

**GOVERNMENT OF INDIA
DEPARTMENT OF SPACE
ISRO TELEMETRY TRACKING & COMMAND NETWORK (ISTRAC)
BANGALORE**

Tender for 10K Cryo cooler based X Band RF Front End

Bids to be submitted online

Tender No.: ISTRAC/ISTRAC PURCHASE/TR202400015201 dated 27-08-2024

A. Tender Details

Tender No :	ISTRAC/ISTRAC PURCHASE/TR202400015201
Tender Date :	27-08-2024
Tender Classification:	GOODS
Purchase Entity :	ISTRAC PURCHASE
Centre :	ISRO TELEMETRY TRACKING & COMMAND NETWORK (ISTRAC)

10K Cryo cooler based X Band RF Front End

Note: 1) This is a Dual Part Tender. Please submit your Offers separately for Technical and Price Bid under relevant Template. Please upload Price Bid under Price Bid only and nowhere else. If price is mentioned anywhere other than Price Bid, your offer will not be considered. 2) Please provide your compliance separately for (a) Security Deposit Clause (b) Performance Bank Guarantee Clause (c) Security Deposit cum Performance Bank Guarantee (SD cum PBG) Clause (d) DELAY IN COMPLETION / LIQUIDATED DAMAGES (e) Certificate of Undertaking (f) MII. and other terms and conditions. 3) The Technical Bid and Price Bid Opening Date and Time is tentative only. Actual bid opening date and time will be intimated separately.

A.1 Tender Schedule

Bid Submission Start Date :	27-08-2024 15:00
Bid Clarification Due Date :	27-09-2024 17:00
Bid Submission Due Date :	11-10-2024 14:00
Bid Opening Date :	11-10-2024 14:30
Price Bid Opening Date :	28-10-2024 17:00

B. Tender Attachments

Technical Write-up/Drawings

Document : rfp

Instructions To Vendors

2. INSTRUCTIONS TO TENDERERS FOR ONLINE SUBMISSION OF TENDERS THROUGH E-PROCUREMENT SYSTEM

1. a) Bidders shall arrange themselves all resources, including Digital signature certificates and Internet Connections at their own cost, for participating in online tendering.
- b) Vendors can download the tender details and submit their offers online using their vendor accounts (obtained during registration) in our portal. Help demos for tender download and bidding processes are given on home page.
- c) The tender should be submitted online in the ISTRAC link before the due date and time as specified in the tender schedule in the portal.
- d) Vendors shall also take note of other Instructions to tenderers indicated in the tender documents.

2. Conditions for online submission of tenders:

- a) It is mandatory for interested parties to register as vendors in our e-procurement portal <https://eproc.vssc.gov.in/home.html> for participating in online eProcurement process of ISRO. Only registered vendors can submit their offers online in our eProcurement portal.
- b) Vendors who are already registered in the existing EGPS software of ISRO, please register by clicking the link in the email you would have already received from 'eproc@vssc.gov.in'. After registration, do the profile update by login to this portal.
- c) For new vendors, who are not registered in the existing EGPS software, vendor registration will be released along with the portal release. To register as vendors please refer to the help demos listed on the home page of the e-procurement link mentioned above. They may approach help desk (contact details provided on the home page) for any technical help for registration and subsequent process.
- d) OEM details should be added in your E-Procurement profile under Add Agent/Principal without fail.

3. ISTRAC shall not be responsible for failure of vendors in submitting bids online caused due to technical reasons at vendor end such as network or power failures, computer failure, internet-browser, mistakes / errors in filling the bids on line by vendor etc.

4. Procedure for seeking clarifications/help for the tender:

- a) All enquiries regarding the tenders and submission of offers shall be online and only through our eProcurement portal.

b) Vendors may approach help desk e-mail id and phone number given on the home page for any technical help (e-mail: eproc@vssc.gov.in and Phone: +91471 2565454/4574/2527/3753/3289).

5. Queries by vendors on technical problems on the last day of tender will not be binding on ISTRAC/ISRO for resolving/addressing. ISTRAC will not be responsible for non-submission of bids for those cases.

3. TENDER TERMS AND CONDITIONS

1. All information in Vendor Specified Terms shall be provided without fail to avoid unnecessary correspondence / delay in process. The same should reach before technical bid opening date and time without fail.

2. a) Order no: F.No.6/18/2019 PPD dated 23.07.2020 of Department of Expenditure), Ministry of Finance

Under Public procurement division for the General Financial rule (GFRs).

3. As per Rule 144(xi) of General Financial Rules, 2017, any bidder from a country which shares a land border with India will be eligible to bid in any procurement whether of goods, services (including consultancy services and non consultancy services) or works (including turnkey projects) only if the bidder is registered with the Competent Authority (i.e., Department for Promotion of Industry and Internal Trade) in line with Order (Public Procurement No. 1, 2 and 3) dated 23/07/2020 and 24/07/2020 or any amendments thereon issued by the Public Procurement Division, Department of Expenditure, Ministry of Finance. Hence, Vendors or Agents of a Vendor (Indian or Others) from a country sharing border with India shall submit the copy of Valid Registration made with DPIIT along with the tender mandatorily, without which the offer will be treated as invalid.

4. A supplier who has been debarred by any procuring entry for violation of this order shall not be eligible

for preference under this order for procurement by any other procuring entity for the duration of the debarment. The debarment for such other procuring entities shall take effect prospectively from the date on which it comes to the notice of other procurement entities, in the manner prescribed.

