can be used for storage. Please confirm.	As per tender document
9.40	**47**	Clause 6.2.2.2. Specification for DAS: Point 4: Internal Battery: Li ion	We request IMD to consider if UPS System (with 24 hours back up) can be offered for complete sensor site incl. DAS.	As per tender document
9.41	**47**	Clause 6.2.2.2. Specification for DAS: Point 5 - Serial ports: 12 or more configurable serial ports (at least 8 Nos. RS232, at least 2 Nos. TTL and at least 2 Nos. RS485)	We understand ports are required for connecting with all sensor and it is dependent number of sensors to be connected. IMD may provide the privilege to provide necessary ports and can provide additional spares ports requirement, if any.	12 or more configurable serial ports (at least 8 Nos. RS232, at least 2 Nos. TTL and at least 2 Nos. RS485) as per tender document.
9.42	**47**	Clause 6.2.2.2. Specification for DAS: Point 8 - USB 3.0: 1 No. or more	It is understood that USB 2.0 should be suitable for all needs at a DAS. USB 3.0 is only for extremely high speed equipment, and we cannot see any such need here. Please confirm if USB 2.0 or better is acceptable.	As per tender document
10. M/s Central Electronics Limited (CEL), Ghaziabad.				
Sl No.	**Page No.**	**Tender Clause / Reference**	**Query**	**Reply**
10.1	**43**	**Qualification Criteria for bidding Clause No. 1.3** The bidder or his counterpart shall submit a report	The bidder or his counterpart shall submit a report regarding **satisfactory performance of AWOS from end users for**	**Please refer to the Reply to the major queries on Page-1 to 3 of this document.**

		regarding satisfactory performance of AWOS from end users for atleast 20 airports in the technical bid during last five years ending on 31st march, 2020. The technical bid should also have the proof of successful commissioning and the performance of the installed systems from the local Met office or Airport officials	**atleast 2-4 airports** in the technical bid **during last five years ending on 31st march, 2020.** The technical bid should also have the proof of successful commissioning and the performance of the installed systems from the local Met office or Airport officials	
10.2	**43**	**Qualification Criteria for bidding Clause No. 1.4** The bidder must have successfully integrated data of AWOS with the Aeronautical Fixed Telecommunication Network (AFTN) and Global Telecommunication system (GTS) of World Meteorological Organization (WMO), at international airports (at least 10 airports) in last five years, ending on 31st March,2020. A report in this connection should be submitted along with technical bid.	The bidder must have technical ability to integrate the data of AWOS with the Aeronautical Fixed Telecommunication Network (AFTN) and Global Telecommunication system (GTS) of World Meteorological Organization (WMO), at international airports.	**Please refer to the Reply to the major queries on Page-1 to 3 of this document.**
10.3	**48, 6.2.1.6.**	**System for Visibility /MOR and Runway Visual Range (RVR System), Clause No. 1(b)** System should have facility to detect window contamination (due to Dust, Dirt, Pollutants or any other aerosols) automatically & compensate the same in computation of MOR/ Visibility & RVR.	The bidder should employ the techniques to take care of the window contamination aspect to ensure the safe and efficient performance of the RVR system placed on the field.	As per tender document
10.4	**44**	**Gross Specifications of AWOS, Clause No. 4.7(i)** Frangible Mast (height 10m) with provision for tilting/folding along with sensor mounting accessories. The mast shall comply with ICAO Aerodrome Design Manual- Part 6 Frangibility (Doc 9157-Part 6).	Frangible Mast (height 10m) with provision for along with sensor mounting accessories. The mast shall comply with ICAO Aerodrome Design Manual- Part 6 Frangibility (Doc 9157-Part 6).	As per tender document
10.5	**45**	4.6 Shall have redundancy in critical components so as to reduce downtime and increase MTBF.	Do the UPS systems also need to be offered in redundancy? Does this clause apply for the UPS systems for Workstations as well?	As per tender document
10.6	**74**	Point no. 5 Manual & static By-Pass Switch shall be provided for the maintenance of UPS.	Auto Static Bypass comes with all reputed UPS System up to 10kVA in Single Phase only. For all the 3Ph UPS Systems, there is a Manual Bypass system. Which system shall be acceptable to IMD?	As per tender document
10.7	**74**	Point no 8 Enclosure of UPS shall meet the IP-20 protection requirements to IS: 13947 (Pt. 1. /1993)	Enclosure for all UPS is IP-20 but no certification can be produced for IS:13947(Pt 1/1993) Shall IMD accept the same without any specific certification	As per tender document

