

Minutes of the meeting of Pre-Bid Committee held on 07.08.2025 at 1000 hours IST for the Procurement of 20 Nos. SSPA based C-Band DWRs and 25 Nos. X-Band DWRs under the Mission Mausam

India Meteorological Department (IMD) has invited bids from global firms vide Tender Reference Number CPU/53/0725/1553 dated: 26.07.2025 for the Procurement of 20 Nos. SSPA-based C-Band DWRs and 25 Nos. X-Band DWRs under the Mission Mausam through the Central Public Procurement Portal of the Government of India. Secretary, MoES, has constituted the following committee in the e-Office File No. DGM-HQ-24022(11)/1/2024-UAID (Comp. No. 40908) vide Note # 314 dated 01.08.2025 to conduct the Pre-Bid meeting, Evaluation of Technical and Financial bids for the procurement of 20 Nos. of SSPA-based C-Band & 25 Nos. of SSPA-based X-Band Doppler Weather Radars under 'Mission Mausam'.

1. Dr. D. Preveen Kumar, Scientist 'G', NCMRWF	Chairperson
2. Dr. (Ms.) Soma Sen Roy, Scientist 'G', Radar Division, IMD	Member
3. Sh. Santosh Kumar S., DDG(A), IMD	Member
4. Sh. S. Gopal Krishna, Director (IFD), MoES	Member
5. Sh. Rajendra Kumar Kumhar, Director (Finance), IMD	Member
6. Member from the Indian Air Force	Member
7. Dr. S. I. Laskar, Scientist 'F', CPU, IMD	Member
8. Sh. K. Ambethkar, Scientist 'D', MC Imphal, IMD	Member
9. Sh. Rohit Shukla, Scientist 'D', Radar Division, IMD	Member Secretary

The representatives from the following firms attended the Pre-Bid meeting:

1. M/s Bharat Electronics Limited, Bengaluru.
2. M/s Astra Microwave Products Limited, Hyderabad.
3. M/s. AVON Defence Systems Private Limited
4. M/s. Neometrix Defence Limited
5. M/s Data Patterns (India) Private Limited, Chennai.
6. M/s. Electronics Corporation of India Limited, Hyderabad
7. M/s. Lotus Microwave Technologies Private Limited,
8. M/s SGS Weather & Environmental Systems Private Limited, Gurugram
9. M/s. PEC, New Delhi

The Pre-Bid meeting was held in hybrid mode on 7th August 2025 at 10:00 hours IST in the Conference Room, Mausam Bhavan, New Delhi, physically as well as through VC mode. The committee discussed and deliberated on all the Pre-Bid queries submitted by prospective bidders vis-à-vis the published tender document. The detailed response of IMD to the queries raised by various firms in writing via email is tabulated below:











S. No.	RFP Reference	Requirement as per RFP	Query	Remarks/ Clarification
1. M/s Bharat Electronics Limited, Bengaluru.				
1.	Page No:173 Clause 2.5 Detection capability	X band: 13dBZ or better at 100km range with 2RPM 0.5us pulse width and 450Hz PRF to be operationally demonstrated.	To achieve 13dBZ at 100km, PRF of 1000Hz or 1250Hz is sufficient, which would give advantage in processing due to additional number of DTPs. With 450Hz PRF the number of DTPs will be lesser and range will be more than 300km (much higher than the actual requirement of 100km) Kindly consider and update RFP accordingly.	Agreed Detection Capability of X-Band, it may be read as "X Band: B. 13 dBZ or better at 100 km range with 2 RPM, appropriate pulse width satisfying the range resolution of 75m, and 1250 Hz PRF to be operationally demonstrated."
2.	Page No:176 Clause 2.36 Tower height	d) The structural design should be certified by a competent third party Authorized agency. The copy of the structural design report shall be submitted at the time of Design Review.	After the Design review and clearance from the committee only the tower design can be finalised and initiated with vendor. Further the design will be finalised and will be taken up for certification by third party agency. Hence the final structural design report will be submitted during FATS. Kindly consider and update RFP accordingly.	The final structural design report certified by a competent third party Authorized agency is to be submitted within six months after the completion of Detailed Design Review.
3.	Page No:177 2.36 Radome	c) The radome RF measurements should be certified by a competent third party authorized	After the Design review and clearance from the committee only the Radome purchase order will be placed on vendor. Further after manufacturing of Radome, the test results will be taken up for certification by third party agency.	The final radome RF measurements report certified by a competent third party Authorized agency (a government institute /Laboratory with expertise in the related field) is to be submitted