5. b) Class I local supplier means a supplier or service provider, whose goods, service or works offered for

procurement, has local content equal to or more than 50%, as defined under order.

6. c) Class II local supplier means a supplier or service provider, whose goods, services or works offered

for procurement, has local content more than 20% but less than 50%, as defined under this Order.

7. d) Bidders offering imported products will fall under the category of Non-local suppliers. They cannot claim themselves as Class I Local suppliers/Class II Local suppliers by claiming the services such as transportation, insurance, installation, commissioning, training and after sales service support like AMC/CMC etc. as local value addition.

8. Delivery Terms: FOR ISTRAC

9. e) Verification of local content:

i) The Class I local supplier/ Class II local supplier at the time to tender, bidding or solicitation shall be required to indicate percentage of local content and provide self certification that the item offered meets the local content requirement for Class I local supplier / Class II local supplier as the case may be. They shall also give details of the location(s) at which the local value addition is made.

10. GENERAL TERMS & CONDITIONS FOR BIDDERS: For this procurement, bids from Class I & class II Local Suppliers are admissible. hence provisions contained in Public Procurement (Preference to Make in India), Order 2017 issued by Department for Promotion of Industry and Internal Trade (DIPP), Ministry of Commerce & Industries vide letter No. P 45021/2/2017 PP(BE II) dated 04.06.2020 and subsequent amendment & directives shall be followed. Accordingly, offer will be evaluated & processed in conformation with above referred GOI order (Specially mentioned below). The bidder shall provide compliance and undertaking as per order and hereafter amendments:

11. If an agent submit bid on behalf of the principal/OEM, the same agent shall not submit a bid on behalf of another principal/OEM in this tender for the same item. If submitted, all offers will be liable for rejection.

12. iii) False declarations will be in breach of the code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules (GFR) for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the general Financial Rules along with such other actions as may be permissible under Law.

13. ii) In case bid value is in excess of Rs. 10 Cr., Class I local supplier/ Class II local supplier shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.

14. In case the bidders propose any other payment terms in deviation with the standard terms mentioned in the tender enquiry, it may be noted that applicable cash flow implications will be loaded on the prices quoted for commercial comparison of the offers. If advance payments are insisted by the bidders, interest at the rate of MCLR (Marginal Cost Linked Rate) as notified by State Bank of India

from time to time shall be loaded on the prices for price comparison.

15. In this tender either the Indian agent on behalf of the principal/OEM or the principal /OEM itself can bid, but both cannot bid simultaneously for the same item. Indian agents while quoting on behalf of their principals shall provide necessary latest authorisation letter obtained from their principals/manufacturers.

16. Liquidated damages: If the vendor fails to deliver the items on or before the delivery date, or any extension thereafter purchaser shall recover from the vendor as liquidated damages a sum of 0.5% of the contract price of the undelivered stores for each calendar week of delay. The total liquidated damages shall not exceed 10% of the contract price of the unit or units so delayed.

17. Model Certificate for Tenders:

I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India I certify that this bidder is not from such a country or, if from such a country, has been registered with the Competent Authority. I hereby certify that this bidder fulfills all requirements in this regard and is eligible to be considered.

18. Model Certificates for Tenders for Work involving possibility of sub contacting:

I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and on sub contracting to contracting from such countries I certify that this bidder is not from such a country or, if from such a country, has been registered with the Competent Authority and will not sub contract any work to a contract form such countries unless such contractor is registered with the Competent Authority. I hereby certify that this bidder fulfills all requirements in this regard and is eligible to be considered.

Provide Compliance for the above in Vendor Specified Commercial Terms.

19. NO EMD AND TENDER FEE.

20. Performance Bank Guarantee (PBG) to be furnished as a security for fulfilment of warranty obligations by the successful vendor after satisfactory execution of purchase order/Contract (3% of the value of the purchase order/Contract). Central SUs/PSE/Autonomous bodies are exempted from the production of Performance Bank Guarantee. Instead; an indemnity bond shall be furnished in lieu of PBG.

21. Product Scope: Class I local supplier/ Class II local supplier shall offer only standard and catalogued product for Equipment / Spares Cards / assemblies. If the above offered Equipment / Cards / Assemblies are under development / to be developed the bid will not be considered.

22. PUBLICITY: No publicity of any kind whatsoever in case of PURCHASE ORDER shall be given by the Supplier without prior permission of the Purchaser.

23. **SECURITY:** The technical information, drawings, specifications and other related documents, forming part of the CONTRACT, are the property of the Purchaser and shall not be used for any other purpose, except for execution of the CONTRACT. All rights, including rights in the event of grant of patent and registration of designs are reserved. The technical information, drawings, specifications, records and other documents shall not be copied, transcribed, traced or reproduced in any other form or otherwise in whole and/or duplicated, modified, divulged and/or disclosed to a third party nor misused in any other form whatsoever without Purchasers consent in writing except to the extent required for the execution of this CONTRACT. These technical informations, drawings, specifications and other related documents shall be returned to the Purchaser with approved copies and duplicates, if any, immediately after they have been used for the agreed purpose.

24. Senior Purchase and Stores Officer, ISTRAC, reserves the right to accept or reject any/or all the tenders in part or full without assigning any reasons thereof.

25. Submit the bid on or before due date.

26. Successful vendor has to submit the security deposit. (3 % of the value of the purchase order). Central PSUs/PSE/Autonomous bodies shall be exempted from the payment of security deposit, and instead, an indemnity bond shall be secured from them.