			from the Indian OEM?	
10.8	**28**	Point no V (Workstation Point 3 - UPS Qty 72 no's)	The UPS systems supporting the workstations shall also be on online type in nature, for better monitoring of the equipment health.	As per tender document
10.9	**46**	The Local Area Network cabling will be provided by the Intender (IMD) at each airport as per the local requirement.	The integration/merger of the network shall happen with the LAN cabling that is pre-existing at the airport; no parallel network shall need to be established. IMD to confirm on the same.	As per tender document
10.10	**64**	5.6 Outdoor cabling for both AMI sites. Underground Armoured Twisted pair cable is to be used for Integration of RVR with DAS 100 m X 18 airports	Vendor shall be liable to provide only 100m of cabling activity for the extraction of RVR Data to DAS. The extra share of cabling, regardless of its length, shall be provided by IMD at the respective airports. In short, the vendor shall integrate their 100m cabling with the pre-existing cabling as provided by IMD.	As per tender document
10.11	**64**	Indoor cabling works for the installation of communication systems, Servers, work stations, Wireless Router Etc. 100 m X 18 airports	Vendor shall be liable to provide only 100m of cabling activity for the installation of communication systems, Servers, work stations, Wireless Router etc. The extra share of cabling, regardless of its length, shall be provided by IMD at the respective airports. In short, the vendor shall integrate their 100m cabling with the pre-existing cabling as provided by IMD.	As per tender document
10.12	**43**	The bidder or his counterpart shall submit a report regarding satisfactory performance of AWOS from end users for at least 20 airports in the technical bid during last five years ending on 31st March 2020. The technical bid should also have the proof of successful commissioning and the performance of the installed systems from the local Met office or Airport officials.	The bidder or his counterpart shall submit a report regarding satisfactory performance of AWOS from end users for at least 2-4 airports in the technical bid, during last five years ending on 31st March 2020. The technical bid should also have the proof of successful commissioning and the performance of the installed systems from the local Meteorological office or Airport officials.	**Please refer to the Reply to the major queries on Page-1 to 3 of this document.**
10.13	**43**	1.4 The bidder must have successfully integrated data of AWOS with the Aeronautical Fixed Telecommunication Network (AFTN) and Global Telecommunication System (GTS) of World Meteorological Organization (WMO), at international airports (at least 10 airports) in the last five years, ending on 31st March 2020. A report in this connection should be submitted along with technical bid.	The bidder must have the technical ability to integrate the data of AWOS with the Aeronautical Fixed Telecommunication Network (AFTN) and Global Telecommunication System (GTS) of World Meteorological Organization (WMO), at international airports.	**Please refer to the Reply to the major queries on Page-1 to 3 of this document.**
10.14	**48**	6.2.1.6/1(b) System should have facility to detect window	The bidder should employ the techniques to take care of the window contamination aspect to	As per tender document

		contamination (due to Dust, Dirt, pollutants or any other aerosols) automatically & compensate the same in computation of MOR/Visibility & RVR.	ensure the safe and efficient performance of the RVR system placed on the field.	
10.15	**44**	4.7(i) Frangible mast (height 10m) with provision for tilting/folding along with sensor mounting accessories. The mast shall comply with ICAO Aerodrome Design Manual – Part 6 - Frangibility (Doc 9157 - Part 6).	Frangible mast (height 10m) with provision for along with sensor mounting accessories. The mast shall comply with ICAO Aerodrome Design Manual-Part 6-Frangibility (Doc 9157 - Part 6).	As per tender document
10.16	**63**	VII/Central Web server Central web server at Pune & Delhi with static IP and its software for viewing &downloading Air-port data from 18 airports.	What shall be the deliverables of this section to establish the redundant web servers at IMD Pune and IMD Delhi? Who shall provide for the necessary Work-station which shall host the redundant data?	As per tender document
10.17	**19**	Terms and Mode of Payment/19.1 Cases where installation & Commissioning to be done by supplier: Sixty percent (60%) payment of total value of stores would be made after proof of dispatch of stores to each site on F.O.R basis & FAT certified by supplier & accepted by buyer.	FAT shall need to happen at India only and IMD shall have to accept this, as FAT at their respective OEMs shall render a lot of delay in the delivery of the STORES at the respective Airports. Delivery of STORES cannot happen on a ubiquitous note to all the airports; So, IMD shall have to approve a staggered delivery of the STORES at the respective airports. The payment for the same shall be claimed from IMD on pro-rata basis.	As per tender document
10.18	**19**	Terms and Mode of Payment/19.2 Balance remaining 40 % of total value of stores shall be made after issuing certificate for installation, commissioning and acceptance of stores by the consignee.	The SAT of STORES cannot happen on a ubiquitous note to all the airports; So, IMD shall have to approve a staggered delivery of the STORES at the respective airports. The payment for the same shall be claimed from IMD on pro-rata basis.	As per tender document
10.19	**48**	Field Units/6.2.1.4 Atmospheric Pressure Sensor (Class-A type pressure sensor)	Shall IMD accept the Pressure Sensor only with Class A certification or they are open with the provision of a Pressure Sensor which can technically comply with the specifications of that of a Class A type Sensor?	As per tender document

11. M/s Rational Technologies Pvt. Ltd. Sonipat, Haryana.

Sl No.	Page No.	Tender Clause / Reference	Query	Reply
11.1	**47**	6.2.1.1. Wind Sensor	A traditional cup and vane type sensor is asked which requires maintenance and recalibration from time to time. We would like to know if we can propose ICAO/FAA compliance ultrasonic Anemometer for the same.	As per tender document
11.2	**N/A**	Eligibility Criteria	Will there be any relaxation for Indian vendor in eligibility criteria reference to Make in India movement and Govt. recent decision to promote made in India products.	Purchase preference shall be given to Make in India, as per the policy of Government of India to encourage Make in India and promote manufacturing and

				production of goods and services in India circulated Vide Order No. P-45021/2/2017- B.E.-II, Ministry of Commerce and Industry, Department of Industrial Policy and Promotion dated. 15.06.2017.

