

Centre for Development of Advanced Computing
A Scientific Society of Ministry of Electronics & Information Technology,
Government of India

Innovation Park, PANCHAVATI, Pashan Road, Pune - 411008
Tel: +91-20-25503671-676 OR +91-20-2586 8086
e-Mail: mmg@cdac.in
www.cdac.in

Tender No: Enquiry No: CDACP/CFDR/ENQ/26-27/457

C-DAC invites ON-LINE bids through Central Public Procurement Portal (CPPP) for Supply, Installation, Integration, Testing, Commissioning, Training & Support of Cryogen-Free Dilution Refrigerator System with Wiring

Prospective Bidders may download the Tender Document from www.cdac.in / <https://eprocure.gov.in/eprocure/app>. Bidders are advised to go through instructions provided at 'Instructions for online Bid Submission' and submit duly filled bids online on the website <https://eprocure.gov.in/eprocure/app> as per the schedule given in the Tender Document.

TENDER SCHEDULE

Tender No: CDACP/CFDR/ENQ/26-27/457

Name of the Institute	Centre for Development of Advanced Computing, Pune 411008
Place of Supply, Installation, Commissioning, & Support etc.	Centre For Development of Advanced Computing, Innovation Park, Panchavati, Pashan Road, PUNE 411008.
Date of Release of Tender	April 30, 2026
Date of Pre-Bid Meeting	May 11, 2026@ 1500 Hrs. Hybrid Mode - Offline / Online
Last date of submission of bids	June 01,2026 @ 1500 Hrs.
Date of opening of Technical bids	June 01,2026 @ 1530 Hrs.
Place of opening of technical bids	C-DAC, Pune 411008
Bank Details for submitting Tender Fees / EMD online	Name of Bank: IDBI Bank, Gokhale Road, Pune – 411016, Account No: 60010010004258 IFSC / NEFT Code: IBKL0000600

Note: The amendment to the tender documents, if any, will be notified by release of Corrigendum Notice on www.eprocure.gov.in/eprocure/app or www.cdac.in/tender against this tender. The amendments/ modifications will be binding on the bidders.

Instruction for Online Bid Submission:

The bidders are required to submit soft copies of their bids electronically on the CPPPortal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPPPortal, prepare their bids in accordance with the requirements and submitting their bids online on the CPPPortal. More information useful for submitting online bids on the CPPPortal may be obtained at: <https://eprocure.gov.in/eprocure/app>.

REGISTRATION:

- Bidders are required to enrol on the e-Procurement module of the Central Public Procurement Portal (url: <https://eprocure.gov.in/eprocure/app>) by clicking on the link 'Click here to Enrol'. Enrolment on the CPPPortal is free of charge.
- As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPPPortal.
- Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India with their profile.
- Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSCs to others, which may lead to misuse.
- Bidder then logs into the site through the secured login by entering their userID / password and the password of the DSC / eToken.

SEARCHING FOR TENDER DOCUMENTS:

- There are various search options built in the CPPPortal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, organization name, location, date, value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as organization name, form of contract, location, date, other keywords etc. to search for a tender published on the CPPPortal.
- Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the

CPPPortal to intimate the bidders through SMS / E-mail in case there is any corrigendum issued to the tender document.

- The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

PREPARATION OF BIDS:

- Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents – including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
- Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF formats. Bid documents may be scanned with 100dpi with black and white option.
- To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use 'My Space' area available to them to upload such documents. These documents may be directly submitted from the 'My Space' area while submitting a bid, and need not be uploaded repeatedly. This will lead to a reduction in the time required for bid submission process.

SUBMISSION OF BIDS:

- Bidder should log into the site well in advance for bid submission so that he/she upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- Bidder has to select the payment option as 'offline' to pay the tender fee / EMD as applicable and enter details of the instrument(s).
- Financial bids to be submitted in .xls format available on CPPPortal.
- The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission,
- All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bid encryption technology. Data storage encryption of sensitive fields is done.
- The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- Upon the successful and timely submission of bids, the portal will give a successful bid submission message and a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.

ASSISTANCE TO BIDDERS:

- Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the Tender.
- Any queries relating to the process of online bid submission or queries relating to CPPPortal in general may be directed to the 24*7 CPPPortal Helpdesk. The contact number for the helpdesk is 0120-4001 002 or 0120-4001 005 or 0120- 4493395. International Bidders are requested to prefix +91 as country code.

GENERAL INSTRUCTIONS TO THE BIDDERS:

- The tenders will be received online through portal <https://eprocure.gov.in/eprocure/app>. In the Technical Bids, the bidders are required to upload all the documents in .pdf format.
- Possession of Valid Class II/III Digital Signature Certificate (DSC) in the form of smart card/ e-Token in the company's name is a prerequisite for registration and participating in the bid submission activities through <https://eprocure.gov.in/eprocure/app>. Digital Signature Certificates can be obtained from the authorized certifying agencies, details of which are available in the web site <https://eprocure.gov.in/eprocure/app> under the link 'Information about DSC'.

Tenderers are advised to follow the instructions provided in the 'Instructions to the Tenderers for the e-Submission of the bids online through the Central Public Procurement Portal for e-Procurement at <https://eprocure.gov.in/eprocure/app>.

SECTION I: INVITATION FOR BIDS (IFB)

1. **Centre for Development of Advanced Computing (C-DAC)** - is a scientific society under the administrative control of Ministry of Electronics & Information Technology (**MeitY**), Government of India. C-DAC invites `ONLINE' bids from eligible bidders for Supply, Installation, Integration, Testing, Commissioning, Training & Support of Cryogen-Free Dilution Refrigerator System with Wiring as per schedule of requirements, terms and conditions stipulated in this document.

2. **Contact information:**

Material Management Group
Centre for Development of Advanced Computing (C-DAC)
Innovation Park, PANCHAVATI, Pashan Road, Pune 411 008
Tel No.: +91-20-2550 3671-676 or +91-20-2586 8086
Fax No.: +91-20-25694004
E-mail: mmg@cdac.in

3. **Two bid System – Online submission through**

<https://www.eprocure.gov.in/eprocure/app>:

The two-bid system will be followed for this tender. In this system, bidder must submit their offer - online in separate e-packets as explained below:

4. **Online - Envelope No. 1: "Technical eBid" shall contain: (PDF format only)**

- a. Scanned copy of Demand Draft towards tender fee (non-refundable) of Rs. 5,900/- (Rupees Five Thousand Nine Hundred Only) drawn in favour of C-DAC payable at Pune. (The DD must reach physically at the place of Opening of the Tender on or before the Due Date & Time of the Tender). Alternatively, bidders can also pay tender fees by online transfer (bank details are mentioned above in Tender Schedule).
- b. Scanned copy of Demand draft towards Earnest Money Deposit of Rs. 22,00,000/- (Rupees Twenty Two Lakh only) drawn in favour of C-DAC payable at Pune. (The Demand Draft must reach physically at the place of Opening of the Tender on or before the Due Date & Time of the Tender Submission). Alternatively, bidders can also pay EMD amount by online transfer or in the form of BG.
- c. If in the view of bidder, any EMD exemption is applicable to them, under any Rules / Process of Government of India, bidder must submit necessary and sufficient documents along with the technical bid, in support of their claim. The exempted bidder should submit undertaking as per **Annexure E**.
- d. Duly filled Technical Bid with proper seal and signature of the authorised person (with name, designation, email id & contact no.) The authority letter, as per the format attached at **Annexure – D**
- e. A copy of Certificate of Incorporation, Partnership Deed / Memorandum and Articles of Association / any other equivalent document showing date and place of incorporation, as applicable.