27. VENDORS HAS TO REFLECT THE POINT NO (4), (5) AND (6) IN THEIR BID.

28. TAXES: GST is payable as per applicable rates.

29. Foreign OEMs/Agents quoting on behalf of Foreign OEMs are not permitted to quote. High Sea Sales quotes not permitted. The bids shall be in INR only.

4. PROFORMA FOR INSTRUCTIONS TO TENDERERS AND TERMS & CONDITIONS OF TENDER

1. a) All available technical literature, catalogues and other data in support of the specifications and details of the items should be furnished along with the offer.

(b) Samples, if called for, should be submitted free of all charges by the tenderer and the Purchaser shall not be responsible for any loss or damage thereof due to any reason whatsoever. In the event of nonacceptance of tender, the tenderer will have to remove the samples at his own expense.

(c) Approximate net and gross weight of the items offered shall be indicated in your offer. If dimensional details are available the same should also be indicated in your offer.

(d) Specifications: Stores offered should strictly confirm to our specifications. Deviations, if any, should be clearly indicated by the tenderer in his quotation. The tenderer should also indicate the Make/Type number of the stores offered and provide catalogues, technical literature and samples, wherever necessary, along with the quotations. Test Certificates, wherever necessary, should be forwarded

along with supplies. Wherever options have been called for in our specifications, the tenderer should address all such options. Wherever specifically mentioned by us, the tenderer could suggest changes to specifications with appropriate response for the same.

2. ACCEPTANCE OF STORES: (a) The stores shall be tendered by the Contractor for inspection at such places as may be specified by the purchaser at the Contractor's own risk, expense and cost. (b) It is expressly agreed that the acceptance of the stores Contracted for, is subject to final approval by the purchaser, whose decision shall be final. (c) If, in the opinion of the purchaser, all or any of the stores do not meet the performance or quality requirements specified in the Purchase Order, they may be either rejected or accepted at a price to be fixed by the purchaser and his decision as to rejection and the prices to be fixed shall be final and binding on the Contractor. (d) If the whole or any part of the stores supplied are rejected in accordance with Clause No. (c) above, the purchaser shall be at liberty, with or without notice to the Contractor, to purchase in the open market at the expense of the Contractor stores meeting the necessary performance and quality Contracted for in place of those rejected, provided that either the purchase, or the agreement to purchase, from another supplier is made within six months from the date of rejection of the stores as aforesaid.

3. ARBITRATION : All disputes, differences, claims and demands arising under or pursuant to or touching this agreement shall be referred to Arbitration of a sole Arbitrator to be appointed by the Director, ISTRAC, whose decision/award will be final and binding on both the parties. Such arbitration shall be held in Bangalore and shall be subject to and governed by the provisions of the Arbitration and Conciliation Act of 1996 or any statutory modification or re-enactment thereof. The language to be used in Arbitration is English only.

4. As a Government of India Department, this office is exempted from payment of Octroi and similar local levies. Tenderers shall ensure that necessary Exemption Certificates are obtained by them from the Purchase Officer concerned to avoid any payment of such levies.

5. a) Your offer should be valid for 120 days from the date of opening of the tender. b) Prices are required to be quoted according to the units indicated in the annexed tender form. When quotations are given in terms of units other than those specified in the tender form, relationship between the two sets of units must be furnished.

6. CUSTOMS DUTY : This office is eligible for Concessional Customs Duty @ 5.5% against Ministry of Finance, Department of Revenue, Government of India, vide Customs Notification No.51/96-Cus Dated 23-07-1996 (Sl.No.1) and amended under Notification No.93/96 dated 11th December 1996 and 24/2002 dated 01-03-2002

7. DESPATCH: The Contractor is responsible for obtaining a clear receipt from the Transport Authorities specifying the goods despatched. The consignment should be despatched with clear Railway Receipt/Lorry Receipt. If sent in any other mode, it shall be at the risk of the Contractor.

Purchaser will take no responsibility for short deliveries or wrong supply of goods when the same are booked on 'said to contain' basis. Purchaser shall pay for only such stores as are actually received by them in accordance with the Contract.

8. TAXES: GST is payable as per applicable rates.

9. GUARANTEE & REPLACEMENT: (a) The Contractor shall guarantee that the stores supplied shall comply fully with the specifications laid down, for material, workmanship and performance. (b) Warranty shall be for the period mentioned in the tender document. After the acceptance of the stores, if any defects are discovered therein or any defects therein found to have developed under proper use, arising from faulty stores design or workmanship, the Contractor shall remedy such defects at his own cost provided he is called upon to do so within the warranty period, by the purchaser who shall state in writing in what respect the stores or any part thereof are faulty. (c) If, in the opinion of the purchaser, it becomes necessary to replace or renew any defective stores such replacement or renewal shall be made by the Contractor free of all costs to the purchaser, provided the notice informing the Contractor of the defect is given by the purchaser in this regard within the said period of warranty from the date of acceptance thereof. (d) Should the Contractor fail to rectify the defects, the purchaser shall have the right to reject or repair or replace at the cost of the Contractor the whole or any portion of the defective stores. (e) The decision of the Purchaser notwithstanding any prior approval or acceptance or inspection thereof on behalf of the Purchaser, as to whether or not the Stores supplied by the Contractor are defective or any defect has developed within the said period of warranty or any other period or as to whether the nature of defects requires renewal or replacement, shall be final, conclusive and binding on the Contractor. (f) To fulfill guarantee conditions outlined in (a) to (e) above, the Contractor shall, at the option of the Purchaser, furnish a Bank Guarantee (as prescribed by the Purchaser)

10. If the IGST is applicable, the same will be reimbursed if it is reflected in Bill Of Entry. Proof shall be provided while claiming payment.