12. M/s Microstep Monitoring Information Systems India Pvt. Ltd, Bengaluru, Karnataka.

Sl No.	Page No.	Tender Clause / Reference	Query	Reply
12.1	Page 39, cl 1.1	If the bidder is not OEM then manufacturer's authorization letter must be submitted along with technical bid.	if the bidder is not the OEM, is it sufficient to get the MAL from the AWOS supplier or is it needed for all the sensors.	As per Govt. of India guidelines, The tender is for procurement from Indian bidders in Indian currency INR only.
12.2	Page 39, cl 1.5	The bidders shall have necessary financial resources to successfully execute the projects on turnkey basis. The annual turnover of the firm should be at least INR 150 Million during each of the past three years ending 31st March 2020	Can the bidder bid on the basis of turnover of the AWOS manufacturer as we are bidding on their behalf.	As per Govt. of India guidelines, The tender is for procurement from Indian bidders in Indian currency INR only.
12.3	Page 39, cl 1.6	The Indian bidder shall have a registered and/or incorporated office in India operating for at least five continuous years ending on 31st March 2020.	We are a subsidiary of MicroStep-MIS of Slovakia AWOS OEM) and the Indian company is 4 years old. The company is a lender MSME Could you please relax the criteria to 4 years	As per tender document
12.4	Page 42, point 5.1	Supply, install, integrate, test calibrate and commission complete AWOS system at selected AMI site.	Please elaborate the calibration requirement at site. The Sensors are calibrated at manufacturer's premises.	As per tender document
12.5	Page 42. Clause 4	4.11. Provision of auto generation of Aerodrome MET summary in IDESK and Date9 format. The formats will be provided by IMD.4.12. Provision to generate digital current weather register as per the IMD format. The format will be provided by IMD.	Could you please provide sample formats for proper estimation.	Details will be shared with qualified bidder L1 after the acceptance of Supply Order.
12.6	**Page No 42** point No **5. Scope:** 5.10	Interfacing existing Transmissometer with CDPI & BPDPI and display MOR/RVR as per ICAO with user selection for existing Transmissometer or the RVR system offered in response to this tender.	How many transmissometers are installed at each Airport?- Please provide Make & Model number	Make and model of the existing Transmissometers will be shared with qualified bidder L1 after the acceptance of Supply Order.
12.7	**Page No 43** point No **5.18**	Keep provision (Hardware & Software) in each AWOS for secured, web-based central monitoring facility for remote monitoring of all data health and statistical parameters.	IS this a Centralised Monitoring of all the AWOS sites? Should the facility be provided or just a provisioning to be done for future use?	As per tender document
12.8	**Page No 44- point** No **6.2.1. Sensor: 6.2.1.3**	RH sensor - Solid state Capacitive	Request to consider Thin Paper capacitive type sensor as well as they have been operational in many Airports.	As per tender document
12.9	**Page No 45** point No **6.2.1.6**	Spectral response :- 400 to 700nm of visible light	The standard range is 420-675 nm, peak 565 nm Analogous to CIE luminous spectral efficiency. Request to consider this range as well.	As per tender document

	Background Luminance Monitor (BLM)			
12.10	**Page No 46** point No **6.2.1.7 Present Weather Sensor**	Precipitation intensity measurement: - 0 to 900 mm h-1 or better.	Standard practice to measure precipitation intensity is 0 to 500 mm per hour and a rangeof 0-900 mm/hr is suited by manufacturer. Request to accept 0 to 500 mm per hour range which is still which is still 67% more than the heaviest rain storm every recorded.	As per tender document
12.11	**Page No 46** point No **6.2.1.7 Present Weather Sensor**	Precipitation detection threshhold: - 0.05 mm h^{-1} or better.	Precipitation detection threshold should be different for liquid & solid precipitation i.e. rain & Snow & able to distinguish between both.	As per tender document
12.12	**Page No 48 Indoor Equipment point No 6.3.1.16**	There should be one parallel Battery Powered Data Processor & Integrator (BPDPI) (Powered by battery with adapter) which shall simultaneously obtain data from all runway sites, process and display it on LCD screen. BPDPI shall be programmed for computing QNH from QFE and other station specific & ICAO standard atmospheric table. This Unit shall process and generate all numeric values for all aviation requirements. This BPDPI unit shall consume less Power and with battery support shall work for one day without ac mains power. This unit shall also be useful in case of server failure due to some reason. The unit shall also have an inbuilt or external memory to store data required for all operational requirements for aviation for a period of seven days. BPDPI unit should be configurable and capable of obtaining data from Aviation Instrument systems (of same make & model offered) installed at additional runway sites as & when constructed by AAI without any additional cost to IMD.	Please provide re detail BDPI. Is it laptop OR small PC working on battery Backup?	As per tender document
12.13	**Page 49, point 6.3.2.8**	CDPI shall generate ATIS information and able to interface to the DATIS server of Airport Authority of India	We understand that MET REPORT should be sent to existing ATIS software. Please clarify.	As per tender document
12.14	**Page 49. sl 6.3.2.11**	CDPI shall have facility to upload data and health parameters of field equipment into the IMD web server at user defined intervals using FTP or http protocol.	Please clarify what data in which format and how often should be sent from AWOS to IMD web server?	Details will be shared with qualified bidder L1 after the acceptance of Supply Order.
12.1	**Page**	In case of failure of field Data	Could you please clarify what	Details will be shared with