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		agency. The agency should be a government institute /Laboratory with expertise in the related field. The test results have to be produced by the successful bidder during the detailed design review (DDR).	Hence the certified test results will be submitted during FATS. Kindly consider and update RFP accordingly.	within six months after the completion of Detailed Design Review.
4.	Page No:183 2.50.3 Data Outputs (All Base Products)	A. 8 bit for transmitting to Remote site / Central Server. B. 16 bit for data acquisition and Local storage.	Request to maintain same bit format for transmitting to remote and local storage so that processing of data products can be done in similar way at both locations. Kindly consider and update RFP	As per Tender Document
5.	Page No:188 2.54 & 2.55 (Online UPS & Green Diesel generator)	Two online UPSs, in redundant mode and each with minimum capacity of 15 KVA or more..... & At least 20 KVA or suitable Green Diesel Generator Set with AMF panel.....	The Power requirement for X band is less as compared to C band. So request to update in RFP for X band as 10KVA UPS and 15KVA DG. Kindly consider and update RFP.	As per Tender Document
6.	Page No: 15	All the 20 C band and 25 X	Considering the time required for procurement of long lead items	As per tender document

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	2.0 Requirement Details (ITB clause 5.0) Terms of Delivery	band along with associated systems including AWS and disdrometer to be delivered, installed, accepted and commissioned within 18 months from the date of issue of the contract agreement.	like MW components, Power Amplifiers and manufacturing of Antenna/Radome, the delivery may be modified as 15 months for supply, 2 months for installation and 1 month for commissioning of first radar from date of contract. Subsequently remaining radars to be supplied installed & commissioned in 30 months in phased manner from the date of contract. Kindly consider and update RFP.	
		3. All the items are required to be delivered directly at respective sites. Dispatch of stores will be on DAP basis. The firm will be responsible to deliver the items at each site.	Please share the details of the locations/warehouse where the systems/sub systems of DWR required to be delivered post contract.	The details will be provided to the successful bidder.
7.	Page No: 213 SLA requirement of operational Services	19.2 The selected bidder shall be fully responsible for the end- to end operation and maintenance of the C & X band DWR system along with disdrometer and	COMAC requirement is indicated But there is no line item in BOQ (Excel sheet) to add cost related to Warranty & COAMC. Request to update RFP and BOQ.	As per Tender Document. Please refer to the Instructions for Filling the Bill of Quantities (BoQ).








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		AWS system at each designated installation site, in accordance with IMD's operational requirements. This includes ensuring uninterrupted 24x7 operation and continuous data availability at respective DWR Site throughout the 3-year Warranty and 7-year COAMC period.		
8.	Page No: 249 Price Schedule & BOQ Page No. 162 Section	2.33- (25 Nos. of X Band DWR) Additional Tower Height (per 5m) (Optional)* *This cost will not be considered while evaluation of bids. Qty- 20 Nos. 2.33: In BOQ (Excel sheet) also Qty is 20 Nos. 2.12: Additional Tower Height	Qty should be 25 Nos. in case of X Band DWR. Also in BOQ, Qty to be changed to 25 Nos. Request to update RFP and BOQ. Qty- 25 Nos. is correct & same to be mentioned in the BOQ & Price Schedule. (Ref above)	Quantity may be read as "25" for BoQ item No. 2.33. Taxes in the dedicated column (11,12,13 and 14) of BoQ item no. 2.33 may be entered for 25 nos. Further, as per Tender document, item no. 1.33 and 2.33 of BoQ will not be considered during financial evaluation.

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S. No.	RFP Reference	Requirement as per RFP	Query	Remarks/ Clarification
	VI: Schedule of Requirements	(per 5m) (Optional)* *This cost will not be considered while evaluation of bids. Qty- 25 Nos.		
9.	Page No. 172 Section VII: Technical Specifications & Quality Assurance	Tender document No. mentioned is CPU/53/1224/1550	The present Tender No. Is CPU/53/0725/1553 To be corrected.	Agreed. The present Tender No. is CPU/53/0725/1553

2. M/s. Astra Microwave Products Limited, Hyderabad.

1	Page no 172 Clause No. 2.1	Range of Observation: For C-Band Radar: Reflectivity: 450 km Velocity & Spectrum Width: 250 km For X-Band Radar: Reflectivity: 100 km Velocity & Spectrum Width: 100 km.	For X-Band Radar, the range for Reflectivity and Velocity/Spectrum Width is mentioned as the same (100 km), whereas in C-Band Radar Reflectivity is 450 km and Velocity/Spectrum Width is 250 km. Kindly confirm.	As per Tender Document
2	Page no 172 Clause No. 2.4	Unambiguous Velocity Maximum required	For lower wavelength system, the maximum velocity requirement 1.5 times the larger wavelength system. Both requirements can be	As per Tender Document.