11. It is to be noted that either Customs Duty or GST is applicable (any one)

12. JURISDICTION : The contract/ purchase order shall be governed by an interpreted and construed in accordance with the laws of India. The courts situated at Bangalore only shall have jurisdiction to deal with and decide any legal matter or dispute arising out of contract/ purchase order.

13. PACKING FORWARDING & INSURANCE: The Contractor will be held responsible for the stores being sufficiently and properly packed for transport by rail, road, sea or air to withstand transit hazards and ensure safe arrival at the destination. The packing and marking of packages shall be done by and at the expense of the Contractor. The purchaser will not pay separately for transit insurance, all risks in transit being exclusively of the Contractor and the Purchaser shall pay only for such stores as are actually received in good condition in accordance with the Contract.

14. Please provide your compliance for Security Deposit, Performance Bank Guarantee and Liquidated Damages Clause.

15. PRICES: Tender offering firm prices will be preferred. Where a price variation clause is insisted upon by a tenderer, quotation with a reasonable ceiling should be submitted. Such offers should invariably be supported by the base price taken into account at the time of tendering and also the formula for any such variation/s.

16. REJECTED STORES: Rejected stores will remain at destination at the Contractor's risk and responsibility. If instructions for their disposal are not received from the Contractor within a period of 14 days from the date of receipt of the advice of rejection, the purchaser or his representative has, at his discretion, the right to scrap or sell or consign the rejected stores to Contractor's address at the Contractor's entire risk and expense, freight being payable by the Contractor at actuals.

17. Sales Tax and/or other duties/levies legally leviable and intended to be claimed should be mentioned in the price bid template. If nothing is mentioned, then it will be presumed that the rate quoted is inclusive of all taxes/duties.

18. SECURITY DEPOSIT: Wherever, the Purchase Order value is Rs. 5.00 Lakhs or more, on acceptance of the tender, the Contractor shall, at the option of the Purchaser and within the period specified by him, deposit with him, in cash or in any other form as the Purchaser may determine, security deposit not exceeding ten percent of the value of the Contract as the Purchaser shall specify. If the Contractor is called upon by the Purchaser to deposit, 'Security' and the Contractor fails to provide the security within the period specified, such failure shall constitute a breach of the Contract, and the Purchaser shall be entitled to make other arrangements for the re-purchase of the stores Contracted at the risk of the Contractor in terms of Sub-Clause (ii) and (iii) of clause regarding Delivery. (b) hereof and/or to recover from the Contractor, damages arising from such cancellation.

19. SETTLEMENT OF DISPUTES : Except as otherwise specifically provided in the contract, all disputes concerning question of fact arising under the Contract shall be decided by the Purchaser subject to a written appeal by the Contractor to the Purchaser whose decision shall be final to the parties hereto. Any disputes or differences including those considered as such by only one of the parties arising out of or in connection with the Contract shall be, to the extent possible, settled amicably between the parties. If amicable settlement cannot be reached, then all disputes shall be settled by arbitration.

20. TERMS & CONDITIONS OF TENDER

21. TEST CERTIFICATE: Wherever required, test certificates should be sent along with the despatch documents.

22. The authority of the person signing the tender, if called for, should be produced.
23. The Purchaser reserves the right to place order on the successful tenderer for additional quantity up to 25% of the quantity offered by them at the rates quoted.
24. The purchaser shall be under no obligation to accept the lowest or any tender and reserves the right of acceptance of the whole or any part of the tender or portions of the quantity offered and the tenderers shall supply the same at the rates quoted.
25. The tenderer should supply along with his tender, the name of his bankers as well as the latest Income-Tax clearance certificate duly countersigned by the Income-Tax Officer of the Circle concerned under the seal of his office, if required by the Purchaser.
26. The term Contractor shall mean, the person, firm or company with whom or with which the order for the supply of Stores is placed and shall be deemed to include the Contractor's successors, representative, heirs, executors and administrators unless excluded by the Contract.
27. The term Purchase Order shall mean the communication signed on behalf of the Purchaser by an Officer duly authorised intimating the acceptance on behalf of the Purchaser on the terms and conditions mentioned or referred to in the said communication accepting the tender or offer of the Contractor for supply of stores or plant, machinery or equipment or part thereof.
28. The term Purchaser shall mean the President of India or his successors or assigns.
29. The term "Stores" shall mean what the Contractor agrees to supply under the Contract as specified in the Purchase Order including erection of plants & machinery and subsequent testing, should such a condition is included in the Purchase Order.

5. CERTIFICATE OF UNDERTAKING

1. A certificate from the bidder shall be enclosed along with their quotation (Technical bid) as per the format enclosed.
2. An AGENT is a person employed to do any act for another, or to represent another in dealings with third person.
3. Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority. (Competent authority is : DEPARTMENT FOR PROMOTION OF INDUSTRY AND INTERNAL TRADE (DPIIT)).

4. (b)Control shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements.