5	49, 6.3.2.15	logger /field system, in order maintain zero down time, CDPI should have the facility to take data from IMD current Weather Instrument systems & Drishti Systems. Required IP & Port No and Data string format (both in ASCII or Hex data format) will be provided by IMD.	IMD current weather instrument systems & Drishti systems are installed at the airports now and what data should be integrated into new system?	qualified bidder L1 after the acceptance of Supply Order.
12.16	Page 49, sl 6.3.2.16	There should be one parallel Battery Powered Data Processor & Integrator (BPDPI) (Powered by battery with adapter) which shall simultaneously obtain data from all runway sites, process and display it on LCD screen. BPDPI shall be programmed for computing QNH from QFE and other station specific & ICAO standard atmospheric table. This Unit shall process and generate all numeric values for all aviation requirements. This BPDPI unit shall consume less Power and with battery support shall work for one day without ac mains power. This unit shall also be useful in case of server failure due to some reason. The unit shall also have an inbuilt or external memory to store data required for all operational requirements for aviation for a period of seven days. BPDPI unit should be configurable and capable of obtaining data from Aviation Instrument systems (of same make & model offered) installed at additional runway sites as & when constructed by AAI without any additional cost to IMD.	Please elaborate this point. Is This a PC? From where does it get the inputs. From the server or the field instruments	Details will be shared with qualified bidder L1 after the acceptance of Supply Order.
12.17	Page 50, point 6.3.4.2	3) 42-inch LED display at various locations for viewing required data from either single runway or multiple runway with zooming facility as per user selection.4) 42-inch LED Display at Passenger Lounge Receive Data containing wind, temperature, Humidity, Visibility & RVR, Rainfall intensity and satellite images from remote server through Internet only. The parameters to be displayed shall be user selectable.	Are these Slave displays only or should they be PCS with processing capabilities When you say "User selectable", does it mean selection at the server end ?	Slave displays are for viewing required data from either single runway or multiple runways with zooming facility as per user selection.
12.18	Page 50, point 6.3.3.1	4 ATCO b) Template for ATIS generation.	Please clarify what ATIS template is requested here, its functionality, description etc. Our system supports to create appropriate communication channel for sending coded MET REPORT to existing ATIS system so no ATIS template is needed. Please confirm.	As per tender document
12.19	Page 52 6.3.5.2f	All the computer time shall be synchronized with GPS	Should a GPS device for server/PC time synchronization	As per tender document

			be proposed?	
12.20	**Page 53, point 6.3.5.5**	Web Based Remote Monitoring System	Could you please clarify what functionalities are needed? Description in this point is very general and not clear	As per tender document
12.21	**Page No 51 Point No 6.3.4.3**	I) Horizontal wind shear along the runway	Please elaborate this point	As per tender document
12.22	**Page 62.**	Indoor units schematic	Please republish the diagram again as it is not clear.	Layout of Indoor Equipment is attached at Annexure-1
12.23	**Page No 63 Proposed layout site selection for installation of AWOS**		Can we propose RVR at one end and Present weather & Visibility at the other end. This will be a cost effective solution.	As per tender document

13. M/s Microcomm India Limited, New Delhi.

Sl No.	**Page No.**	**Tender Clause / Reference**	**Query**	**Reply**
13.1			Kindly extend the due date by 3 weeks since we would need some time after the pre bid minutes to submit our offer.	**Please refer to the Reply to the major queries on Page-1 to 3 of this document.**
13.2			Payment terms should be changed to after successful installation & commissioning at each airport in a phased manner.	As per tender document
13.3			Total delivery and installation & commissioning time to be changed to 18 months for all 18 sites.	**Please refer to the Reply to the major queries on Page-1 to 3 of this document.**

14. M/s SGS Weather & Environmental Systems Pvt. Ltd, New Delhi.

Sl No.	**Page No.**	**Tender Clause / Reference**	**Query**	**Reply**
14.1	**Page 10,**	**Point No. 8 Earnest Money Deposit (EMD):** Micro and small Enterprises specified by Ministry of Micro, Small & Medium Enterprises (MoMSME) are exempted from earnest money deposit (EMD). EMD also known as security deposit	Please confirm if bidder who is not the manufacturer of major sensors and software and is having MSME certificate is exempted for EMD or not. Or The Bidders who are system integrator of meteorological system is eligible for exemption from EMD or not	This is a tender for procurement of goods, so the bidders registered for supply of specific goods are exempted from EMD submission.
14.2	**Page 41,**	**Point No. 4.6** - Shall have redundancy in critical components so as to reduce downtime and increase MTBF	This is an open statement and critical component need to be define as every organization have their own definition of critical components. Please confirm	As per tender document
14.3	**Page 42,**	**Point No. 4.12** -Provision to generate digital current weather register as per the IMD format. The format will be provided by IMD	In reference to the clause, can you please provide IMD template/format to generate digital current weather?	Details will be shared with qualified bidder L1 after the acceptance of Supply Order.
14.4	**Page 41,**	**Clause 4.8 and 5.9 –** Auto generation of METAR / SPECI/ MET report/ Special etc. and their dissemination over GTS & AFTN networks as per ICAO "Annex-3", WMO "Manual on the GTS" and ICAO "Annex-10 Volume-II".	The scope of work need to be clarified Do we need to provide standard AFTN message as per ICAO "Annex-3" on our server serial port which will be compatible with IMD/AAI AMSS. or	Details will be shared with qualified bidder L1 after the acceptance of Supply Order.