- f. Copies of documents in support of eligibility requirements stipulated in Schedule of Requirements (Section – IV).
- g. The bidder should have minimum average annual sales turnover of INR (Rs.) 08 Cr (Rs. 80 million) of last 03 financial years. The copy of the certificate from a Chartered Accountant for the last 03 financial years indicating the annual sales turnover of the bidder should be submitted.
- h. Only the Original Equipment Manufacturers (OEM) or their authorised representative in India are allowed to bid for the items as mentioned in the tender document. The specific authorisation letter from the OEM as indicated in Schedule of Requirements (Section – IV) should be submitted. The undertaking on the letterhead of Principal Manufacturer as per format given in **Annexure – B** must be submitted.
- i. The detailed technical specification, make, model, part number & compliance of the items offered supported by the printed catalogue / leaflet published by the OEM.
- j. Undertaking from the OEM to the effect that the products offered are not nearing end-of-life / end-of-support three years down the line from the date of bidding.
- k. Undertaking to the effect that a Security Deposit of 5% of the order value will be submitted in case C- DAC decides to place the Purchase Order.
- l. Undertaking to the effect that the terms and conditions, clauses etc. stipulated in this tender are acceptable. **(as per Annexure- C attached)**
- m. Declaration as per Annexure F (restrictions on procurement from a bidder of a country which shares a land border with India).
- n. Declaration as per Annexure G (compliance to GoI OM regarding Make in India). The bidder shall be required to provide the declaration / 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.
The Annexure-G is applicable only for Class I / Class II local suppliers & not applicable for Non-local suppliers.
- o. Bidder shall submit the online links / documents and Data / specifications sheets pertaining to the quoted items.
- p. Declaration as per Annexure H (format for the Integrity Pact)
Details of Independent External Monitors (IEM)
Shri M Peter Johnson - email: johnson.mp@nic.in
Shri Vijay Kumar Singh - email: vijaysinghsls10@gmail.com
- q. Other documents necessary in support of eligibility criteria, product catalogues, brochures etc.

Note: C-DAC reserves the right to reject the bid if any of the above listed document/s is not submitted.

5. Online - Envelope 2: “Commercial eBid “ shall contain: (.xls format only)

The Commercial e-Bid completed in all respects as per format available on CPPPortal.

6. Pre-Bid Meeting will be held on 11 May 2026 @ 1500 hrs in Hybrid Mode:

Venue for Offline Mode:

Materials Management Group (MMG)
Centre for Development of Advanced Computing (C-DAC)
Innovation Park, Panchavati, Pashan Road,
Pune, INDIA

Meeting Link for Online Mode:

<https://cdac-mmg.webex.com/cdac-mmg/j.php?MTID=m3d8f768f5ea59cfdd7ce0b2bb31c5a60>

The queries, doubts, clarifications if any, must be sent by email on or before **08 May, 2026** at mmg@cdac.in

7. Date of submission/Due Date of bids and opening of the Technical bids – Online.

Last date for uploading the ebids: **01 June 2026** upto **1500 Hrs** through www.eprocure.gov.in/eprocure/app portal:

8. Technical ebids will be opened - online on 01 June 2026 at 1530 Hrs through www.eprocure.gov.in/eprocure/app portal

The bids must be submitted on-line. The DD towards Tender Fees & EMD etc. must be submitted in person or through post/ courier (C-DAC shall not be responsible for any postal delays or any other reason for not submitting the tender fees/ EMD etc. in the specified time and resulting in disqualification / rejection of any bid) so as to reach on or before the due date and time.

The representatives (maximum two) of bidders are welcome to attend the opening of the 'online' technical ebids (optional).

In case bidder requires any clarifications / information, they may contact C-DAC address given in Clause 2 of Section I.

Note: Please do not put "Commercial / Financial Bid" (prices quoted) in the technical bid envelope. However, techno-commercial terms and conditions documents can be uploaded in the technical bid envelope.

9. Opening of commercial ebids – online through www.eprocure.gov.in/eprocure/app:

Commercial ebids of the qualified bidders only will be opened, in the presence of the bidders or their authorized representative of the bidders, who choose to attend, at the time place and date to be informed later. The authorized representative of bidders, present at the time of opening of the bids shall be required to sign an attendance register as a proof of having attended the commercial bid opening.

The bidder's name, bid prices, other appropriate details will be displayed at the time of the opening of the commercial bids.

(END OF SECTION I)

SECTION II: INSTRUCTIONS TO BIDDERS (ITB)

1. Locations for the Supply, Installation & Warranty Services

The entire system as described in “Schedule of Requirements” must be supplied, installed, commissioned & supported at **C-DAC Pune**.

Centre for Development of Advanced Computing (C-DAC) Innovation Park, PANCHAVATI, Pashan Road, Pune 411 008

2. Delivery Period:

The system covered in the Schedule of Requirements (Section – IV) must be supplied and installed within **9 Months** from the date of placement of order or from date of establishment of Letter of Credit, whichever is later.

In case of import, the items must be dispatched by air.

3. Order Placement:

The Supply Order (payment also) shall be released by:

Centre for Development of Advanced Computing (C-DAC)

Innovation Park, PANCHAVATI, Pashan

Pune 411008, Maharashtra, INDIA.

4. Eligibility Criteria:

4.1. Bidder should either be the Original Equipment Manufacturers (OEM) or authorised representative in India for the system mentioned in the tender document.

4.2. The OEM and the authorised representative in India cannot bid simultaneously for same item.

4.3. The bidder must quote for all the items given in Schedule of Requirements – Section IV of this document. The AMC services can be provided either by the OEM directly or by their authorised representative in India.

4.4. The bidder must not be blacklisted by C-DAC or any other Educational / R&D / Govt. Organizations as on date of submission of the bids. A certificate or undertaking to this effect must be submitted.

4.5. The bidders should upload the required documents as stipulated in para 4, Section – I.

4.6. Regarding demonstration of required specifications and installations, Bidder must submit the supporting documents as mentioned in Schedule of Requirements (Section – IV).

4.7. The bidder must comply with the provisions of (Public Procurement No.4) Ref. [OM No.F.7/10/2021-PPD \(1\)](#) dated 23/02/2023 issued by Public Procurement Division, Department of Expenditure, Ministry of Finance, GoI. A certificate or undertaking to this effect must be submitted as per Annexure F.

4.8. The system offered to comply with the provisions of Order No P-45021/2/2017-PP (BE-II)-Part(4) Vol.II dated 19/07/2024 issued by Department for Promotion of

Industry and Internal Trade, Ministry of Commerce and Industry, Gol, and order issued by relevant Ministry. A certificate or undertaking must be submitted as per Annexure G.

This clause is applicable only for Class I / Class II local suppliers & not applicable for Non-local suppliers.

Note:

- The bidders should provide sufficient documentary evidence to support the eligibility criteria. C-DAC reserves the right to reject any bid not fulfilling the eligibility criteria.
- The tender is being published as **Global Tender Enquiry (GTE)**. However, in case the system offered by any bidder / bidders complies (Class I or Class II) with the provisions of Order No. P-45021/2/2017-PP (BE-II)-Part(4) Vol.II dated 19/07/2024 issued by Public Procurement Division, Department for Promotion of Industry and Internal Trade (DPIIT), Ministry of Commerce, Gol, such bidders would be only considered as per the Order subject to technical compliance of the offered system.

5. Amendment to Bidding Documents

- 5.1 At any time prior to the deadline for submission of bids, C-DAC may, for any reason, whether on its own initiative or in response to the clarification request by a prospective bidder, modify the bid document.
- 5.2 The amendments to the tender documents, if any, will be notified by release of Corrigendum Notice on www.eprocure.gov.in/eprocure/app/ / www.cdac.in/tender against this tender. The amendments/ modifications will be binding on the bidders.
- 5.3 C-DAC at its discretion may extend the deadline for the submission of bids if it thinks necessary to do so or if the bid document undergoes changes during the bidding period, in order to give prospective bidders time to take into consideration the amendments while preparing their bids.

6. Preparation of Bids

Bidder should avoid, as far as possible, corrections, overwriting, erasures or postscripts in the bid documents. In case however, any corrections, overwriting, erasures or postscripts have to be made in the bids, they should be supported by dated signatures of the same authorized person signing the bid documents. However, bidder shall not be entitled to amend/ add/ delete/ correct the clauses mentioned in the entire tender document.