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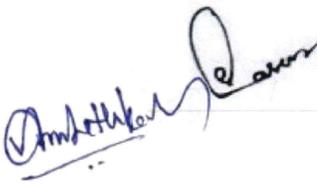
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S. No.	RFP Reference	Requirement as per RFP	Query	Remarks/ Clarification
		unambiguous velocity is +/- 30 m/s for a 5cm (C-Band) Radar upto 250 km and +/- 45 m/s for a 3 cm (X-Band) Radar upto 100 km. Both X and C Band Radar: 1. Consistent with PRFs specified below in Sl. No 2.11; 2. Ambiguity Resolution up to four times the Nyquist Velocity	met in principle with their respective accuracies. The reference of PRF to be looked at Sr.no. 2.11 is not having any number.	
3.	Page No. 172 & 173 Clause 2.5	Detection Capability C-Band: A. 13 dBZ or better at 230 km range with 2 RPM 0.5 μ s pulse width and 600 Hz PRF to be operationally demonstrated. X Band: B. 13 dBZ or better at 100 km range with 2 RPM 0.5 μ s pulse width and 450 Hz PRF to be operationally demonstrated.	In X-Band PRF value for testing range 100km is kept lower than C-Band long range observation of 230km. Is this correct, or can be modified. This type of testing will have impact on velocity estimation.	“Detection Capability of X-Band, it may be read as “X Band: B. 13 dBZ or better at 100 km range with 2 RPM, appropriate pulse width satisfying the range resolution of 75m, and 1250 Hz PRF to be operationally demonstrated.”
4.	Page No. 178	Parameters to be Measured & Displayed	The range resolution of the DWR system is 75m, so the measurement with <75m resolution is not	As per Tender Document. Except, $\Delta r < 75m$ may be read as “The range

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S. No.	RFP Reference	Requirement as per RFP	Query	Remarks/ Clarification
	& 179 Clause 2.47	a) Reflectivity (ZH & Zv) Dynamic Range: -31 dBZ to +90 dBZ Resolution: 0.1 dB Accuracy: ≤1dB @ SNR >10dB r=230Km (for C band Radar) r=100km (For X band Radar); Δr<75m.	possible. Moreover, the accuracy of parameters measured with 150m/300m resolution keeping in mind of SNR in that operation. If it is very specific, hope, IMD is done a simulation with suggested peak power and various other parameters to meet this specification in the dynamic range stated.	resolution of the DWR system is 75m(Δr)". Simulation to be demonstrated by the firm during technical presentation during technical evaluation of the tender.
5.	Page 178 Clause No. 2.43 & 2.47	Linear dynamic range: 95 dB or better Dynamic Range: -31 dBZ to +90 dBZ	Sr. No. 2.43 suggest that Linear dynamic range 95 dB or better for the system. 2.47 implied dynamic range is 121dB. Is it possible get some explanation on this part of specification and what is to be demonstrated and what condition.	As per Tender Document.
3. M/s. AVON Defence Systems Private Limited				
1			Following up on the pre-bid conference, we would like to seek clarification on whether Startups and MSEs are exempted from the Turnover and Experience criteria for the above-referenced tender. Request you to kindly confirm if such exemptions are applicable.	As per Tender Document
4. Neometrix Defence Limited				
1.			Kindly confirm whether attending the pre-bid meeting is mandatory, as firms not attending will be ineligible to bid.	Attending the Pre Bid is Not Mandatory and will have no effect on eligibility to participate in the tender.
2.			Are MSME- registered vendors	As per Tender Document

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S. No.	RFP Reference	Requirement as per RFP	Query	Remarks/ Clarification
			exempt from submitting the EMD?	
3.			Please confirm the agency responsible for final inspection and clearance	India Meteorological Department
4.			Joint Venture/ Consortium is allowed and eligible or not for bidding	As per tender document
5.			Past performance of bidder can be considered for JV companies or not?, installation and performance certificate from outside India is considerable for eligibility or not ?	As per Tender Document
6.			Financial standing of 190 Cr for MSME is not feasible, request you to please make it average of 45-50Cr so that MSME can participate	_ As per Tender Document
7.			Financial standing can be considered with JV companies or not	As per Tender Document
8.			Kindly confirm if all civil works and input electrical power is in in IMD	As per Tender Document
5. DATA PATTERN (INDIA) PVT LIMITED, Chennai				
1.	Section VI page no 154	Schedule of Requirements	It is mentioned as "Destination state" in Column 10 of Schedule of Requirements, please clarify what data need to be mentioned in Column 10.	Refer Appendix C

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S. No.	RFP Reference	Requirement as per RFP	Query	Remarks/ Clarification
2.	Section VII page no 210 and point 15	Project Schedule In Tender document, All the 20 C band and 25 X band DWRs along with associated systems including AWS and disdrometers to be installed, accepted and commissioned within 18 months from the date of issue of contract agreement.	Proposed Project schedule, The lead time of the components are high, so the mentioned project schedule is not sufficient. We request IMD to ammend following delivery schedule. ➤ First Radar to be delivered in 12 months at site. ➤ Installation and Commissioning of first radar will be 15 months. ➤ Remaining Radars will be delivered within 30 months and Installation and commissioning for the same will be completed within three months from the date of delivery at site.	As per tender document
3.		General BoQ	In Tender document warranty period is mentioned as 3 years, but there is no provision to enter the price in BoQ file. We request IMD to clarify where the Warranty cost need to be entered or added.	As per Tender Document. Please refer to the Instructions for Filling the Bill of Quantities (BoQ).
4 & 5	Section VII Page no 172 Point 2.5 Detection capability	C band A. 13 dBz or better at 230 km rangewith 2 RPM 0.5 μs pulse width and 600Hz PRF to be operationally	1. Please clarify, if the mentioned pulse width of 0.5us, refers to the transmitted pulse width or it is related to the bandwidth (1/Bandwidth)? If it is transmitted pulse width, achieving a detection of 13dBz at 230Km seems unfeasible with	Detection Capability of C-Band, it may be read as "C Band: A. 13 dBZ or better at 230 km range with 2 RPM, appropriate pulse width satisfying the range resolution of 75m, and 600 Hz PRF to be operationally