		The messages should strictly follow the AFTN / GTS format, so that it gets ingested automatically to AAI AMSS as well as IMD AMSS through Socket and FTP using Ethernet or Serial interface. Data stream analysis and ingest to AAI or IMD AMSS will be the responsibility of the Vendor.	We need to generate the message and ingest in the existing IMD/AAI AMSS. In this case please clarify all existing IMD/AAI AMSS accept standard message format at all the18 Airports and if any hardware interface and cabling is required at these airports.	
14.5	**Page 43 -**	**Point No. 5.18 -** Keep provision (Hardware & Software) in each AWOS for secured, web-based central monitoring facility for remote monitoring of all data health and statistical parameters	Keep provision (Hardware & Software) in each AWOS is an open statement. This involves financial implication. This should be clarified either IMD needs it or not. If IMD needs it, do we need to provide monitoring servers and web based application at the central monitoring facility. If this is required, this needs to be added in List of deliverables.	As per tender document
14.6	**Page 45 –**	**Point No. 6.2.1.6 e) -** Provision of external USB port or Ethernet RJ45 port for local maintenance.	Please also include serial port as an option for maintenance terminal. The connection with serial port for maintenance is more reliable.	As per tender document
14.7	**Page 45 –**	**Point No. 6.2.1.6 (II) C -** Back ground Luminance Monitor (BLM) – **(a)** -Measurement Range - 0 to 40000 cd per Sq. meter	The Back-ground Luminance Monitor (BLM) measurement range need to be change to 2 - 40000 cd/ Sq M as '0 cd per Sq. meter' is not possible as per Law of Physics.	BLM O/P is 0 to 40000Cd per Sq.m as per Tender document however for computation of RVR 0 to 2 Cd per sq.m may be considered as 2cd per Sq.m as Log(0)= minus infinity.
14.8	**Page 47 –**	**Point No. 6.2.2.2 -** Specification for DAS		
14.9		(4) -Internal Battery - Li -ion	The type of internal battery need to be change as latest state of art technology	As per tender document
14.10		(5) -Serial ports - 12 or more	Adding 12 serial port on a data logger is an overkill and reduces the processing speed, instead of asking 12 serial ports, IMD should ask for number of free serial ports required after configuration of all the sensors in the present scope of work. This will help all the bidders to optimize their sensor outputs and processing speed. Further the latest sensors are all on RS485 as the length of the cable in the field between the sensor and the DAS is more than 25 to 50 meters. This data cannot be transmitted on serial port.	As per tender document
14.11		(22) - In built RTC with Li-Ion Battery	The type of battery need to be change as latest state of art technology.	As per tender document
14.12	**Page-48 -**	**6.3.1.1 -** Indoor Unit Dual Hot Redundant CDPI Online sine wave UPS for half-an hour backup with SMF battery to cater to the requirement of all indoor equipment. Detailed	As per our past experience for installation of similar equipment for Airports, we suggest "Online UPS for three-hour backup with SMF battery to cater to the requirement of all indoor equipment"	As per tender document

		specifications of online UPS are given in Annexure – VII	This is necessary change for smooth running of the server and to avoid sudden shutdown.	
14.13	**Page-49**	**6.3.2.8 -** CDPI shall generate ATIS information and able to interface to the DATIS server of Airport Authority of India.	This point need to be clarified. AWOS system can provide standard DATIS output and interface to DATIS server of Airport Authority of India should not be responsibility of AWOS supplier as different DATIS work on different formats and principals. This point should be changed to "CDPI shall generate ATIS information and should be available on the server serial port as per standard ICAO format."	As per tender document
14.14	**Page - 49 &42 -**	**Clause 6.3.2.13, 6.3.2.14, 6.3.2.15 and 5.10 -** CDPI to Accept Data from existing sensors and future installed sensors from other OEMs – 6.3.2.13 and 14	IMD through this procurement is buying complete system which will be in compliance with ICAO and FAA stringent guidelines. The supplier here has to take the complete responsibility of compliance with ICAO and FAA rules and create reports, METAR and other aviation messages which are as per the international standards. Once the Airport system is configured and commissioned, adding any further third party sensor will void the compliance of ICAO and FAA guidelines and the vendor will not be responsible. This requirement need to be change that system should compatible for future up-gradation using OEM specific or recommended sensors. Integration of DRISTI with the system is not technically possible as RVR is the heart of the system and provides major part of information in all the aviation reports.	As per tender document
14.15	**Page - 50 -**	**6.3.4.1 –Slave Display Units-** Slave Display to have provision for dynamically configuring information to be displayed	With Slave Display, provision for dynamically configuration is not advisable. This can create confusion and should be selected while commissioning the system at the server level to provide the symmetrical views. Standard views for day and night vision should be selected. However, the screen of forecaster workstation and observer work station should be configurable.	As per tender document
14.16	**Page - 50 -**	**6.3.4.4 –(4)** - 42-inch LED Display at Passenger Lounge - The parameters to be displayed shall be user selectable	There are several display-page templates available which are optimized with respect to display resolution. The user can select any option. The requirement for the "parameters user selectable" to be displayed. "Parameter user selectable" to be removed.	As per tender document
14.17	**Page - 51 -**	**6.3.4.3 - Display Parameters –** 42-inch LED display at various locations & 42-inch LED Display at Passenger	Please confirm that 42-inch LED display at various locations & 42-inch LED Display at Passenger Lounge need to offer with Touch Screen.	As per tender document