7. Earnest Money Deposit (EMD)

- 7.1. The Earnest Money Deposit (EMD) must be submitted prior to the DUE DATE & TIME of submission of the online technical bid. The EMD is required to be in the form of Demand Draft in favour of C-DAC payable at Pune, for an amount of Rs. 22,00,000/- (Rupees Twenty Two Lakh Only). Alternatively, bidders can also pay EMD amount by online transfer or in the form of BG.
- 7.2. If in the view of bidder, any EMD exemption is applicable to them, under any Rules / Process of Government of India, bidder must submit necessary and sufficient documents along with the technical bid, in support of his claim. (Valid for the products/services required by C-DAC against this Tender). No interest shall be payable on EMD. The exempted bidder should submit undertaking as per **Annexure E**.

7.3. The EMD will be returned to the bidder(s) whose offer is not accepted, within 30 days of declaration of the result of the first stage, i.e., technical evaluation. In case of the bidder whose offer is accepted, the EMD will be returned on submission of Security Deposit (Refer Clause 3 of Section III). However, if the return of EMD is delayed for any reason, no interest/ penalty shall be payable to the bidder.,

7.4. The successful bidder, on award of contract / order, must send the contract/ order acceptance in writing, within 10 days of award of contract/ order, failing which the EMD will be forfeited and the order will be cancelled.

7.5. The EMD may be forfeited:

- If the bidder withdraws the bid during the period of bid validity specified in the tender.
- In case a successful bidder, fails to furnish the Security Deposit (Refer Clause 3 of Section III).
- If the bidder fails to furnish the acceptance in writing, within 10 days of award of contract/ order.

8. Period of validity of bids

8.1 Bids shall be valid for minimum 120 days from the date of submission. A bid valid for a shorter period shall stand rejected.

8.2 C-DAC may ask for the bidder's consent to extend the period of validity. Such request and the response shall be made in writing only. The bidder is free not to accept such request without forfeiting the EMD. A bidder agreeing to the request for extension will not be permitted to modify his bid.

- **Submission of Bids- Online PDF format only.**

The Bid documents shall be neatly arranged. They should not contain any terms and conditions, printed or otherwise, which are not applicable to the Bid. **The conditional bid will be summarily rejected.** Insertions, postscripts, additions and alterations shall not be recognized, unless confirmed by bidder's signature.

9 Deadline for Submission of Bids – Online Only.

9.1 Bids must be received by C-DAC online before the due date and time as specified in the tender document.

9.2 C-DAC will not be responsible for any issues arising/pertaining with the eprocure.gov.in/eprocure/app portal for non-submission, failure in submission of ebids online.

9.3 C-DAC may extend this deadline for submission of bids by amending the bid documents and the same shall be suitably notified in the media.

10 Late Bids

C-DAC shall not be responsible and liable for the delay in receiving the bid for whatsoever reason.

C-DAC will not be responsible for any issues arising/pertaining with the eprocure.gov.in/eprocure/app portal for non-submission, failure in submission of ebids online.

11 Bid Opening & Evaluation of Bids

- 11.1 The technical bids will be evaluated in two steps.
- The bids will be examined based on eligibility criteria stipulated at Para 4 of Section – II to shortlist the eligible bidders.
 - The technical bids of only the short-listed eligible bidders shall be evaluated based on technical specifications stipulated at Section – IV.
- 11.2 The bidders whose technical bid is found to meet both the requirements as specified above will qualify for opening of the commercial bid and will be informed about the date and time of the opening of the commercial bid.
- 11.3 The duly constituted Tender Committee (TC) shall evaluate the bids. The TC shall be empowered to take appropriate decisions on minor deviations, if any.
- 11.4 The bidder’s name, bid prices, discounts and such other details considered as appropriate by C-DAC, will be displayed at the time of opening of the commercial bids.

12 Comparison of Bids

- 12.1 Only the short-listed bids from the technical evaluation shall be considered for commercial comparison.
- 12.2 For the purpose of comparison of prices on equal basis, the prices quoted in foreign currency (if any) by bidders shall be converted to equivalent Indian Rupees.
- 12.3 All offers shall be converted to Indian Rupees based on the RBI / Authorised exchange bankers approved by RBI “Bill currency selling” exchange rate on the deadline of bid submission.
- 12.4 The comparison for evaluation will be made on the total cost of ownership (TCO) basis, including the base system, all mandatory accessories, and AMC (if applicable), after currency conversion.
- 12.5 In case both Indian and foreign bidders have quoted in the tender, The following charges shall be added over and above CIP, International AirPort, INDIA:
One per cent as port handling charges; customs duty and surcharges, as applicable on the date of opening of the bid; clearing agency charges; inland freight.
- 12.6 In case there are no domestic bidders, a comparison of offers shall be done based on CIP Mumbai Airport, INDIA / Landed costs.

13 Award of Contract

- 13.1 C-DAC shall award the contract to the eligible bidder whose technical bid has been accepted and determined as the lowest evaluated commercial bid based on the Grand Total calculated of all items + taxes/duties etc. of the Commercial Bids. However, C-DAC reserves the right and has sole discretion to reject the lowest evaluated bid.
- 13.2 If more than one bidder happens to quote the same lowest price, C-DAC reserves the right to decide the criteria and further process for awarding the contract, decision of C-DAC shall be final for awarding the contract.

14 End User Certificate (if applicable):

C-DAC can provide end user certificate in advance in order to save on time/ delivery period. However, this does not mean that the order shall be placed on the same bidder. The bidder may submit the format of end user certificate at the earliest, preferably along with the technical bid.

15 Purchaser's Right to amend / cancel

- 15.1 C-DAC reserves the right to amend the eligibility criteria, commercial terms & conditions, Scope of Supply, technical specifications etc.
- 15.2 C-DAC reserves the right to cancel the entire tender without assigning any reasons thereof.

16 Corrupt or Fraudulent Practices

- 16.1 It is expected that the bidders who wish to bid for this project have highest standards of ethics.
- 16.2 C-DAC will reject bid if it determines that the bidder recommended for award has engaged in corrupt or fraudulent practices while competing for this contract;
- 16.3 C-DAC may declare a vendor ineligible, either indefinitely or for a stated duration, to be awarded a contract if it at any time determines that the vendor has engaged in corrupt and fraudulent practices during the award / execution of contract.

17 Interpretation of the clauses in the Tender Document / Contract Document

In case of any ambiguity/ dispute in the interpretation of any of the clauses in this Tender Document, the interpretation of the clauses by Director General, C-DAC shall be final and binding on all parties.

(END OF SECTION II)

SECTION III: SPECIAL CONDITIONS OF CONTRACT (SCC)

1. Prices

1.1. The price quoted shall be considered firm and no price escalation will be permitted (except Govt. Statutory Levies).

1.2. Bidder can quote in INR (Indian Rs.) or in Foreign Currency. The bidder can quote partly in INR and partly in foreign currency. The authorised representative in India may bid on behalf of their OEM / Principals abroad. In such case, the bidders must provide the details viz. name & address on whom the Supply Order/ Letter of Credit is to be placed/ established with bank/ account details etc. in their techno-commercial bid. In such case the EMD, Security Deposit / Performance Bank Guarantee may be provided by the bidder in INR.

1.3. The prices quoted must be on “all inclusive till destination” (C-DAC, Pune) basis.

In case of imports, **the price quoted should be – CIP, Mumbai Airport, INDIA** including cost towards Supply, Installation, Integration, Testing, Commissioning, Training & Support of Cryogen-Free Dilution Refrigerator System with Wiring as per schedule of requirements, terms and conditions stipulated in this document.

The customs duty, Customs clearance charges & inland freight (the charges payable in India) shall be borne by C-DAC.

1.4. The supplier must provide the proper shipping documents necessary for customs clearance formalities availing applicable duty exemption.

1.5. Prices for Goods, works, or services or sourced in India must be quoted and paid for in Indian Rupees.

2. Software Licenses: (if applicable)

The software licenses, if any, shall be required in the name of user. The licenses shall contain paper licenses and at least one set of media (CDs) – wherever applicable.