5. Bidder from a country which shares a land border with India for the purpose means:

(a)An entity incorporated, established or registered in such a country; or

(b)A subsidiary of an entity incorporated, established or registered in such a country; or

(c)An entity substantially controlled through entities incorporated, established or registered in a such a country; or

(d)An entity whose beneficial owner is situated in such a country; or

(e)An Indian (or other) agent of such an entity; or

(f)A natural person who is a citizen of such a country; or

(g)A consortium or joint venture where any member of the consortium or joint venture falls under any of the above.

6. BIDDER (including the term tenderer, consultant or service provider in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.

7. CERTIFICATE

8.

COMPANY NAME AND SEAL:

9. DESIGNATION:

10. Explanation:

(a)Controlling Ownership interest means ownership of or entitlement to more than twenty-five per cent of shares or capital or profits of the company;

11. GOVERNMENT OF INDIA

DEPARTMENT OF SPACE

ISTRAC, BENGALURU: 560 058.

12. iii) In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals.

13. (iii). I/We _____ hereby undertake that if the Certificate is found to be false at any given time ISRO/ISTRAC may treat this as a ground for immediate termination and further legal action in accordance with law can be initiated.

14. ii) In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership.

15. (ii). I/We hereby confirm that the country of origin of goods is _____

16. i) In case of a company or Limited Liability Partnership, the beneficial owner is a natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means.

17. (i). I/WE _____ read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India. I / We _____ Certify that this bidder is not from such a country.

18. iv) Where no natural person is identified under (i) or (ii) or (iii) above, the beneficial owner is the relevant natural person who holds the position of senior managing official.

19. I / We _____ Certify that this bidder is from such a country and registered with the Competent Authority (i.e. Registration Committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT). Copy of Registration Certificate is enclosed.

20. NAME:

21. OR*

I/We _____ read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India.

22. Ref:Tender No _____ date _____

Our Quotation No. _____ date _____

23. REQUIREMENT OF REGISTRATION:

24. SIGNATURE:

25. (* Strike out whichever is not applicable).

26. Subject: Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs) 2017 - reg.

27. The beneficial owner for the purpose of (6) above will be as under:

28. (TO BE PRINTED ON THE LETTER HEAD OF THE VENDOR)

29. v)In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.

6. MAKE IN INDIA UNDERTAKING (VENDORS SHALL SUBMIT THE BELOW CERTIFICATE ON THEIR LETTER HEAD DULY SIGNED)

1. The type of Class which the vendor belongs:Class-I or Class-II Local Suppliers as defined under DPIIT Order dtd 04/06/2020- Preference to Make in India Order-2017 Revision.(Class I local supplier means a supplier or service provider, whose goods, service or works offered for procurement, has local content equal to or more than 50% & Class II local supplier means a supplier or service provider, whose goods, services or works offered for procurement, has local content more than 20% but less than 50%). NOTE: Bidders offering imported products will fall under the category of Non-local suppliers. They cannot claim themselves as Class I Local suppliers/Class II Local suppliers by claiming the services such as transportation, insurance, installation, commissioning, training and after sales service support like AMC/CMC etc. as local value addition.

2. Percentage of local content for the quoted item.

3. Details of location (s) at which the local value addition is made

4. Provide self-certification that the item (s) offered meets the local content requirement for Class-I/Class-II Local Suppliers as the case may be.

C. Bid Templates

C.1 Technical Bid - 10K Cryo cooler based X Band RF Front End

1. Cryogenic Chamber

Item specifications for Cryogenic Chamber

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	X-Band Vacuum Dewar		-		
2	Chamber material and dimension:	SS304 Dewar Inner wall -2 mm & Outerwall - 4 mm Thick. Approx.	Yes / No / Explain		
3	Temperature sensor:	Silicon Diode (Up to 1.4K) , 6 No's	Yes / No / Explain		
4	Door Opening :	Manual By Bolting	Yes / No / Explain		
5	Mass:	80-100 Kg max.	Yes / No / Explain		
6	Insulation :	Super Insulation (Vacuum + Multilayer Paper)	Yes / No / Explain		
7	Design Temperature	-269° C To + 50° C (4 K to 323 K)	Yes / No / Explain		
8	Working Temperature	-263° C To + 50° C (10 K to 323 K)	Yes / No / Explain		
9	Annular Space Vacuum :	1.0 X10 ⁻⁸ mBar, Vacuum %= 99.96	Yes / No / Explain		
10	MSLD Test :	To be performed at 4X10 ⁻⁰⁹ atm-cc/sec,	Yes / No / Explain		
11	Service Fluid :	Lab Grade Gas Helium (GHe) Grade 5 or above	Yes / No / Explain		
12	Cold Head LNA MountingArea:	22mm×20mm×8mm min	Yes / No / Explain		
13	Safety Accessories:	· Cryogenic Hand Gloves-4 Nos	Yes / No / Explain		
14	10 K Cryocooler		-		