		Lounge. **Under para 6.3.4.3.** Following Parameters are to be displayed as per user selection, i.e. user shall configure the display structure, Runway site by finger touch on a touch screen Tablet PC and LED display	These LED display with touch screen will not be viable solution as these display will be hang on roof or on some height. We therefore request you to remove touch screen LED display from para 6.3.4.3.	
14.18	**Page - 51 -**	**6.3.4.3 - Display Parameters** - User shall configure the display structure	There are several display-page templates available that the user can select. The display pages are pre-configured for safety reasons. The requirement for "User shall configure the display structure" should be change to User shall be able to select pre-configured pages.	As per tender document
14.19	**Page - 51**	**-6.3.5.2 - Data Presentation** - NOTAM Report	NOTAM is an information generated to inform the airport on the downtime of an operational system or event which can hamper the operation of airport. NOTAM cannot be generated through AWOS as this an operation system and human intervention is required to inform airport when AWOS system is not working. Generation of NOTAM report need to be removed.	As per tender document
14.20	**Page - 53 -**	**6.3.5.5 - Web Based Remote Monitoring System** Firm shall programme the CDPI server for auto uploading of AWOS data and its health parameters into the web server at IMD, Pune through FTP.	It may be changed to FTP/ HTTP/ TCP as all the three are the standard internet protocols.	As per tender document
14.21	**Page - 54 –**	**7.1.2- Delivery Schedule** **Delivery Schedule:** The supplier is required to complete delivery of all the Stores at respective airports within 6 months from date of issue of Supply order.	**Request to Change the following in Delivery & Payment Terms:** 1. Delivery of AWOS equipments in staggered manner in place of one lot delivery. 2. The supplier is required to complete delivery of all the Stores at respective airports within 18 months from date of issue of Supply order. 3. Payment of the supply to be made in lots. 60% of the payment to be made against each airport supply at the respective sites. 4. Balance 40% of the equipment cost will be done after commissioning of individual airports. **Request to Change the following in Installation Terms:** 1. All the systems shall be installed within Twelve (12) months from the date of delivery of stores at respective site. 2. The Airport will be commissioned as and when ready instead of commissioning	**Please refer to the Reply to the major queries on Page-1 to 3 of this document.** **Payment & Other terms & conditions as per tender document.**

			all the 18 Airport together. 3. The payment of services, installation & commissioning to be paid in 100% against the commissioning of each airport. 4. The warranty of the airport to start from the individual day of commissioning. 5. Late Delivery charges should be applicable on the value of the delayed stores after 18 months and LD charges for Integration, Installation & Commissioning should be applicable airport wise after 12 months of supply at each airport. Delay in providing the site by IMD, power availability at site and security clearance of the engineers should be added in the commissioning timelines. These changes in delivery and payment terms are required for maintaining the cash flow and smooth execution of the project.	
14.22	**Page - 54 –**	**7.2-** Installation Terms All the systems shall be installed within three (3) months from the date of delivery of stores at respective site	As Above.	As per tender document
14.23	**Page - 54 -**	**7.5.1 & Page-42 5.11 —** Factory Acceptance Test a) The firm will submit testing and acceptance plan for comments by IMD. Factory acceptance test (FAT) and site acceptance test (SAT) details are also to be provided. The firm will also provide the schedule for FAT and SAT. b) FAT will be carried out by Five IMD officials for 18 (Eighteen) systems for a period of 15 days. Travel & Stay Expenses will be borne by Government of India.	Since the nature of the project has changed from Global buy to Indian Bidders only. The requirement of Factory Acceptance Test (FAT) need to be removed as the payment will be made after delivery of the equipment at sites.	Please see Para 7.5 at Page no. 58. Travel & Stay Expenses will be borne by Government of India.
14.24	**Page - 55 -**	**7.6 –Comprehensive Warranty** Comprehensive Warranty for 3 years	Comprehensive Warranty need to start airport wise after completion of commissioning for each airport.	Comprehensive Warranty will start airport wise from the date of commissioning for each airport.
14.25	**Page - 56 -**	**7.10.1** - Payment Terms and Conditions	Payment need to be link with individual Airport delivery and installation as stated above.	As per tender document
14.26	**Page-41,**	**4.7 (i) & Page -56 -Clause 8** Frangible mast (height 10m) with provision for tilting/folding along with sensor mounting accessories. The mast shall comply with ICAO Aerodrome Design Manual – Part 6 - Frangibility (Doc 9157 - Part 6). 10m frangible wind mast (tiltable)X 78 Nos	Kindly Clarify if center hinge tower is required or tillable from base is required. Center hinge is easy to maintain and can be done by single person whereas base tillable 10 meter Tower needs 3-4 person to lower down the tower for maintenance. Your statement "with provision for tilting/folding" is not clear.	As per tender document
14.27	**Page-41,**	**4.7 (i) & Page -56 -Clause 8** Frangible mast (height 10m) with provision for tilting/folding along with sensor mounting accessories. The mast shall comply with ICAO Aerodrome Design	Frangible mast is critical item for any Airport installations. Seeing the present cases for the plane skidded off the runway during bad weather condition, Frangible tower plays an important role. We request you seeing the	As per tender document