3. Security Deposit (SD):

The successful bidder will be required to furnish the Security Deposit in INR equivalent to 5% of the order value within 15 days of receipt of Supply Order. The Security Deposit should be submitted in the form of Demand Draft (drawn in favour of C-DAC payable at Pune) / Online Transfer / BG. The Security Deposit will be returned upon completion of Installation & Commissioning and on submission of Performance Bank Guarantee (PBG). Seller can also convert the security deposit BG to PBG by extending the validity suitably.

4. Performance Bank Guarantee (PBG):

The successful bidder will be required to furnish the Performance Guarantee in the form of a Bank Guarantee in INR equivalent to 5% amount of the Supply Order value, as per the format attached to this document (**Annexure – A**). This bank guarantee should be submitted along with the invoice after successful installation within 15 days. The Bank Guarantee shall remain valid for the period of **38 months** from the date of successful Installation & Commissioning.

The PBG must be negotiable at a branch of issuing bank in India. In case of no warranty claims towards the items under warranty, the PBG will be returned on completion of warranty period.

5. **Completeness Responsibility:**

Notwithstanding the scope of work, engineering, supply and services stated in bid document, any equipment or material, engineering or technical services which might not be even specifically mentioned under the scope of supply of the bidder and which are not expressly excluded there from but which – in view of the bidder - are necessary for the performance of the equipment in accordance with the specifications are treated to be included in the bid and has to be performed by bidder. The items which are over & above the scope of supply specified in the Schedule of Requirements may be marked as “Optional Items”.

6. **Warranty:**

The Supplier warrants that all the Goods are new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided otherwise in the Contract. The supplier further warrants that all Goods supplied under this contract shall have no defect arising from design, materials or workmanship or from any act or omission of the supplier. The warranty should be comprehensive on site, repair/replacement basis free of cost.

The system and components should be covered for a comprehensive warranty for 3 years from the manufacturer, which will start from the date of the successful Installation and Commissioning (SAT) of the equipment.

Warranty and Support for Cryogenic Microwave Readout Assembly with Traveling Wave Parametric Amplifier (**TWPA**) - **Minimum 12-month warranty covering parts and labor.**

The warranty shall cover all hardware, software, and subcomponents including compressor, GHS, cryostat, and automation system.

Any failure during the warranty period shall be addressed within five (5) working days of complaint acknowledgment. Response time shall be one business day by email / call and 05 business days for site visit.

Replacement parts supplied during warranty shall carry a minimum of 12-month warranty.

The defects, if any, during the guarantee/warranty period are to be rectified free of charge by arranging free replacement wherever necessary. Goods requiring warranty replacements must be replaced on free of cost basis.

C-DAC reserves the right to invoke the Performance Bank Guarantee submitted by bidder, in case of the following:

- a. The System fail to achieve the performance as stipulated in this document or The bidder fails to provide the warranty and other services in scheduled time frame, as stipulated in this document or
- b. The bidder delays to provide the warranty services as stipulated in this document.

7. Payments:

1.1. For foreign currency payments:

- 90% of the payment (of system) will be released through irrevocable Letter of Credit (LC).

Documents required for payment (on shipment of goods).

1. Supplier's original invoice giving full details of the goods, including quantity, value, HSN Code and so on;
2. Packing list;
3. Certificate of country of origin of the goods to be given by the seller as recognized by chamber of commerce.
4. Factory Acceptance Test Report / Certificate approved by the purchaser.
5. Manufacturer's Warranty certificate
6. Certificate of insurance;
7. Airway bill mentioning
 - a) Name of the carrier;
 - c) Date of shipment / Flight details
 - d) Airport of departure
 - e) Airport of destination etc.

Note: Copy of above documents shall be sent by email as intimation to purchaser before arrival of shipment to India.

- Balance 10% of the payment shall be released on successful installation and SAT at C-DAC Pune through L/C & on submission of PBG, as per clause 4 of Section III given above.

The LC operating charges inside India will be to C-DAC account and those outside India will be to beneficiary account. The LC confirmation charges & LC amendment charges, if requested/ required, will be to beneficiary account.

a. Payments against the services (AMC) provided at site, in India; will be released in INR only on quarterly basis and on successful completion of services.

b. For payments in INR:

- 80% on delivery.
- 10% after successful installation and SAT at C-DAC Pune.
- 10% after warranty or acceptance of performance bank guarantee valid for the warranty period.

8. Shipping Documents: (in case of import option)

The **Air Way Bill and Invoices** shall be marked as given below:

Bill to / Ship to:

(Name and Address of Bank)

**A/c Centre for Development of Advanced Computing (C-DAC)
Innovation Park, PANCHAVATI, Pashan Road, PUNE 411008**

Maharashtra, INDIA

9. Penalty for delayed Delivery /Services

C-DAC reserves the right to levy penalty @ of 0.5 % of order value per week of delay beyond the scheduled deliveries / execution of the order successfully, subject to maximum of 5 % of the order value.

C-DAC reserves the right to cancel the order in case the delay is more than 10 weeks.

The delay in delivery and/or installation not attributed to supplier viz. delay in site preparation, delay in submission of required documents (by C-DAC) etc. and the conditions arising out of Force Majeure will not be considered for the purpose of calculating penalties.

10. Jurisdiction:

The disputes, legal matters, court matters, if any shall be subject to Pune, INDIA jurisdiction only.

11. Force Majeure:

C-DAC may consider relaxing the penalty and delivery requirements, as specified in this document, if and to the extent that, the delay in performance or other failure to perform its obligations under the contract is the result of a Force Majeure. Force Majeure is defined as an event of effect that cannot reasonably be anticipated such as acts of God (like earthquakes, floods, storms etc.), acts of states / state agencies, the direct and indirect consequences of wars (declared or undeclared), hostilities, national emergencies, civil commotion and strikes at successful Bidder's premises or any other act beyond control of the bidder.

12. Arbitration:

All disputes/claims of any kind arising out of supply, commissioning, acceptance, warranty maintenance etc under this Contract, shall be referred by either party (C-DAC or the bidder) after issuance of 30 days notice in writing to the other party clearly mentioning the nature of dispute to the Sole Arbitrator appointed by C-DAC. The venue for arbitration shall be specified in the purchase order/agreement. The arbitration proceedings shall be conducted in English and as per the provisions of Indian Arbitration and Conciliation Act, 1996. The decision of the Arbitrator shall be final and binding on both the parties.

13. Risk and Ownership:

Upon 80% of payment, C-DAC shall become owners of goods ordered but all risks, responsibilities; liabilities thereof in all goods shall remain with selected bidder till delivery of all goods to all end users. Part deliveries shall not be treated as deliveries. Only full deliveries of all items ordered will be considered as delivery.

14. Indemnity:

Selected bidder shall save, indemnify and hold harmless C-DAC from any third party Govt. Claims, losses penalties, if any, arising in connection with this Contract.

15. Assignment:

Selected bidder/ Party shall not assign, delegate or otherwise deal with any of its rights or obligation under this Contract without prior written permission of C-DAC.

16. Severability:

If any provision of this Contract is determined to be invalid or unenforceable, it will be deemed to be modified to the minimum extent necessary to be valid and enforceable. If it cannot be so modified, it will be deleted and the deletion will not affect the validity or enforceability of any other provision.

(END OF SECTION III)

Section – IV: Schedule of Requirements

Specification of Cryogen-Free Dilution Refrigerator

System with Wiring

1. Introduction

This document defines the detailed technical specifications, performance parameters, and compliance requirements for the procurement, installation, and commissioning of a cryogen-free dilution refrigerator system with full DC, RF, and cryogenic wiring infrastructure.

