## Minutes of the meeting of Pre-Bid Committee for Procurement of 04 Nos. Of Klystron based S-Band DWRs for Eastern Coast held on 28.01.2025 at 1200 hours IST

India Meteorological Department (IMD) has invited bids vide GeM bid no. GEM/2024/B/5751958 dated: 17.01.2025 for the dismantling, procurement, installation and commissioning of 04 nos. of klystron based S-band Doppler Weather Radars (DWRs) through GeM portal of the government of India and IMD website. Secretary, MoES has constituted the following Pre-bid committee vide File No.DGM-HQ-32011(102)/1/2023-CPU-DGM dated 20.01.2025 comprising the members mentioned below:

1. Dr. T. Narayan Rao, Scientist 'G', NARL	Chairman
2. Sh. Gajendra Kumar, Scientist 'F', IMD	Member
3. Sh. Kapil Dev Meena, Director (Finance), IMD	Member
4. Sh. Harmeet Sawhney, Scientist 'E', CPU, IMD	Member
5. Sh. Sunil Narayan Thool, Scientist 'E', UAID, IMD	Member
6. Sh. Jan Mohmmad, Scientist 'D', UAID, IMD	Member Secretary

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

- 1. M/s Bharat Electronics Limited, Bangalore.
- 2. M/s Astra Microwave Products Limited, Hyderabad.
- 3. M/s Data Patterns (India) Private Limited, Chennai.
- 4. M/s SGS Weather & Environmental Systems Private Limited, Gurugram
- 5. M/s NAPL
- 6. M/s KCMC, Bengaluru
- 7. M/s Space Energy Systems
- 8. M/s Skymet Weather Services

The Pre-bid meeting was held in hybrid mode on 28<sup>nd</sup> January, 2025 at 12:00 hours IST in the conference room of DGM, Mausam Bhawan, New Delhi physically as well as through video conference mode. The committee discussed and deliberated on all the Pre-bid queries submitted by prospective bidders vis-a-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		
M/s	M/s Bharat Electronics Limited, Bengaluru					
1.	Page no:36 4.4 Unambiguous velocity	1) Consistent with PRFs specified below SI. No 4.11; 2) Ambiguity resolution up-to four times the Nyquist velocity	the required unambiguous velocity	Maximum required unambiguous velocity should be ± 60 m/s.		

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2.	Page no:36 4.13 Pulse width	0.5 to 2.0u Sec	Are there any pulse widths between 0.5 to 2.0u Sec? If so, please specify.	Pulse widths should be user selectable as 0.5 µs, 1.0 µs and 2.0 µs.
3.	Page no:39 4.41 (c) Calibration	(c) There should be a provision for automatic update of Radar parameters (i) Receiver single point calibration in long and short pulse mode	Please clarify: "Long and short pulse mode".  OR  Request to update RFP as necessary for klystron based system.	The statement "Receiver single point calibration in long and short pulse mode" to be read as "Receiver single point calibration"
4.	Page no:43 4.50 General	22. Air conditioned equipment shelter with adequate space for housing all radar electronic equipment's, the work station, UPS, three phase voltage stabilizer, stationery, manuals, tools, etc.	Please clarify if a separate AC shelter is required as w.r.to Point 4.50 - 21 General, Radar equipments should be installed in the room below the antenna.	Thermal analysis to be carried out by the OEM including overall heat dissipation of all sub systems and accordingly suitable AC system should be provided to operate the radar 24/7.  In case supporting equipment do not fits in the existing room available at the site, then separate air conditioned equipment shelter need to be provided by the vendor.
5.	Page no:44 4.50 General	29. IMD will take possession of the radar after commissioning.	Supply of DG set not in RFP scope and hence supply of diesel may please be	Supply of DG set is not in the scope of this tender, but vendor has to bear expenditure