		Manual – Part 6 - Frangibility (Doc 9157 - Part 6). 10m frangible wind mast (tiltable)X 78 Nos	importance of frangibility, It is essential that frangibility tests are conducted and verified under supervision of an independent third-party that is recognized by ICAO and the FAA, such as Intertek and NLR. The test reports, certificate of these competent third party agency (who have experience for conducting these tests) must be submitted along with bid document.	
14.28	**Page 7**	**Para 12.3 Financial evaluation** Indian Stores : GST will be added to calculate the lowest bidder	1. Since GST will be calculated to estimate the lowest bidder, kindly clarify if the IMD will provide GST certificate of exceptional R&D rate or not. If GST exceptional certificate will be provided the rate of applicable GST will be 5% if GST exceptional certificate is not provided the rate of GST will be 18%. The clarification in this regard is requested. 2. Also since the tender is now Bid in Indian Rupees only, addition of GST to calculate L1 bidder should be removed. 3. Will IMD accept bids in High Sea Sale?	GST exemption certificate will not be provided. GST will be added to calculate the lowest bidder.
14.29	**Page 42**	**Para 5.6** The local area Network cabling will be provided by IMD at each stations as per the local requirement.	This process will make the installation complex and will delay in the execution. Local area cabling and networking should be kept in bidders scope as this will help in the complete responsibility of the system network. The requirement should be added in the list of material and online price bid excel file	As per tender document
14.30		**General Clarification**	Outdoor OFC cabling. Kindly confirm that the outdoor OFC cabling will be provided by IMD in stipulated time and any delay in getting the cable will not stop the airport from commissioning.	Yes, OFC already available at the AMI to MBR. If not available, it will be arranged by IMD through airport operator.

15. M/s Vaisala India

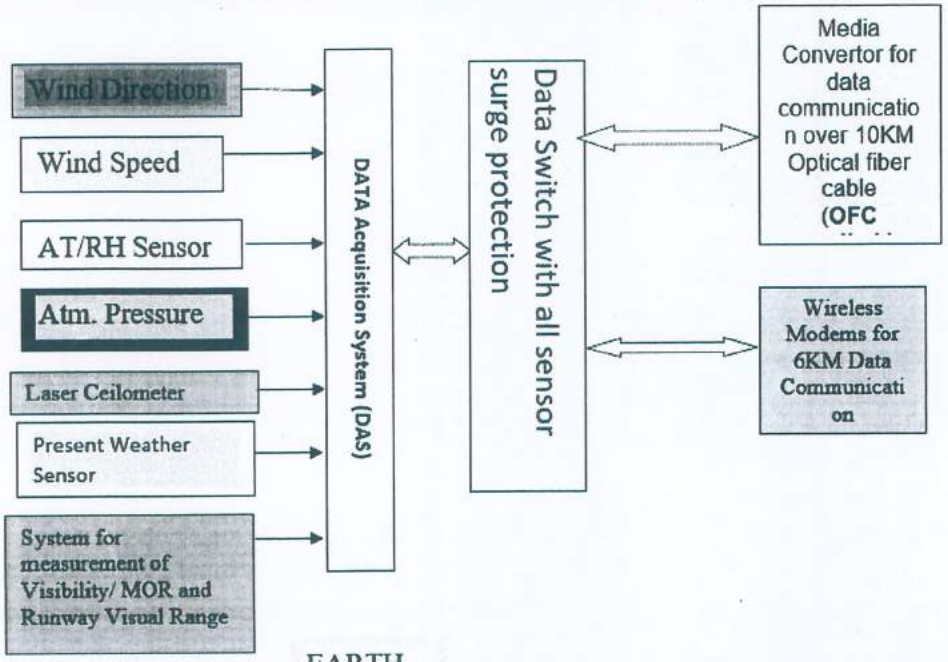
Sl No.	**Page No.**	**Tender Clause / Reference**	**Query**	**Reply**
15.1		Delivery Terms under Clause 7.1	Given the large volume of equipment to be delivered against the above tender, especially 78 Nos of DAS, 54 Nos RVR systems with BLM, 52 Nos of Present Weather Sensors and 26 Nos of Ceilometers, we would like to inform you that the Delivery Terms under Clause 7.1 of the Tender Document is very difficult to meet. Supply of stores at the respective airport within 6 months of award of supply order is highly challenging with our present production capacity. To ensure that the AWOS system is manufactured and delivered by Vaisala to the highest level of quality as required by ICAO standards and tender	**Please refer to the Reply to the major queries on Page-1 to Page-3 of this document.**