2. Technical Specifications

Sno.	Feature / Subsystem	Specification / Requirement
1	Base Temperature	<10 mK at the sample position with factory-installed DC and RF wiring as mentioned in Annexure II (Should be verified at the time of Installation)
2	Cooling Power	a) $\geq 15 \mu\text{W}$ at 20 mK b) $\geq 400 \mu\text{W}$ at 100 mK c) Measurements should be performed with factory-installed wires and cables, away from the mixing chamber, and verified at the time of installation.
3	Cool down time from room temperature to base temperature	a) The total cool-down time to reach the base temperature from room temperature shall be less than 36 hours Note: The total cool-down time includes the pre-cooling period to any intermediate temperature stage, if applicable. b) Provide the performance measurements plots of the system such as cool-down vs time and base temperature, clearly specifying the test conditions under which the measurement was conducted.
4	He3/He4 mixture	Included with the unit for optimal operation as per specifications.

5	Cryostat	The cryostat should have a single vacuum space with all hermetic seals, such as an O-ring seal at room temperature - - a lightweight outer vacuum jacket, and radiation shields enabling one-person manual assembly.
6	Refrigerator insert	<p>a) The insert should have all the necessary KF ports on the top flange for the pulse tube, the condensing line, cryostat vacuum pump line and the still pump line.</p> <p>b) Experimentally accessible ports for the user:</p> <p>(i) KF-40 or Larger Ports: The system must include a minimum of four (4) ports of KF-40 size or larger. At least two (2) of these ports must provide direct line-of-sight access.</p> <p>(ii) Auxiliary Ports (Side-loading/Secondary-insert): A minimum of two (2) such ports must be provided to allow flexible access and integration.</p> <p>Wiring Configuration Compatibility</p> <p>The proposed system must be capable of supporting the following coaxial cable configurations to accommodate future expansion needs: ≥ 325 high-density coaxial cables and ≥ 25 SMA connectors.</p> <p>c) The dilution unit should be removable/replaceable without disturbing the experimental plates/wiring.</p> <p>The required wiring diagram is attached for reference. The system should support the wiring as per Annexure-II</p>

7	Pulse-tube cryo-cooler with compressor	<p>a) Single PTR with 4K cooling, $\geq 1.3W$ or higher at 4.2K with remote motor.</p> <ul style="list-style-type: none"> · Available cooling power at 4K flange of the cryostat at 3.6 K without experimental load ≥ 300 mW. · Available cooling power at 4K flange of the cryostat at 5 K without experimental load ≥ 1 W. <p>b) Vibration isolation at 50K and 4K plate.</p> <p>c) Pulse tube should have mechanical vibration isolation from the rest of the cryostat.</p> <p>d) The pulse tube unit should be replaceable without disturbing the dilution unit/experimental plates.</p> <p>Compressor:</p> <ul style="list-style-type: none"> · Compatible with Indian electrical standards · Specify whether single-phase or three-phase power is required · Specify cooling water requirements <p>Vendor must include compatible water chiller specifications for compressor unit (temperature and water pressure required should be mentioned)</p>
8	Pumping and gas handling system	<p>a) A suitable dry pumping system for the dilution unit, having a turbo molecular pump with an oil-free backing pump, and a compressor for the mixture. Please specify the specifications of all pumps and compressors. Please specify if the same pumping system can also be used to evacuate the sample vacuum space. Otherwise, please include a suitable pumping system for sample vacuum space evacuation.</p> <p>b) The gas handling system (GHS) should provide the possibility of</p> <ol style="list-style-type: none"> (i) computer-controlled, fully automatic, as well as, (ii) completely manual control of the cool-down sequence, to reach the base temperature. <p>c) The gas handling system should be completely oil-free, using suitable pumps for He3 circulation and other requirements.</p> <p>d) The main circulation pump should have a maintenance-free design for an average service life of ≥ 5 years.</p> <p>e) The GHS should be provided with both internal and external liquid nitrogen cold trap.</p> <p>f) Control valves, flowmeters, safety and pressure regulators, gauges and electronic units of the GHS should be of very high quality (sourced from well-established manufacturers with a proven track record of reliability)</p>

		g) Provision for robust electrical and mechanical isolation of the GHS from the cryostat using suitable clamps, spacers, and dampers should be provided.
9	Sample space below mixing plate	<p>a) The cold plate at the mixing chamber stage must have a minimum diameter of 290 mm.</p> <p>b) Vertical clearance below the mixing chamber plate (measured down to the innermost radiation shield) must be at least 500mm.</p> <p>c) Up to a maximum of 3 sections for vacuum can and radiation shields should be used to meet the above requirement.</p>
10	Diagnostic/Control Electronics	<p>a) Fully automated temperature control with appropriate temperature sensors, heaters and heat-switches. Sensors set to be provided on the fridge to meet desired specifications and diagnose problems during day-to-day operation.</p> <p>b) The system must also include suitable resistance temperature sensors at 50K, 4K, Still and mixing chamber stages.</p> <p>c) Integrated heaters must be present at the Still and Mixing Chamber (MXC) flanges, operable in manual or closed-loop mode.</p> <p>d) Warm up heaters to reduce the warmup time from base temperature to room temperature, including all wiring and heater electronics, must be provided.</p> <p>e) The necessary electronic unit for control and monitoring of the resistance thermometers and heaters should be provided. Temperature Controller must have at least eight channels that can be used for thermometry.</p>
11	Low Vibration levels	<p>Less than 100 nm amplitude near 100 Hz (in both horizontal and vertical directions) at the mixing chamber plate while the fridge is in operation.</p> <p>Include supporting data on the measurements of mechanical vibrations in vertical and horizontal directions</p>
12	Cold traps	Cold traps (internal/external) to operate the fridge for longer duration to support >6 months of continuous operation without circulation path blockage.

13	Cooldown procedure, automation software and safety features	<p>Fully automated cool down from room temperature to 10mK via pre-programmed computer control.</p> <p>Flow chart explaining logic behind automation should be provided to enable easier debugging by the user</p> <p>Safety interlocks allowing unattended operation. Remote control operation.</p> <p>Ability to resume automation at different stages of the cooldown if interrupted due to power failure or other reasons.</p> <p>Continuous monitoring and logging of the system parameters.</p> <p>Cooldown parameters should be user editable for customization without requiring technical support team's intervention</p> <p>Control software should be compatible with Windows 11 or higher version operating system.</p> <p>Open access software with user modifiable sample codes/scripts for complete cooldown and warmup should be provided. API at the level of opening/closing of valves/pumps/heaters etc and pressure/temperature readings should be provided.</p> <p>Free upgrades of software.</p> <p>Safety feature: Ability to perform unattended operations, continuous logging of all system parameters.</p> <p>Safety feature: The control unit should have the provision for putting the unit in a safe-mode operation.</p>
14	DC Wiring	<p>Following DC wiring should be provided:</p> <p>a) 1×12 twisted pairs (24 Nos.) (1 units): PhBr (36 AWG) wiring from 24-pin Fischer connector at room temperature to mixing chamber, with 25-pin micro-D break-out at 4K and mixing chamber with EM Shielding</p> <p>b) 1×12 twisted pairs (24 Nos.) (1 units): Cu (35 AWG) wiring from 24-pin Fischer connector at room temperature to 4K, with 25-pin micro-D break-out (intermediate) at 4 K with EM Shielding</p> <p>c) 1×12 twisted pairs (24 Nos.) (1 units): NbTi/CuNi wiring from 4K to the mixing chamber plate, with termination 25-</p>