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6. Page no:50 7.4.2 Hydrological products and Hydrological products are and accumulation products shall have an option to be adjusted in real time by rain gauge, disdrometer data. rain gauge and disdrometer data shall be displayed along with radar data. Shall have an option to be adjusted in real time by rain gauge and disdrometer data shall be displayed along with radar data. Shall have an option to be adjusted in real-time adjustment is not available with global radars. Windly confirm, if display of rain gauge / disdrometer data will be made available by IMD in text format.  7. Page no:50 7.4.4 Software running and gard and			the system (Radar, inclusive of all the deliverables as per this document) and operator till then shall be borne by the bidder including all consumables and supply of diesel for the DG set.	excluded from Bidder's scope.  Please update RFP.	of all consumables and supply of diesel for the DG set till commissioning of the radar system.
no:50 7.4.4 Warning and forecasting forecasting with TITAN software to be software to be run on a separate work station?  with TITAN software to be run on a separate work station?  run on a separate work station.  should be station?  provided and If so, please	6.	no:50 7.4.2 Hydrological	(f) Rainfall intensity, rainfall rate and accumulation products shall have an option to be adjusted in real time by rain gauge, disdrometer data. rain gauge and disdrometer data shall be displayed along with radar data. rain gauge and disdrometer data will be made available by IMD in text	in other global radars, rain gauge / disdrometer data can be displayed along with radar data. But real-time adjustment is not available with global radars.  Kindly confirm, if display of rain gauge / disdrometer data along with radar data for manual comparison is sufficient or Please share procedure for real- time	statement "Rainfall intensity, rainfall rate and accumulation products shall have an option to be adjusted in real time by rain gauge, disdrometer data." to be treated as
products	7.	no:50 7.4.4 Warning and	with TITAN software running in real-time should be	software to be run on a separate work station?	be run on a separate work

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		with appropriate data intake.	of "peripherals" under 4.44, page 39	
8.	Page no: 53 14. Warranty	(a) Warranty shall remain valid for three years after the system has been commissioned and accepted by IMD as per terms of the contract agreement. The warranty shall also include all third party bought out items/ subsystems including tower, computers, generator set, UPS and three phase voltage stabilizer etc.  OEM certification of warranty for the third party items is to be provided.	Please remove "tower" and "generator set" from the clause and update RFP as these are not part of scope of supply as per RFP.	"tower" and "generator set" are not scope of the supply as per RFP.  The statement "The warranty shall also include all third party bought out items/ subsystems including tower, computers, generator set, UPS and three phase voltage stabilizer etc." to be read as "The warranty shall also include all third party bought out items/ subsystems including computers, UPS and three phase voltage stabilizer, etc.
9.	Page no: 72  Annexure V  Terms and conditions of CAMC	1.The CAMC includes control center and radar site material & services inclusive of all computer peripherals, printers, radar modules, spares, components, cables, connectors etc and radar related materials like UPS, DG, radome, tower	from the clause and update RFP as these not part of scope of supply as per RFP.	"generator set" are not scope of the supply as per RFP.
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		etc and the removed or replaced defective material becomes the property of the bidder excluding any hard disks/storage media that contains IMD's data.		stabilizer etc." to be read as "The warranty shall also include all third party bought out items/ subsystems including computers, UPS and three phase voltage stabilizer etc."
10.	Page no: 121 Annexure XV List of Standard tools and measuring instruments	SI No- (4) Signal generator with narrow pulse modulation facility upto <u>X</u> band along with set of test cables and adaptors / connectors / accessories.	Please confirm if signal generator up-to S band is sufficient.	Signal generator up to S-band is sufficient.  The standard signal generator should possess the capability to generate pulse RF signals with a minimum pulse width (PW) of 0.5 µs and an adjustable pulse repetition frequency (PRF) to meet system requirements.
11	Page no:55  Chapter 2  Conditions of contract (COC)  SI. No. 17. Delivery schedule	i. First radar to be installed accepted & commissioned at site within 13 months & Rest of the radar within 22 months from issue of contract agreement.	Considering the time required for procurement of long lead items like klystron tube, MW components and manufacturing of antenna / radome, the delivery may be modified as 18 months for supply, 2 months for installation and 1 month for commissioning of first radar	As per tender document.
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			from date of contract.  Subsequently 3 more radars to be supplied installed & commissioned in 24 months in phased manner from the date of contract.	
12	Page no:105 Annexure XIV	All four existing old S-Band doppler weather radar (Chennai, Kolkata, Machilipatnam, Visakhapatnam) to be dismantled, packed, transported and to be kept at safe places.	Please indicate the value of transit insurance? Is it to be taken in name of IMD? If not, then on whose name?	As per tender document.
13	Page no-27  Chapter 2  Conditions of contract (COC)  SI. No. 20  Terms and mode of payment	(f-iii) Forty percent (40%) payment towards stores will be made after successful installation, endurance tests, completion of onsite training, commissioning and acceptance of the radar at each site.	made available for dismantling of old radar and installation of new radar & commissioning, immediately after delivery.	As per tender document.
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14	Page no: 18 Chapter- 2 Conditions of contract (COC) Financial compliance: Sl. No. 7	EMD (Earnest Money Deposit)- The bidder should enclose bid security (EMD) of Rs.  3,84,00,000/- in the form of account payee demand draft, fixed deposit receipt, banker's cheque, bank guarantee, insurance surety bond, from any of the commercial banks drawn in favour of DDO, O/o DGM, New	there is any escalation in GST at the time of delivery, the difference in amount needs to be borne by IMD and to be reimbursed.  EMD (Earnest money deposit) - exemption to be given to BEL, as BEL is a defence PSU and has also supplied DWR to IMD previously.	As per tender document.
15	Page No:118- 119  Annexure- XIII Sl. No. (vii) to (xii)	Delhi.  Self-certification regarding local content in DWR: vii) Sale price of the product viii) Ex-factory price of the product ix) Freight, insurance and handling x)Total bill of material xi) List and total-cost value of inputs used for manufacture of the Doppler weather radar xii) List and total	will be provided in the price bid.  As this is a competitive bid, data for SI. No. (xi) to (xii) is not applicable and only to be certified for local content.  Please confirm.	Vendor should submit percentage of local content for each item in the list of deliverables.
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		cost of inputs which are imported, directly or indirectly		
16	Page No: 8  Ch-1 11 (A)  Scrutiny of bids	(b) Tender should be signed on each page, stamped and complete in all respects. All documents shall also be digitally signed.	Is digital signature mandatory in all pages? Please clarify.	As per tender document.
17		Last date for Bid submission as per GeM portal is 07-02-2025.	Considering the time required for obtaining competitive quotes from vendors as well as the Pre-bid minutes release, request to extend the bid submission date till 07-03-2025 (by one month)	Last date for bid submission will be 7 days from date of publication of Pre-bid minutes.
M / «	s Data Patterns (I	ndia) Private Limi	ted, Chennai	
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18	Chapter 1			If there is any discrepancy
18	Chapter 1 Point 7 (B) (L) (price Bid) Page no 7	If there is any discrepancy between BoQ and PDF. Price bid the BoQ will be considered as final price bid.  Note: Point 2  Price Bid shall not be accepted if CAMC charges are quoted in percentage.	tender is floated in GeM portal only uploading PDF File is possible. We believe there is no provision to upload BoQ (.xlsx File) file in GeM portal.  Also please re confirm, whether vendors need to submit two price bid formats as mentioned in the chapter-4 (Price	discrepancy between BoQ and price bid format, the BoQ format will be considered for quoting price. Bidder shall submit BoQ in pdf format only.  Provisions of GeM tender to quote CAMC in % only are
			schedule, financial bid Format) and PDF	