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S. No.	RFP Reference	Requirement as per RFP	Query	Remarks/ Clarification
		demonstrated. X Bands B.13 dBz or better at 100 km range with 2 RPM 0.5 μs pulse width and 450 Hz PRF to be operationally demonstrated.	given transmit power. Requesting to ammend the RFP to specify a transmitted pulse width greater than 80us to enhance the feasibility of the detection. 2) PRF of X-Band is mentioned less than C-Band DWR. Please reconsider this to update it to >1000Hz.	demonstrated” Detection Capability of X-Band, it may be read as “X Band: B. 13 dBZ or better at 100 km range with 2 RPM, appropriate pulse width satisfying the range resolution of 75m, and 1250 Hz PRF to be operationally demonstrated”
6	Section VII Page no 178 Point 2.44 Minimum Discernible Signal	-108 dBm or better @2MHz Bandwidth at IF signal output i.e., Signal Processor input).	Please clarify whether the mentioned MDS with Matched filtering losses included. With respect to the NF=3 dB & 2MHz(63dB) bandwidth MDS will be around -108 dBm(approx). calculated as: $\text{MDS (dBm)} = -174 \text{ dBm/Hz} + 10 \cdot \log(2,000,000) + 3 \text{ dB} = -174 + 63 + 3 = -108 \text{ dBm.}$ If we consider Matched filtering losses, MDS will be >-108 dBm. Request you to reconsider this and update it to -107 dBm or better @ 2MHz with Matched filtering losses.	As per Tender Document
7	Section VII Page no 178 Point 2.47 Parameters to be measured and	Dynamic Range: -31 to +90 dBZ;Resolution: 0.1 dB;Accuracy: ≤1dB @ SNR>10dB;	should be 95 dB or better. However, the dynamic range of Reflectivity is mentioned here is -31 dBZ to +90 dBZ, which is 121 dB.	As per Tender Document.

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S. No.	RFP Reference	Requirement as per RFP	Query	Remarks/ Clarification
	displayed	r=230Km (for C band Radar); r=100km (For X band Radar); $\Delta r < 75m$.	Please clarify on the same	
6. M/s. Electronics Corporation of India Limited, Hyderabad				
1	TIS (Tender Information Summary, clause 10, ITB Clause 9.4) (Refer Pg.no. 20)	Performance Security: Applicable @5% of Order value Bid Security (EMD) of Rs.9,24,00,000/- (Mentioned in CPPP portal)	ECIL being a CPSU, an Indemnity Bond in lieu of BG shall be acceptable. Bid Securing Declaration for exemption of EMD shall be provided. Please confirm waiver of EMD amount of Rs.9,24,00,000/-	As per Tender Document
2	Terms of Delivery (Pg. No 15)	All the 20 C band and 25 x band along with associated systems including AWS and disdrometer to be delivered, installed, accepted and commissioned within 18 months from the date of issue of contract agreement	The given time line of 18 months is very restrictive and short for project (45 systems) of Turnkey in nature. Therefore we request for amending the Delivery Schedule as First Radar system in 13-14 months and Installation & Commissioning within 15 months & then 2 systems per months until all systems are complete.	As per tender document
3.	Requirement Details (ITB- clause 5.0) (Pg. No	Schedule 1 : 20 no's of C-Band Dual Polarized SSPA based	Can we submit bid only for one type system i.e. C- BAND or X-BAND DWR's?	NO As per Tender Document

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S. No.	RFP Reference	Requirement as per RFP	Query	Remarks/ Clarification
	15 & BoQ sheet)	Doppler Weather Radar Schedule 2 : 25 no's of X-Band Dual Polarized SSPA based Doppler Weather Radar	Please confirm?	
4.	Demonstration Section VII (4.1.8) Page no. 197	Demonstration of Radar Products during Tender Evaluation Phase.	Although we would be bidding as a Class-I supplier with more than 50% local content, if our OEM is a foreign entity and the main goods/systems are being offered from abroad, is it permissible to demonstrate the equipment at an overseas location outside India during the Technical Evaluation Committee (TEC) stage?	Simulation results to be shown by the firm during technical presentation during technical evaluation of the tender.
5.	General	Bid Submission End Date :9th Sept, 2025	For the preparation of comprehensive response confirming to the terms and conditions of the RFP, It is requested to extend due date of submission of bid for 6 weeks i.e. till 24th Oct 2025.	As per Tender Document
7. Lotus Microwave Technologies Private Limited				
1	1(i) Experience and Past Performance	Bidders should have proven capability of successfully manufacturing, supply and commissioning of Doppler	Since we are a company falling in the MSE category, we request IMD to confirm if the prior experience criteria is applicable to us	As per Tender Document