		pin micro-D at mixing chamber with EM Shielding
15	Amplifier Wiring	<p>a) 1x4 triple twisted pair (24 Nos.) (1 unit): Cu (35 AWG) wiring routed from the room temperature 24-pin Fischer connector to the nano-D connector at the 4 K flange.</p> <p>b) Bias cables, nano-D clamps, adapters, mounting beams and brackets, and necessary assemblies for at least 4 LNAs.</p>
16	RF wiring	<p>Vacuum flanges with necessary feedthroughs and additional thermal anchoring flanges at 50 K and 4 K for the following RF wiring should be provided.</p> <p>a) 12x semi-rigid SMA 0.86mm SCuNi/CuNi coaxial lines from RT to 4K and 4K to mixing chamber with breakout at 4K plate. All connectors should be SMA (18 GHz) type.</p> <p>All lines shall have a total attenuation of 60 dB distributed across stages (20 dB at 50 K, 20 dB at 4 K, 0 dB at CP and 20 dB at the MXC)</p> <p>b) 12x semi-rigid SMA 0.86mm SCuNi/CuNi coaxial lines from RT to 4K and 0.86 mm NbTi coaxial lines (or equivalent material) fitted using SMA connectors from 4 K to MXC plate. 10 Lines shall include around 30 dB total attenuation (20 dB at 4 K and 10 dB at the Cold Plate, and 0 dB at rest stages). 2 lines shall have about 30 dB total attenuation (20 dB at 4 K and 10 dB at the Cold Plate and 0 dB at rest stages)</p> <p>Additional Components</p> <p>Spare Components (minimum):</p> <p>Cryogenic Attenuators: 0 dB × 10, 3 dB × 6, 6 dB × 6, 10 dB × 6, 20 dB × 6</p> <p>Cryogenic Isolators: 2 units</p> <p>Cryogenic Circulators: 2 units</p> <p>Infrared low loss Filters: 5 units</p>
17	Cryogenic RC–RF Filter	<p>Combined low-pass RC and RF filtering element for noise reduction in cryogenic measurement lines.</p> <p>Cryogenic Multi-Stage Low-Pass Filter (Q-Filter Type)</p> <p>Designed for integration within cryogenic wiring at low-temperature stages; constructed from vacuum-compatible, non-magnetic materials.</p> <p>25-pin Micro-D male-to-female, titanium or equivalent non-magnetic connectors, fully shielded</p>

		<p>for low-noise signal transmission.</p> <p>Effective Electron Temperature Cooling: Reduces electron temperature through optimized filtering to typically 5–15 mK above the mixing chamber.</p> <p>Multi-Stage Low-Pass Filtering: Dual filter boards (RC and RF) with 24 or 48 channels, ensuring strong noise rejection and broadband attenuation.</p> <p>Optimal Thermal and Electrical Performance: Incorporates thermal anchoring to gold-plated copper brackets and provides 2 GΩ isolation per channel for superior stability and low leakage.</p> <p>High Magnetic Field Compatibility: Built from non-magnetic, shielded components including titanium connectors, ensuring reliable operation in various cryogenic and magnetic environments.</p> <p>Integration and Compatibility: Designed for integration within cryogenic wiring at low-temperature stages, compatible with 6-inch or 12-inch non-magnetic, shielded jumper cables.</p> <p>Construction: Made from vacuum-compatible, non-magnetic materials for reliable performance in ultra-low-temperature environments.</p> <p>Dimensions: Compact design (approx. 30 mm × 47 mm × 70 mm) for space-limited cryogenic setups.</p> <p>Mounting: Easily mountable on standard dilution refrigerator mixing chamber plates (20 mm × 20 mm pitch).</p> <p>Scalability: Robust and stackable structure suitable for configurations exceeding 48 or 96 lines, supporting stacking or in-series connections.</p>
18	Cryogenic Microwave Readout Assembly with Traveling Wave Parametric Amplifier (TWPA)	<p>The system shall deliver high gain, low added noise, and stable performance across a wide frequency bandwidth, enabling precise readout of very weak microwave signals.</p> <p>Cryogenic Microwave Readout Assembly with Traveling Wave Parametric Amplifier (TWPA) shall include the following components:</p> <ul style="list-style-type: none"> Traveling Wave Parametric Amplifier (mK stage) Low-noise HEMT amplifier (4 K stage) RF wiring kit including attenuated pump and readout lines

		<p>Filtering and isolation microwave components Parametric amplifier cold-finger assembly with dual magnetic shield Filtered DC lines for TWPA flux bias control</p> <p>Compliance and Testing The module shall be: Factory assembled, tuned, and performance-tested at cryogenic temperature Supplied with test documentation Compatible with standard dilution refrigerator infrastructure.</p> <p>Technical support for installation, operation, and performance verification of TWPA should be provided.</p> <p>Reference Requirement At least one customer reference using a similar TWPA-based Microwave Readout Module shall be provided to demonstrate proven field performance and reliability.</p>
19	Sample Holder System (Q-Cage Type)	<p>A modular, cryogenic sample holder system designed for superconducting qubit and microwave device measurements at millikelvin temperatures. The system shall be installed at the MXC stage of the dilution refrigerator and integrated with the measurement wiring for high-fidelity control and readout of multiple qubits or microwave circuits.</p> <p>Functional Requirements</p> <ul style="list-style-type: none"> ● Enables microwave measurements for 5–10 qubits or equivalent multi-channel devices. ● Provides up to 24 coaxial transmission lines optimized for signal transmission up to 18 GHz. ● Must ensure resonance-free signal transmission with low insertion loss and high return loss across the operating frequency range. ● Compatible with the overall wiring scheme of the dilution refrigerator (DC, RF, and microwave lines). <p>Mechanical and Thermal Specifications</p> <ul style="list-style-type: none"> ● Designed for installation at the Mixing Chamber flange with proper thermal anchoring to minimize heat load. ● Operable at temperatures down to < 20 mK without degrading system base temperature. <p>Electromagnetic Shielding</p>

		<p>Shielding must provide effective suppression of ambient magnetic fields to ensure qubit coherence.</p> <p>Integration and Testing</p> <ul style="list-style-type: none"> • Supplied pre-wired and pre-tested for microwave continuity and thermal performance. • Compatible with standard coaxial connectors (e.g., SMA or SMPM). • Verification of performance (S-parameters, thermal anchoring, and shielding) to be demonstrated prior to shipment or at installation. • Designed for integration within a dilution refrigerator measurement infrastructure including DC, RF, and microwave wiring. • Materials and performance suitable for quantum measurement and cryogenic research applications.
20	Mounting	<p>The complete cryostat assembly, gas handling system, and associated pumps shall be supplied with floor-mounted, vibration-isolated support frames. The mounting structure shall be rigid, non-magnetic, and mechanically decoupled from building vibrations using appropriate damping pads or pneumatic isolators.</p> <p>The design shall ensure vibration transmission to the dilution refrigerator is minimized. All components shall be anchored securely to prevent microphonic coupling and shall include leveling adjustment provisions for precise alignment of the cryostat and compressor.</p>
21	Demonstration of required specifications and Installation	<p>a) Prior to shipment all the specifications should be met at the factory and documentation provided to us for approval.</p> <p>b) Installation and demonstration of the desired specifications to be done by a trained engineer with prior experience in installation.</p> <p>c) Training should be done during the on-site installation. (Comprehensive hands-on training shall be conducted during on-site installation and commissioning at C-DAC Pune. The training shall cover operation, maintenance, troubleshooting, and software control. It shall be imparted to the C-DAC team over a period of mutually agreed days (min 5 days). All required training materials (manuals, presentations, and reference documents) shall be provided by the bidder.</p>

		<p>d) A list and plan of pre-installation requirements must be provided.</p> <p>f) Installation, complete interfacing of the system with its subsystems, and commissioning are to be carried out by the vendor's factory-trained engineers, followed by a demonstration of the system's performance.</p> <p>g) An estimated time schedule for installation, commissioning and training must be provided.</p>
22	Service and support	<p>1. The manufacturer and/or their Indian representative must have at least one qualified and factory-trained service engineer in India to be able to attend to service at C-DAC Pune on submitting a complaint. Training certificates from the manufacturer have to be provided with the tender.</p> <p>2. Warranty period must start after post-installation and commissioning of the system.</p> <p>3. Only factory-trained and certified engineers are acceptable to attend the service for the warranty period.</p>
23	List of customers and references	<p>Bidder should have proven track record of installation and service to at least five installations based in India with a cryogen-free dilution fridge.</p> <p>Bidder should provide list of references along details such as Name of Contact Person, Email address, Phone Number, Place of Installation, Installation/completion certificate if available. Upon receiving negative feedback from users where installation has been made, party will be subjected to rejection.</p>
24	Utility requirements	<p>1. A list of utility requirements should be part of the technical bid. Please include the dimensions of the space requirement.</p> <p>2. The system should be compatible with $240 \pm 10V$, 50 Hz single phase or $415 \pm 20V$, 50 Hz 3-phase supplies.</p> <p>Footprint: A floor plan should be part of the technical bid</p>
25	Annual Maintenance Charges (AMC)	<p>Annual Maintenance Contract: Annual maintenance contract (AMC) charges associated with the system for 2 additional years after completing 3 years warranty period to be quoted by the bidder. The AMC should include costs of any essential parts needed for the maintenance. The cost of 2 years AMC will be considered for identification of the L1 bidder.</p>