15	Power Supply	3 Phase 380-415 V, 50+/- 2 Hz.	Yes / No / Explain		
16	2nd Stage Capacity	6.0 W @ 10 K min ± 2K	Yes / No / Explain		
17	1st Stage Capacity	110 W @ 50 K min ± 5K	Yes / No / Explain		
18	Minimum Temperature	10 K ± 2K	Yes / No / Explain		
19	Cool down Time to 10 K from ambient	5 Hrs Max	Yes / No / Explain		
20	Maintenance cycle	13,000 Hours min	Yes / No / Explain		
21	He Compressor		-		
22	Electrical Supply	3 Phase 380-415V , 50+/- 2 Hz.	Yes / No / Explain		
23	Power Consumption	6.0-8.0 KW@ 50 Hz. typical	Yes / No / Explain		
24	Working Ambient Temperature	4-28 °C max	Yes / No / Explain		
25	Cooling Water Inlet	6-9 L/min., 5-25 °C max	Yes / No / Explain		
26	Dimension	530 x 440 x 490 mm ,HxWxD approx.	Yes / No / Explain		
27	Weight	100 kg approx.	Yes / No / Explain		
28	Additional feature	Compressor must have He gas pressure monitoring system	Yes / No / Explain		
29	Cooling	Water cooled.	Yes / No / Explain		
30	Maintenance	30000 Hours min	Yes / No / Explain		
31	Vacuum Turbo Pump		-		
32	High-vacuum connection	ISO-K / CF	Yes / No / Explain		
33	Ultimate vacuum level ISO-K/CF to interface with dewar	8 *10 ⁻⁸ (ISO-K) min	Yes / No / Explain		
34	Operating Speed, RPM	72000 max	Yes / No / Explain		

35	Cooling standard	Convection cooling Forced Air or Water	Yes / No / Explain		
36	Weight (Pump)	7.0 Kg max	Yes / No / Explain		
37	Supply voltage	24/48V DC \pm 10 % typical	Yes / No / Explain		
38	Max. current consumption	10A at 24V DC max	Yes / No / Explain		
39	Temperature Sensors		-		
40	Temperature Range	10K to 325K max	Yes / No / Explain		
41	Calibrated Accuracy		-		
42	Recommended excitation	10 μ A \pm 0.1% min	Yes / No / Explain		
43	Max reverse voltage	40 V	Yes / No / Explain		
44	Thermal response time	<10 ms at 10 K	Yes / No / Explain		
45	Measurement		-		
46	Dissipation (max)	16 μ W at 10 K	Yes / No / Explain		
47	Pressure Transducer		-		
48	Pressure Range	1*10 ⁻⁸ mBar to 100 mBar	Yes / No / Explain		
49	Sensor Type	Absolute Pressure Sensor	Yes / No / Explain		
50	Principle of Measurement	Filament Pirani & Capacitance	Yes / No / Explain		
51	Max Measurement Uncertainty	1*10 ⁻⁸ to 1*10 ⁻⁶ mBar \pm 10 % of reading.	Yes / No / Explain		
52	Status indicators	LED	Yes / No / Explain		
53	Overpressure limit	1 Bar	Yes / No / Explain		
54	Interfaces	RS 232 or any latest interface model	Yes / No / Explain		

55	OFHC Cryogenic Isolator		-		
56	Frequency of operation	8.0 to 12.0 GHz	Yes / No / Explain		
57	Power Handling	1 Watt max	Yes / No / Explain		
58	Structure	Coaxial	Yes / No / Explain		
59	RF O/p Connector	Coaxial Type N	Yes / No / Explain		
60	Isolation of isolator	23 dB or better	Yes / No / Explain		
61	Insertion Loss	0.1 dB or lower @ 50 K	Yes / No / Explain		
62	Material	OFHC Copper or equivalent	Yes / No / Explain		
63	Environment	Vacuum (10^{-8} mBar) min	Yes / No / Explain		
64	Weight(isolator)	30 gm. approx.	Yes / No / Explain		
65	Quantity(isolator)	1 Nos	Yes / No / Explain		
66	OFHC Cryogenic Directional Coupler		-		
67	Frequency	8.0 to 12.0 GHz	Yes / No / Explain		
68	Coupling Value	40 dB +/-1dB max @ 50 K	Yes / No / Explain		
69	Directivity	15 dB min	Yes / No / Explain		
70	Insertion Loss(Directional Coupler)	0.10 dB or lower @ 50 K	Yes / No / Explain		
71	Power	1 Watt max	Yes / No / Explain		
72	Waveguide	WR 112	Yes / No / Explain		
73	Flange	UG 51/U	Yes / No / Explain		
74	Material(Directional Coupler)	OFHC Copper or equivalent	Yes / No / Explain		

75	Weight(Directional Coupler)	35 gm approx.	Yes / No / Explain		
76	Environment (Directional Coupler)	Vacuum (10^{-8} mBar) approx	Yes / No / Explain		
77	Quantity(Directional Coupler)	1 Nos	Yes / No / Explain		
78	Operation Temp	50 K min	Yes / No / Explain		
79	OFHC Cryogenic Band		-		
80	Pass Filter		-		
81	0.1 dB Bandwidth	8400-8500 MHz	Yes / No / Explain		
82	In-band loss	0.12 dB or lower @ 50 K	Yes / No / Explain		
83	In-band ripple	< 0.1 dB pp	Yes / No / Explain		
84	Group delay ripple	< +/- 1 ns pp over the full bandwidth < 0.2 ns/MHz linear	Yes / No / Explain		
85	VSWR(filter)	< 1.2:1	Yes / No / Explain		
86	Rejection	8120 MHz and 8780 MHz > 50dB	Yes / No / Explain		
87	Waveguide(filter)	WR 112	Yes / No / Explain		
88	Flange(filter)	UG 51/U	Yes / No / Explain		
89	Material(filter)	OFHC Copper or equivalent	Yes / No / Explain		
90	Environment (filter)	Vacuum (10^{-8} mBar)	Yes / No / Explain		
91	Quantity(filter)	1 Nos	Yes / No / Explain		
92	OFHC Waveguide Vacuum Window		-		
93	Frequency Range(Vacuum Window)	8400±100 MHz	Yes / No / Explain		
94	Power Handling Capacity(Vacuum Window)	1 Watt max	Yes / No / Explain		