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S. No.	RFP Reference	Requirement as per RFP	Query	Remarks/ Clarification
		<p>Weather Radars.</p> <p>The bidder shall be a weather radar manufacturer or shall have arrangements with foreign collaborators with phased indigenization as per DIPPOM No. P-45021/2/2017-PP (BE- II) dated 4th June 2020.</p> <p>Bidder may be manufacturer or integrator of transmitter (SSPA), RF Receiver, digital systems and receiver (Three Channel IF Processing in single PRF), signal processing systems (Hardware and so ware), Servo system, Antenna & Mechanical system, designed and developed</p>		

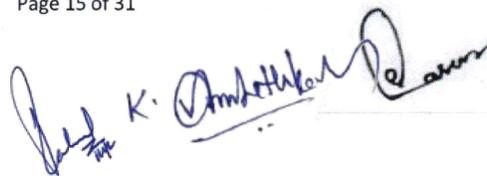
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S. No.	RFP Reference	Requirement as per RFP	Query	Remarks/ Clarification
		for Doppler Weather Radar system.		
2	Financial Standing	The average annual financial turnover of 'The bidder' during the last three years, ending on '31st March, 2025, should be at least Rupees One Hundred and Ninety crore(INR 190 Crore) per annum. In this regard audited annual balance sheet and profit or Tender Document - CPU/53/1224/15 50 [230] Procuring Organization loss statement/report s, duly authenticated (by a Chartered Accountant/Cost Accountant in) of last three consecutive years shall be submitted along	Since we are a company falling in the MSE category, we request IMD to confirm if the prior turnover criteria are applicable to us	As per Tender Document

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S. No.	RFP Reference	Requirement as per RFP	Query	Remarks/ Clarification
		with technical bid.		
8. M/s. SGS Weather & Environmental System Pvt Limited, Gurugram				
1	Part quotation not allowed, TIS / 2.0 Page No. 8	The tender pertains to procurement of Twenty (20) number of C-Band and Twenty Five (25) number of X-Band Polarimetric Doppler Weather Radar Systems.	<p>If Company 'A' has lower price for C-band and higher price for X-Band, overall the Company is L1.</p> <p>And the Company 'B' who has higher price for C-band and lower price for X-band and overall L2</p> <p>Will the Company 'B' who has quoted price lower for X-band will be given Purchase order for X-band at higher price based on the L1 total price of Company 'A' under splitting of order option amongst two/ three vendors.</p> <p>Kindly clarify</p>	NO. As per Tender Document
2	Section VIII/ 2.1	Financial Standing – under all conditions - The average annual financial turnover of the bidder during the last three years, ending on 31st March, 2025, should be at least Rupees One Hundred and Ninety crore	<p>The annual financial turnover requirement of INR 190 Cr is excessively high.</p> <p>This eligibility condition will restrict participation of only by Big Players and prohibit participation of MSEs even though they have proven technology. Whereas GoI encourage larger participation by MSEs. GoI is promoting Start-ups and MSEs to strengthen manufacturing base in India for high-end technology but such restrictive clause defeat the very purpose and discourage MSMEs</p>	As per Tender Document

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S. No.	RFP Reference	Requirement as per RFP	Query	Remarks/ Clarification
		(Rs. 190 Crore) per annum.	<p>to invest in infrastructure and create capabilities.</p> <p>Since the MSE turnover limit as per the Government of India rules is 100 Cr. The Financial turnover limit should be exempted for MSE.</p> <p>The clause needs to be changed in coherence with the Govt of India policy which states "Registered MSEs are exempted from the requirement of "prior turnover" and "prior experience" in public procurement tenders subject to meeting technical and quality specifications in the bid."</p> <p>Further "2. Manual for Procurement of Goods Second Edition, 2024 Page 25, Para 9. Specifications in Tenders and other procurement solicitations:</p> <p>Sub para b) Procuring entities shall endeavour to see that eligibility/ qualification conditions, including on matters like turnover, production capability, and financial strength, do not result in unreasonable exclusion of 'Class-I local supplier'/ 'Class-II local supplier' who would otherwise be eligible beyond what is essential for ensuring quality or creditworthiness of the supplier. Request: The tender clause should be changed to encourage MSE companies by allowing</p>	