26	Installation site suitability	System parts which cannot be assembled on site and are factory-fitted must be compatible with the doors available on the installation-site. Bidder must visit the site before submission of bid and take the measurements so that the equipment can fit the gate/elevator etc.
27	OEM Authorization Certificate	<p>In case the bidder is not the Original Equipment Manufacturer (OEM), a valid and specific authorization certificate from the OEM must be submitted along with the technical bid.</p> <p>The certificate shall clearly state that the bidder is authorized to quote, supply, install, and provide post-installation support for the offered Cryogen-Free Dilution Refrigerator System on behalf of the OEM.</p> <p>The authorization must be addressed to C-DAC, Pune, and must remain valid for the entire bid validity period. Bids without such authorization shall be summarily rejected.</p>
28	Factory Acceptance Test (FAT) criteria	<p>The parameters and performance points specified in this document shall be demonstrated by the bidder during the Factory Acceptance Test (FAT). A comprehensive FAT report, including test data, calibration results, and compliance verification, shall be submitted to C-DAC Pune for review and approval prior to shipment.</p> <p>If required, representatives from C-DAC and/or C-MET, or their authorized delegates, may visit the vendor's facility to witness the FAT. The equipment shall not be dispatched until a satisfactory FAT report has been reviewed and formally accepted by C-DAC.</p>
29	Site Acceptance Test (SAT) Criteria	<p>The installed Cryogen-Free Dilution Refrigerator shall meet all specified performance parameters. During SAT at C-DAC Pune, the bidder shall demonstrate a base temperature of less than 10 mK at the mixing chamber plate, with the full thermal load of the specified wiring configuration.</p> <p>The system shall exhibit continuous temperature stability within ± 1 mK of the achieved base temperature for a minimum duration of five (5) consecutive days under steady-state operation. All temperature and system performance data shall be logged and submitted as part of the SAT documentation.</p>

3. Terms and Conditions

3.1 General

1. All bidders shall carefully review the complete specifications and ensure full compliance. Any deviation must be explicitly stated in the compliance matrix.
2. Partial, ambiguous, or conditional offers are liable to be rejected.
3. The system offered shall be new, unused, and of the latest proven design. Re-manufactured or refurbished components are not acceptable.

3.2 Scope of Supply

1. The bidder's scope includes design, fabrication, assembly, testing, shipment, installation, commissioning, and performance demonstration of the complete integrated system.
2. All accessories, connectors, fittings, and consumables necessary for the proper functioning of the system shall be included, even if not explicitly mentioned (without any extra cost to the purchaser).
3. Bidders shall provide system software, documentation, certificates, and all tools required for maintenance (without any extra cost to the purchaser).

3.3 Pre-installation and Site Requirements

1. The bidders shall provide detailed pre-installation requirements.
2. The bidder should visit the site and suggest any requirements before bidding.
3. The vendor shall ensure that all major components can pass through the site doors.

3.5 Site Acceptance Test (SAT)

1. SAT shall be conducted after installation at C-DAC Pune to confirm full compliance.
2. All parameters specified in the technical document shall be verified.
3. Any deviations identified during SAT must be rectified at no additional cost.

3.6 Training

1. Vendor shall provide comprehensive on-site training on system operation, maintenance, troubleshooting, and software control.
2. Training materials (manuals, presentations, and videos) shall be provided as part of deliverables.

3.7 Annual Maintenance Contract (AMC)

1. Bidders shall quote AMC charges for the 4th and 5th years beyond the warranty period.
2. AMC shall include preventive maintenance visits and software/firmware updates.

3. Non-availability of essential spares or discontinuation of service within 5 years of supply will be considered a breach of contract.

3.8 Delivery and Packaging

1. Equipment shall be transported under protective crating and shock/vibration protection and air worthy packaging as per the international standard.
2. Any damage during transit shall be the responsibility of the supplier.

3.9 Documentation

1. The vendor shall supply at least three complete sets of documentation, including:
 - Technical manuals and as-built drawings
 - Software flowcharts and user guides
 - FAT/SAT reports and calibration certificates
 - Maintenance checklist and troubleshooting guide
 - Other documents required for operations
2. A hard copy of all documents shall also be provided.

3.10 Safety and Compliance

1. The system shall comply with relevant international standards (CE, ISO 9001, ISO 13485 where applicable).
2. All electrical components shall conform to safety and EMC standards.
3. The system shall include adequate interlocks and automatic safe shutdown modes.

3.11 System Completeness Clause

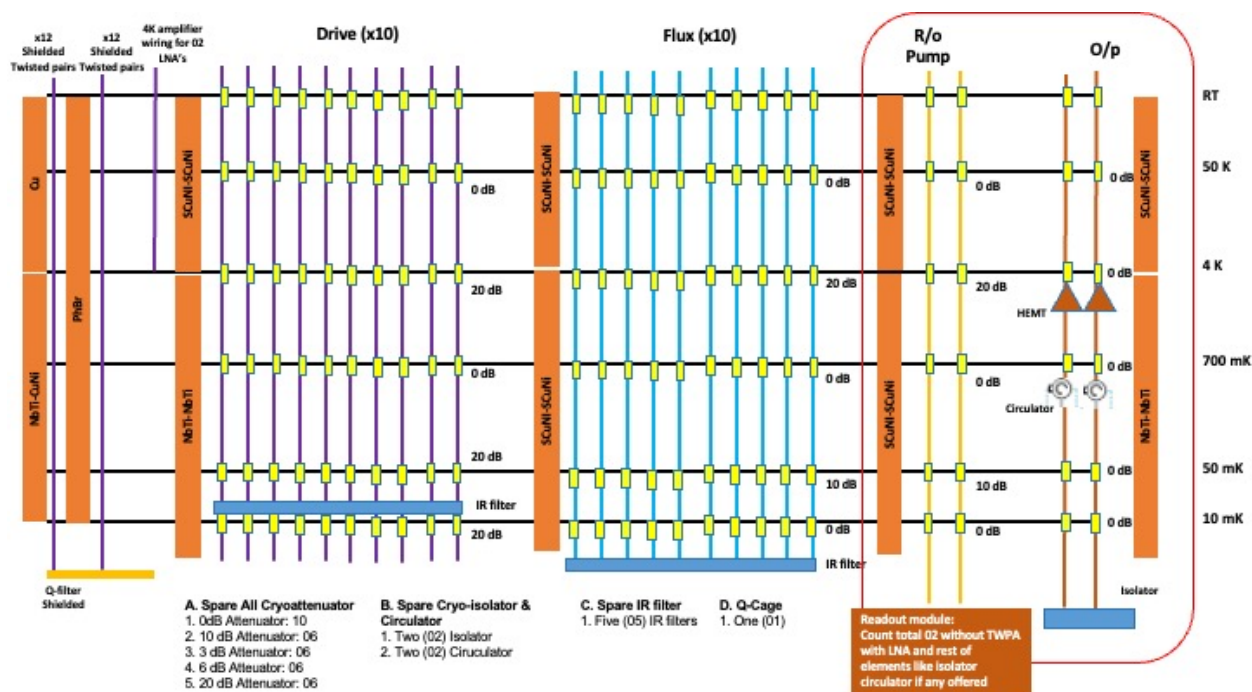
All components, accessories, fittings, cables, connectors, and hardware necessary for the complete integration, installation, and functional operation of the Cryogen-Free Dilution Refrigerator system — even if not explicitly mentioned in this specification — shall be deemed to be included in the bidder's scope of supply. It shall be the sole responsibility of the bidder to deliver, install, and demonstrate a fully operational and integrated dilution refrigerator system meeting all specified performance parameters.