			specifications, we kindly request you to extend the delivery time for stores to respective airports from 6 months to 18 months. We also kindly request you to allow deliveries in multiple tranches with each tranche covering supply of all stores to a specific set of airport(s) over the 18 month delivery period.	
15.2		Clause 4.8 under SECTION 4 – Gross Specification of AWOS	The METAR/SPECI/MET messages are required to strictly follow AFTN/GTS format and be automatically ingested to AAI and IMD AMSS. Please confirm if AAI and IMD AMSS Gateway accept messages in AFTN format? In that case Vaisala can provide the METAR/SPECI message with AFTN framing, sent out in plain Ascii format to an AFTN switch for worldwide distribution. This is widely used globally. Whereas AMHS (ATS Message Handling System) is designed to replace AFTN, but not so widely in use yet. It is a binary message sent out in X.400 protocol, and establishes a 2-way communication channel. AMHS is an option available in Vaisala Avimet. Please confirm if IMD and AAI AMSS gateway accepts messages in standard AFTN format.	As per tender document
		Clause 4.11 under SECTION 4 – Gross Specification of AWOS.	There is a requirement to provide auto generation of Aerodrome MET summary in IDESK and Date9 format. The formats will be provided by IMD. However, we are not aware of these formats. Would it be possible to provide those formats so that we can study the same and check if it is possible to auto generate Aerodrome MET summary in iDESK and Date9 format.	Details will be shared with qualified bidder L1 after the acceptance of Supply Order.

(K.N. Mohan) (Dr. R.K. Jenamani) (Suresh Chand)

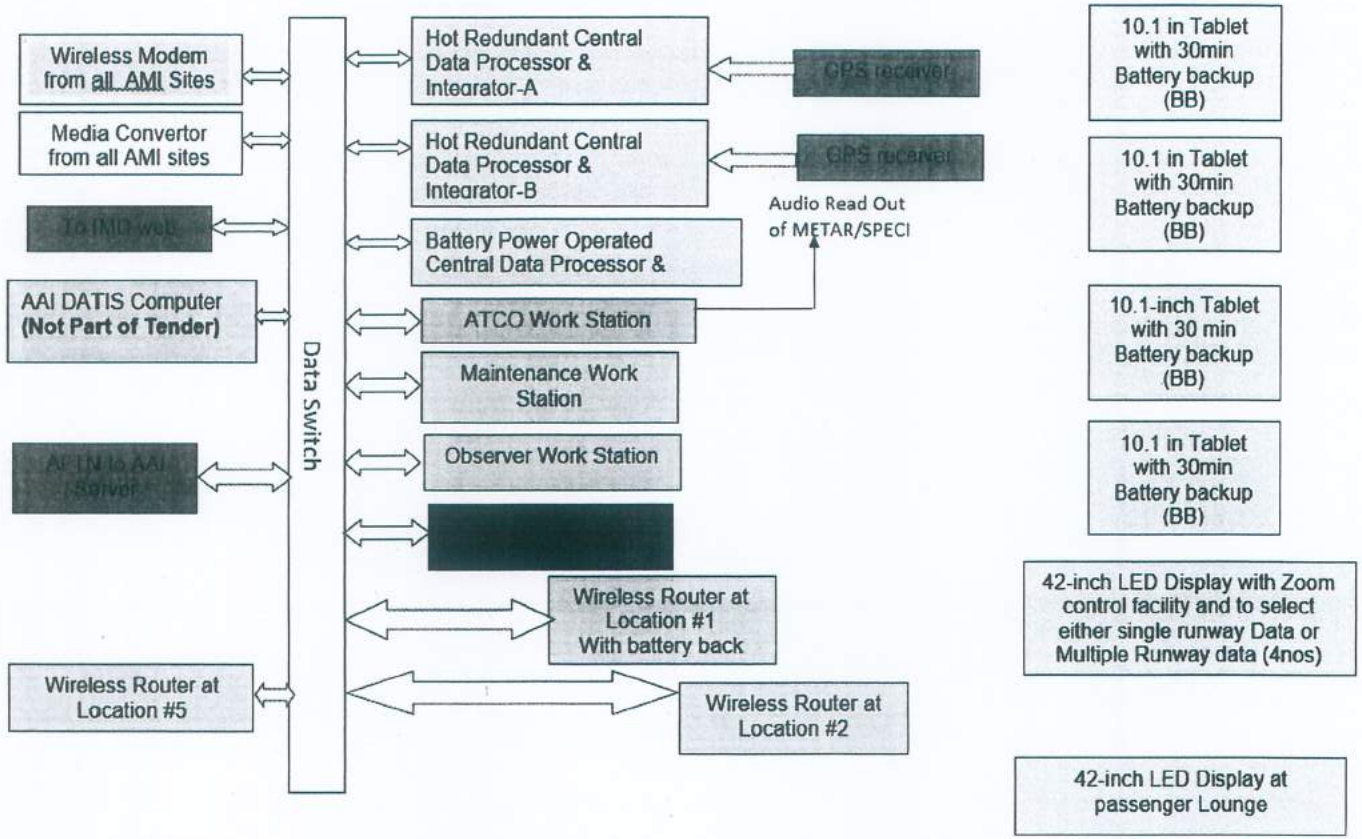
(Gajendra Kumar) (Sankar Nath) (C.S. Tomar)

BLOCK DIAGRAM OF FIELD AVIATION WEATHER OBSERVING SYSTEM (AWOS)



Note: The data from RVR, may come through Data Acquisition System OR directly go to Field communication units via surge protection system.

INDOOR UNITS OF AWOS



Proposed layout site selection for the installation of AWOS