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S. No.	RFP Reference	Requirement as per RFP	Query	Remarks/ Clarification
			exemption in Turnover.	
3	2.5 A Page 173	C-band 13 dBZ or better at 230 km range with 2 RPM 0.5 μ s pulse width and 600 Hz PRF to be operationally demonstrated.	To obtain 13 dBZ sensitivity at $R_{max} = 230$ km, the pulse width flexibility has to be long, may be around 90 μ s. However, 75m range resolution can be achieved through appropriate pulse compression.	Detection Capability of C-Band, it may be read as "C Band: A. 13 dBZ or better at 230 km range with 2 RPM, appropriate pulse width satisfying the range resolution of 75m, and 600 Hz PRF to be operationally demonstrated"
4	2.5B Page 173	X-band 13 dBZ or better at 100 km range with 2 RPM 0.5 μ s pulse width and 450 Hz PRF to be operationally demonstrated.	Optimum PRF for $R_{max} = 100$ km is about 1500Hz. Specifying PRF=450Hz in this context is not clear. For achieving sensitivity of 13 dBZ at 100 km pulse width has to be long, may be around 90 μ s. However 75m range resolution can be achieved through appropriate pulse compression.	Detection Capability of X-Band, it may be read as "X Band: B. 13 dBZ or better at 100 km range with 2 RPM, appropriate pulse width satisfying the range resolution of 75m, and 1250 Hz PRF to be operationally demonstrated"
5	2.50.1 Real Time processing, Page 180	FPGA based or equivalent for Base Product generation (required FPGA Board and Workstations shall be provided)	IS the proposed FPGA board in addition to IFDR and RVP forming part of the main system?	As per Tender Document
6	Tech. spec 1.iv Page 171	Calibration facility at each site. Internal sig. Gen with Digital	Details of calibration setup (like hardware items forming part of supply) may be spelt out explicitly to remove	As per Tender Document.

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S. No.	RFP Reference	Requirement as per RFP	Query	Remarks/ Clarification
		attenuator, noise source etc. May be power sensor too	subjectivity.	
7	7.6 Page 204	Deliverable for control centre	No matching Annexure III is seen.	Delivery of control centre is as per BoQ.(Annexure III)
8	7.2 Page 204	Control and monitoring centre, Calibration Centre etc.	This concept is not clear from rest of the document	As per Tender document
9	5.4.1.2 Page 201	Radial velocity at a fixed user defined range on height and azimuth angles (Radial velocity display for fixed range, azimuth angles for various height and azimuth)	Product type is not clear.	As per Tender document
10	5.1.16 Page 198	Displaying of data of base data listed shall be possible and will be selected as and when required by the end user for the operational and analysis purpose in single	Not clear. Seeking clarification	As per Tender document

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S. No.	RFP Reference	Requirement as per RFP	Query	Remarks/ Clarification
		terminal.		
11	4.2.1 Page 197	Provision to display data capture time in both UTC and IST in the images and display simultaneously in RADAR data product	Seeking clarification if both UTC and IST are to be displayed or just UTC would do as is the normal convention in weather radar data display.	As per Tender document
12	4.1.1 Page 196	products in NETCDF, GRIB2, HDF5, KML, KMZ formats and Nexrad-level II formats	Seeking clarification if the products are also to be archived in each of these formats.	Archival in NETCDF format and conversion tool should be supplied to convert to other formats as per tender document.
13	4.1.11 Page 197	Data format converter from Raw Data format as well as products to ASCII	Does the products also be converted to ASCII ?	As per Tender document
14	4.1.9 Page 197	Implementation of Rainfall mosaic: integration shall provide a comprehensive mosaic, regardless of the frequency band of each DWR.	Request amend the clause	As per Tender document Clarification:It is to clarify that the Rainfall mosaic is to be carried out for entire IMD Radar network. Existing Radar Data format details will be provided to successful bidder

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S. No.	RFP Reference	Requirement as per RFP	Query	Remarks/ Clarification
15	4.1.7 Page 196	Demonstration of Rainfall mosaic:	What exactly is expected from demonstration and implementation...(4.1.7 versus 4.1.9).	As per Tender document
16	3.5 Page 196	Hard Disk should be retained by the organization (IMD), even if it is faulty. This excludes any hard disks / flash disks or storage media that contains any data of IMD	seeking clarity	As per Tender document
9. M/s. PEC, New Delhi				
1.			Delivery of all the 45 systems have been sought within 18 months, how this is possible, that to complete with installation, commissioning, and acceptance, including the FAT at OEM premises, transportation, customs, and other incidental etc. this is unrealistic. The lead time for radar itself is 8-9 months for one RADAR, considering the FAT/SAT and other manufacturing related dynamics are involved. Please clarify.	As per tender document
2.			In tender it is stated that part quote is not allowed, however the bid splitting is allowed.	Part Quotation is not allowed.
3.			Seller is responsible for all customs duty, clearance, transportation to	As per Tender Document