95	VSWR(Vacuum Window)	1.1:1 min	Yes / No / Explain		
96	Vacuum Compatibility(Vacuum Window)	10 ⁻⁸ mbar max	Yes / No / Explain		
97	Operating Pressure(Vacuum Window)	0.5 Psi max	Yes / No / Explain		
98	Leak Rate(Vacuum Window)	5×10 ⁻¹⁰ mbar/sec max	Yes / No / Explain		
99	Waveguide(Vacuum Window)	WR 112	Yes / No / Explain		
100	Flanges(Vacuum Window)	UG 51/U	Yes / No / Explain		
101	Transmission Loss(Vacuum Window)	0.10 dB or lower @ 50 Kelvin	Yes / No / Explain		
102	Material(Vacuum Window)	OFHC Copper or equivalent	Yes / No / Explain		
103	Quantity(Vacuum Window)	1 Nos	Yes / No / Explain		
104	OFHC Cryogenic Waveguide to Coaxial Adapter		-		
105	Frequency(adapter)	8.0 to 12.0 GHz	Yes / No / Explain		
106	Insertion Loss(adapter)	0.1 dB or lower @ 50 K	Yes / No / Explain		
107	Power Handling(adapter)	1 Watt Max	Yes / No / Explain		
108	VSWR(adapter)	1.15:1 max	Yes / No / Explain		
109	Material(adapter)	OFHC Copper or equivalent	Yes / No / Explain		
110	Waveguide(adapter)	WR 112	Yes / No / Explain		
111	Flange(adapter)	UG 51/U	Yes / No / Explain		
112	Connector Type(adapter)	SMA Female	Yes / No / Explain		
113	Environment (adapter)	Vacuum (10 ⁻⁸ mBar) max	Yes / No / Explain		
114	Quantity(adapter)	1 Nos	Yes / No / Explain		

115	Cryo LNA Specification		-		
116	RF Bandwidth	6-20 GHz	Yes / No / Explain		
117	Noise Temperature	4.7 Kelvin	Yes / No / Explain		
118	Noise figure	.070 dB	Yes / No / Explain		
119	Gain	32 dB	Yes / No / Explain		
120	DC Power	Vd =1.00 v, Id=22 mA	Yes / No / Explain		
121	RF Connector	Female SMA	Yes / No / Explain		
122	DC connector	9 pin female Nano D	Yes / No / Explain		
123	RF input drive level	-10 dBm	Yes / No / Explain		
124	IRL	15 dBm	Yes / No / Explain		
125	ORL	15 dBm	Yes / No / Explain		
126	Quantity(Ina)	1 Nos	Yes / No / Explain		
127	Power supply for Cryo LNA		-		
128	AC Input voltage range	230V±10%	Yes / No / Explain		
129	Input Frequency	50 Hz	Yes / No / Explain		
130	Maximum Total	+12V	Yes / No / Explain		
131	Output Current Max	1.7 A	Yes / No / Explain		
132	Efficiency	55%	Yes / No / Explain		
133	Ripple and noise	3 mV PK-PK	Yes / No / Explain		
134	Load Regulation	0.05%	Yes / No / Explain		
135	Storage Temperature	85c	Yes / No / Explain		

136	Operating Temperature	55 ºC	Yes / No / Explain		
137	Status and feedback monitoring	Vd sense and Vg sense.	Yes / No / Explain		
138	Quantity(ps)	2 Nos	Yes / No / Explain		

Document : rfp

Common Specifications (Applicable for all items)

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	10 K X BAND DEWAR	10 Kelvin	Yes / No / Explain		

Supporting Documents required from Vendor

1. •Vendors should have proven track record and experience in designing, manufacturing, and supplying cryogenic Dewar up to 80 Kelvin or lower to ISRO or any other R&D Organization under Govt. of India

5 additional documents can be uploaded by the vendor

C.2 Commercial Terms / Bid

Sl. No.	Description	Compliance	Vendor Terms
1	Onsite Supply and installation	Yes / No / Explain	
2	Payment Term (Our normal terms of payment is 100% within 30 days from the date of receipt and acceptance of the item at our site)	Yes / No / Explain	
3	Taxes and other costs, if any	Yes / No / Explain	
4	Delivery Period	Yes / No / Explain	
5	Delivery Term	Yes / No / Explain	
6	Security Deposit: FD or BG for 3% of PO value to be submitted after receipt of PO and valid till supply & acceptance.	Yes / No / Explain	
7	Performance Bank guarantee : BG for 3% of PO value to be submitted while claiming payment valid till end of warranty period with a claim period of 60 days.	Yes / No / Explain	
8	SD-cum-Warranty (PBG) (in lieu of SD & PBG as a single instrument): BG for 3% of PO value to be submitted after receipt of PO valid till end of warranty period with a claim period of 60 days.	Yes / No / Explain	
9	<p>DELAY IN COMPLETION / LIQUIDATED DAMAGES : If the Contractor fails to deliver the stores within the time specified in the Contract or any extension thereof, the Purchaser shall recover from the Contractor as Liquidated Damages a sum of one-half of one per cent (0.5%) of the Contract price of the undelivered stores for each calendar week of delay. The total liquidated damages shall not exceed ten percent (10%) of the contract price of the unit or units so delayed. Stores will be deemed to have been delivered only when all their component parts are also delivered. If certain components are not delivered in time, the stores will be considered as delayed until such time as the missing parts are delivered.</p>	Yes / No / Explain	