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			converted file of BoQ (.xlsx) (In absence of uploading facility)  Being a GeM Tender, We are only allowed to quote CAMC in % only (Between 3 to 10 %) Please refer GEM Page no 11/12 (Point no 2) kindly amend the RFP clause.	
19	Chapter 2 (CoC) Point 20; Page no 27	Terms and mode of payment	We request CPU, IMD to clarify about the payment release of dismantling of old radar (services part). Will it be along with invoice submission of SITC of new radar or a separate invoice needs to be submit. Need clarity in writing for financial compliance.	dismantling of old radar (services part) will be along with invoice submission of SITC of new
20	Chapter 2 point 25 page no 30	Dismantling of old radar	We request IMD to allow us for a site visit at any one of the four sites.  Please re confirm, whether insurance is required for the dismantled items during the transportation period? If yes, please provide	office.  Details regarding cost of the old radar will be provided to the

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			the lump sum cost of the old radar, as a prerequisite for insurance formalities in advance.	
21	Page no 74 (Annexure-VI)	Format for list of deliverables for supply of (04) numbers S-band dual polarized doppler weather radars	Please provide clarity, whether Annex-VI also need price details as per the format (if yes), same needs to be uploaded along with price bid (.PDF File) as a 3rd format or not?  We have a big confusion between BoQ File (.xlsx) Vs financial bid format ( Chapter: 4; page no 57-66) Vs annxure-VI on Page on 74.	discrepancy between BoQ and price bid format, the BoQ format to be considered for quoting price. Bidder shall submit

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(Dr. T. N. Rao)

(Gajendra Kumar)

(Kapil Dev Meena)

(Harmeet Singh Sawhney)

(Suni Marayan Thool)

(Jan Mohmmad)