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S. No.	RFP Reference	Requirement as per RFP	Query	Remarks/ Clarification
			site, since it is global tender, IMD should manage to clear the goods through their nominated freight forwarder, putting this on OEM onus it would create more problem and financial exodus.	
4.			Seller is responsible for civil work, ensuring the power supply till the installation, post completion of installation IMD will ensure the power supply, also the civil work must be seismic tolerant, how this is possible, all this would delay in execution of contract and would attract penalty for delay. The seismic zone information must be ascertained by IMD in advance and notify as part of tender, the civil work can be	As per Tender Document
5.			it is not clear from tender whether it is global tender or make in India , because at several places it has been stated the phased indigenization is solicited, then how the radars would be manufactured and delivered within the stipulated time, the local company has to understand the Radar Technology and its performing criteria, before they can even manufacture , hence there is bench marking on past performance for such an sophisticated procurement of Doppler Weather Radar. It must be completely global except for the items like Tower, Computer, civil	As per Tender Document

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S. No.	RFP Reference	Requirement as per RFP	Query	Remarks/ Clarification
			work, UPS, Generator, Transportation if any can be done on local currency, hence the price bid should allow two types of scope of work and respective currency to be quoted.	
6.			The qualification criteria are not adequate to state that OEM or their channel partner must have delivered a specific number of DWR across the globe with proven performance and user credentials.	As per Tender Document
7.			Quantity Splitting: the ratio given is 70:30 50:30 :20, how this would be implemented? The is no proper narrative and when the vendor pitch in with prices for larger quantity the same price will not be applicable for smaller quantity, also it would not be prudent to ask one vendor to match the L1 prices, since the technology and product specification would vary from OEM to OEM.	As per Tender Document
8.			Reverse Auction: the most dangerous part, IMD should aim to get the quality Radar with proven performance rather indulging in RA process, this procurement is for Doppler Weather Radar which is very important to measure and forecast the major weather events which effect the public at large and national economy is dependent on timely prediction of weather phenomena , this procurement is	As per Tender Document

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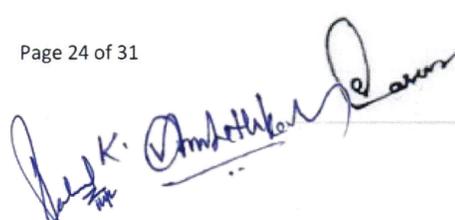
 K. Anandakumar



S. No.	RFP Reference	Requirement as per RFP	Query	Remarks/ Clarification
			<p>not general merchandise like computer, UPS for furniture, also no OEM is willing to participate in the RA , since the prices that is offered is for the complete supply, delivery, installation, commissioning , training etc also 3 years of warranty and 7 years of CAMC, this RA process would kill the very impetus of buying such an sophisticated equipment, the emphasis should be on proven supplier with functioning of DWR, this is major deterrent factor in radar tender , NO OEM will ever commit to price reduction and also it would be difficult to coordinate the prices with different stake holders at the same time. The criteria of elimination of highest bidder would be implemented which means the price is only criteria not the proven performance and established manufacturer.</p>	
9.			<p>Customs duty: Is IMD entitled for concessional rate of customs duty, rather they should approach government to seek concessional rate of customs duty to save money and facilitate the procurement of worldclass equipment for such a critical requirement at much better and fast deliveries. IMD should arrange to clear the goods and arrange for transport to ultimate site rather putting the onus on Seller.</p>	As per Tender Document

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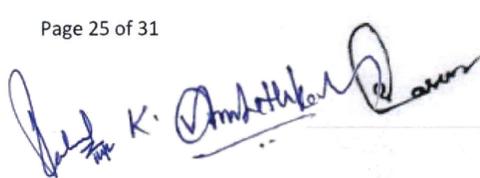






S. No.	RFP Reference	Requirement as per RFP	Query	Remarks/ Clarification
10.			Performance Bond: in most of tenders the current rate of PBGT is 3% whereas in the tender it is specified as 5%, this needs to be clarified.	As per Tender Document
11.			Also, these bonds would remain valid for next 10 years, 3 years of warranty and 7 years of CAMC plus 60 days, hence there would be tremendous financial drain on supplier as this amount would remain blocked for 10 years.	As per Tender Document
12.			Tender also encourages for production of these Radar under the manufacturing licence, technical collaboration, however the price escalation for the exchange rate variation of the imported components is allowed, how IMD envisages to ensure that there is level playing field for the direct quote and the one produced here with Exchange Rate Variation is allowed. The prices that are quoted should remain firm and valid till the execution of order that is the standard operating procedure for all the contracts.	As per Tender Document
13.			Payment Terms: this is not all practical. 20% advance is allowed with the contract and subsequent to this 5% more would be provided upon completion of Design Review Meeting, and these advances are to be protected against the 110% Bank Guarantee, essentially the supplier	As per Tender Document