10	Warranty	Yes / No / Explain	
11	Validity	Yes / No / Explain	
12	Name and Address of the company on whom purchase order to be placed (OEM if any should be added in your E-Procurement profile under Add Agent/Principal without fail). Address indicated here must be available in your profile as a Principal/Agent failing which PO will be placed on the e-procurement address available in the profile.	Yes / No / Explain	
13	Certificate of Undertaking: Any bidder from a country which shares a land border with India will be eligible to bid in any procurement whether of goods or services (including consultancy services and non consultancy services) or works (including turn-key projects) only if the bidder is registered with the Competent authority (i.e. DPIIT). Hence, it is mandatory to furnish Certificate of Undertaking as indicated in the tender document.	Yes / No / Explain	
14	Foreign vendors are not permitted to quote. 1. Only Class -I and Class-II Local suppliers as per make in India policy are eligible to participate in the bid. 2. The percentage of local content should be specifically mentioned in the offer, without which will be summarily rejected 3. Preference will be given to class-I Local Supplier and in their absence, class-II Local supplier will be considered.	Yes / No / Explain	

15	<p>This tender is restricted only to Class-I and Class-II Local Suppliers as defined under DPIIT Order dtd 04/06/2020- Preference to Make in India Order-2017 Revision. Non-Local Suppliers need not quote. Foreign OEMs/Agents quoting on behalf of Foreign OEMs are not permitted to quote. High Sea Sales Quotes not permitted. The bids shall be in INR only.</p> <p>Purchase preference to eligible vendors are applicable as per extant notifications issued by the Government of India.</p> <p>The Class-I/Class-II Local suppliers, at the time of submitting their offer, shall also indicate percentage of local content and provide self certification that the item (s) offered meets the local content requirement for Class-I/Class-II Local Suppliers as the case may be. They shall also give details of location (s) at which the local value addition is made.</p> <p>In cases if the item(s) offered exceed Rs. 10 Crores, the Class-I/Class-II Local Suppliers shall provide a Certificate from the statutory auditor or cost auditor of the company (in case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content. False Declarations will be in breach of the Code of Integrity under Rule 175 (1) (i) (h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law.</p>	Yes / No / Explain	
16	<p>Percentage of local content for the quoted item. Details of break-up of local content shall be provided in terms of percentage. Please note that the value should not be mentioned.</p>	Yes / No / Explain	
17	<p>Details of location (s) at which the local value addition is made</p>	Yes / No / Explain	
18	<p>Foreign OEMs/Agents quoting on behalf of Foreign OEMs are not permitted to quote. High Sea Sales quotes not permitted. The bids shall be in INR only.</p>	Yes / No / Explain	

19	GeM Seller ID: As per Gol OM No. 6/9/2020-PPD dated 24.08.2020 and DO No. 170/CEO-GeM/2020, sellers providing Goods and Services to Central Government Organizations shall be registered on GeM and obtain a unique GeM registered ID. Hence please get registered in GeM and furnish your GeM Seller ID.	Yes / No / Explain	
20	Any other terms	Yes / No / Explain	
21	Micro and Small Enterprises [MSEs] a. In order to avail the benefits extended by Government of India to the Micro and Small Enterprises [MSEs] in respect of Goods and Services as per provision of the policy, MSEs registered with District Industries Centre [DIC] or Khadi and Village Industries Commission [KVIC] or Khadi and Village Industries Board [KVIB] or Coir Board or National Small Industries Commission [NSIC] or Directorate of Handicrafts and Handlooms or Udyog Aadhar Memorandum, or any other Body specified by Ministry of MSME have to submit a copy of Valid Certificate with self-attestation along with the Techno-commercial bid. No Certificate claiming exemption will be entertained after Tender due date.	Yes / No / Explain	
22	b. MSEs are entitled for [i] issue of Tender documents Free of Cost [ii] Exemption of Earnest Money Deposit [EMD]. However, Performance Security is mandatory for Goods and Services.	Yes / No / Explain	
23	c. If the MSE Tenderer[s] is/are SC/ST/Woman entrepreneur owned MSEs, specific mention for the same should be there in the valid certificate submitted by the tenderer.	Yes / No / Explain	
24	d. Tenderers claiming MSME benefit shall furnish copy of UAM no. as uploaded on CPP portal to avail benefit	Yes / No / Explain	

25	In case a bidder is an MSE, registered under NSIC or any other Government Agencies and would like to avail exemptions, offer should be accompanied with necessary registration certificate with declaration to consider their offer. Quotation received without such declaration and valid registration certificate will not be considered for exemptions under the Public Procurement Policy.	Yes / No / Explain	
26	Confirm whether you are a reseller or distributor if not mention the nature of business with the copy of valid registration certificate to substantiate the same.	Yes / No / Explain	

C.3 Price Bid

Sl. No.	Item	Quantity	Unit Price	Currency	Total Price	Remark
1	Cryogenic Chamber	1.00 Nos.		-		

Common charges (Applicable for all items)

P&F Charges	
Freight Charges	
Installation Charges	
Documentation & Handling Charges	
Other Charges (If any)	