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 K. Sambathkumar


S. No.	RFP Reference	Requirement as per RFP	Query	Remarks/ Clarification
			is not getting any money as these days bank does not provide the BG on collateral security or margin money, the collateral security or pledging has to match with the amount of BG, hence there is no fun, further these BG's have to be established through Indian Bank, who will also impose their charges, which means two banks one from overseas and other from India will also impose their charges , added to this current banking norms facilitate the local banks to extend the bank guarantee validity for additional one year from the given validity which means the seller has to pay more money to bank for these BG's which is again a major deterrent for tenders.	
14.			Price Negotiation is also allowed in tender, then why Reverse Auction, though GFR rules says, there shouldn't be any price negotiation post opening of commercial bid, however the buyer can seek some discount from vendor	As per Tender Document
15.			WPC: this clearance mandate is also given to vendor, this very cumbersome process, IMD should assume this responsibility through their Ministry, rather putting the onus on Vendor, who should be more focussing on manufacturing these Radars, rather running in government corridors to expedite all these formalities. Most of other	As per Tender Document

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S. No.	RFP Reference	Requirement as per RFP	Query	Remarks/ Clarification
			institutes functioning under Moes does these clearances on their own.	
16.			<p>Training: only 2 weeks of training at the OEM premises have ben envisaged, how this has been arrived with only 2 weeks training, will the people from IMD will get enough training on both version of Radars C Band and X Band?</p> <p>In nutshell instead of creating a tender document of more than 300 pages, the scope of work, qualification criteria, payment terms, clarity on Global Tender and its related terms , delivery timeline should be more realistic , hence aprecise and concise tender documents should be prepared so that prospective vendor can read and respond appropriately rather reading between the lines and also there are several overlapping clauses are existing which is confusing and ignorance of any of these conditions could post potential threat and disqualification.</p>	As per Tender Document
17.			Automatic Weather station should be delinked from Radar Manufacturer Scope	No. As per Tender document
18.			Disdrometer Should also be delinked from Radar Manufacturer Scope.	No. As per Tender document

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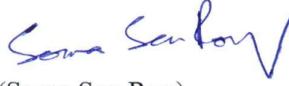
In addition, the committee noted the following observations in the tender document and proposed the corresponding corrections:

1. The updated Form 2 is enclosed as an Annexure.
2. Section III ITB 4.1 may be read as 'Make in India (MII) policy will be applicable.

The meeting ended thanking all the participants and the committee members.



(D Preveen Kumar)



(Soma Sen Roy)



(Santosh Kumar S.)



(S. Gopal Krishna)



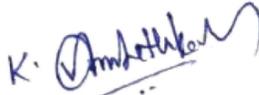
(Rajendra Kumar Kumhar)



(Member from Indian Air Force)



(S. I. Laskar)



(K. Ambethkar)



(Rohit Shukla)

Form 2: Schedule of Requirements - Compliance
Schedule of Requirements

(Ref ITB-clause 9.2, Schedule VI: Schedule of Requirements)

(To be submitted as part of Technical bid)

(on Company Letter-head)

Tender Document No. CPU/53/0725/1553; Tender Title: Procurement of 20 C and 25 X band Polarimetric Doppler Weather Radar Systems.

Bidder's Name _____

[Address and Contact Details]

Bidder's Reference No. _____ Date.....

Note to Bidders: Fill up this Form regarding Section VI: Schedule of Requirements maintaining the same numbering and structure. Add additional details not covered elsewhere in your bid in this regard.

Tender Title		Procurement of 20 C and 25 X band Polarimetric Doppler Weather Radar Systems.								
Tender Reference No		CPU/53/0725/1553								
Schedule	Item Sr	Local Content (%)	Foreign Content (%)	Description of Goods	Quantity	Country of Origin	Units of Quantity	Delivery Requirements	Destination, State	GSTIN



1	2	3	4	5	6	7	8	9	10	11
Schedule-1	20 number of C-band Dual Polarized SSPA based Doppler Weather Radar									
Schedule-2	25 number of X-band Dual Polarized SSPA based Doppler Weather Radar									

- (1) General Background of requirements:
- (2) Preferred Transportation:
- (3) Required Delivery Schedule:
- (4) Required Terms of Delivery:
- (5) Scope of Supply:
- (6) Incidental Works/ Services:



Deviations from Schedule of Requirements

Note to Bidders: Highlight deviations, if any, from Section VI: Schedule of Requirements in this Form.

Sl. No.	Ref of Tender Document Section, Clause		Subject	Confirmation/ Deviation/ Exception/ reservation	Justification/ Reason
	Section	Clause/ sub-clause			

We shall comply with, abide by, and accept without variation, deviation, or reservation all requirements detailed in Section VI: Schedule of Requirements in the Tender Document, except those mentioned above. If mentioned elsewhere in our bid, contrary terms and conditions shall not be recognised and shall be null and void.

.....

(Signature with date)

.....

(Name and designation)

Duly authorized to sign bid for and on behalf of

.....

[name & address of Bidder and seal of company]