3.12 Single-OEM Requirement:

The complete Cryogen-Free Dilution Refrigerator system, including cryostat, pulse-tube cooler, gas handling system, wiring infrastructure, and vibration isolation assemblies, must be supplied from a single OEM as an integrated, factory-built system. Assemblies created by integrators using components sourced from multiple OEMs shall not be accepted. If the OEM is not bidding the bidder should be an authorized distributor of the OEM.

Annexure - II

Wiring diagram



RF Lines										
Lines	No.	Line type	Filters	50K	4K	Still	CP	10 mK	Total Attenuation	Remark
Drive	x10	0.86 SCuNi-SCuNi (till 4K) & NbTi after 4K to CP	IR filters to all line at CP	0	20	0	20	20	60	NIL
Flux	x10	0.86 SCuNi-SCuNi all	IR filters to all line at CP	0	20	0	10	0	30	NIL
Read out Pump	x2	0.86 SCuNi-SCuNi all	NIL	0	20	0	10	0	30	This is readout module from BF along with 02 LNA, Isolators, Circulators and required attenuators. We will not take any TWPA's for both
Read out O/p	x2	0.86 SCuNi-SCuNi (till 4K) & NbTi after 4K to CP	NIL	0	0	0	0	0	0	

- We are assuming we will be having 5 qubit read out setup considering per 5 qubit (5 Drive + 5 Flux + 1 R Pump + 1 R o/p = 12 lines) . So out of above 12 lines will be used for that.
- We are taking some extra lines so that another readout module can be used for 2 or 3 qubit testing seperately. Also this is taking into account that if needd for Sr. No. we can use these additional wirings.
- Readout resonator will be on chip resonator. 5 qubits will be readout from same TWPA of QPU chips.

Twisted Pairs				
Sr. No.	Type	Temp Stage	Filters	Remark
1	Shielded Twisted pair x 12	Cu (till 4K) - NbTi-CuNi (4K to CP)	Q Filters	
2	Shielded Twisted pair x 12	PhBr all stages		
3	Amplifier wiring	till 4K		BF will have this in readout module

A. Spare All Cryoattenuator
 1. 0dB Attenuator: 10
 2. 10 dB Attenuator: 06
 3. 3 dB Attenuator: 06
 4. 6 dB Attenuator: 06
 5. 20 dB Attenuator: 06

B. Spare Cryo-isolator & Circulator
 1. Two (02) Isolator
 2. Two (02) Circulator

C. Spare IR filter
 1. Five (05) IR filters

D. Q-Cage
 1. One (01)

ANNEXURE A - PROFORMA OF BANK GUARANTEE
(on non-judicial paper of appropriate value)

To:

Centre for Development of Advanced Computing Pune University Campus
Ganesh Khind, Pune – 411 007

BANKS GUARANTEE NO:

DATE:

Dear Sir(S)

This has reference to the Purchase Order No. _____ Dated _____ been placed by Centre for Development of Advanced Computing(C-DAC), Pune on M/s _____ (Name & Address of vendor) for supply, installation, commissioning and warranty of _____ (description of items) at client's site.

The conditions of this order provide that the vendor shall,

1. Arrange to deliver the items listed in the said order to the consignee, as per details given in said order, and
2. Arrange to install and commission the items listed in said order at client's site, to the entire satisfaction of C-DAC and
3. Arrange for the comprehensive warranty service support towards the items supplied by vendor on site as per the warranty clause in said purchase order.

M/s (Name of Vendor) has accepted the said purchase order with the terms and conditions stipulated therein and have agreed to issue the performance bank guarantee on their part, towards promises and assurance of their contractual obligations vide the Supply Order No.

_____M/s. _____ (name of vendor) holds an account with us and has approached us and at their request and in consideration of the promises, we hereby furnish such guarantees as mentioned hereinafter.

C-DAC shall be at liberty without reference to the Bank and without affecting the full liability of the Bank hereunder to take any other undertaking of security in respect of the suppliers obligations and / or liabilities under or in connection with the said contract or to vary the terms vis-a – vis the supplier or the said contract or to grant time and or indulgence to the supplier or to reduce or to increase or otherwise vary the prices or the total contract value or to forebear from enforcement of all or any of the obligations of the supplier under the said contract and/or the remedies of C-DAC under any security now, or hereafter held by C-DAC and no such dealing(s) with the supplier or release or forbearance whatsoever shall have the effect of releasing the bank from its full liability of C-DAC hereunder or of prejudicing right of C-DAC against the bank.

This undertaking guarantee shall be a continuing undertaking guarantee and shall remain valid and irrevocable for all claims of C-DAC and liabilities of the supplier arising up to and until

This undertaking guarantee shall be in addition to any other undertaking or guarantee or security

whatsoever the that C-DAC may now or at any time have in relation to its claims or the supplier's obligations/liabilities under and / or in connection with the said contract and C-DAC shall have the full authority to take recourse to or enforce this undertaking guarantee in preference to the other undertaking or security (ies) at its sole discretion and no failure on the part of C-DAC in enforcing or requiring enforcement of any other undertaking or security shall have the effect of releasing the bank from its full liability hereunder.

We _____ (Name of Bank) hereby agree and irrevocably undertake and promise that if in your (C-DAC's) opinion any default is made by M/s _____ (Name of Vendor) in performing any of the terms and /or conditions of the agreement or if in your opinion they commit any breach of the contract or there is any demand by you against M/s (Name of Vendor), then on notice to us by you, we shall on demand and without demur and without reference to M/s _____ (Name of Vendor), pay you, in any manner in which you may direct, the amount of Rs. _____/- (Rupees _____ Only

) or such portion thereof as may be demanded by you not exceeding the said sum and as you may from time to time require. Our liability to pay is not dependent or conditional on your proceeding against M/s _____ (Name of Vendor) and we shall be liable & obligated to pay the aforesaid amount as and when demanded by you merely on an intimation being given by you and even before any legal proceedings, if any, are taken against M/s _____ (Name of Vendor)

The Bank hereby waives all rights at any time inconsistent with the terms of this undertaking guarantee and the obligations of the bank in terms hereof shall not be anywise affected or suspended by reason of any dispute or disputes having been raised by the supplier (whether or not pending before any arbitrator, Tribunal or Court) or any denial of liability by the supplier or any order or any order or communication whatsoever by the supplier stopping or preventing or purporting to stop or prevent payment by the Bank to C-DAC hereunder.

The amount stated in any notice of demand addressed by C-DAC to the Bank as claimed by C-DAC from the supplier or as suffered or incurred by C-DAC on the account of any losses or damages or costs, charges and/or expenses shall as between the Bank and C-DAC be conclusive of the amount so claimed or liable to be paid to C-DAC or suffered or incurred by C-DAC, as the case may be and payable by the Bank to C-DAC in terms hereof.

You (C-DAC's) shall full liberty without reference to us and without affecting this guarantee, postpone for any time or from time to time the exercise of any of the powers and rights conferred on you under the contact with the said M/s _____ (Name of Vendor) and to enforce or to forbear from endorsing any power or rights or by reason of time being given to the said M/s

_____ (name of Vendor) which under law relating to the sureties would but for the provisions have the effect of releasing us.

You will have full liberty without reference to us and without affecting this guarantee, postpone for any time or from time to time the exercise of any of the powers and rights conferred on you under the contract with the said M/s _____ (Name of Vendor) and to enforce or to forbear from endorsing any power or rights or by reason of time being given to the said M/s _____ (Name of Vendor) which under law relating to the sureties would but for the provisions have the effect of releasing us.

Your right to recover the said sum of Rs. _____/- (Rupees _____ only) from us in manner aforesaid will not be affected/ or

suspended by reason of the fact that any dispute or disputes have been raised the said M/s _____ (Name of Vendor) and/ or that any dispute or disputes are pending before any officer, tribunal or court or Arbitrator.

The guarantee herein contained shall not be determined or affected by the liquidation or winding up, dissolution or change of constitution or insolvency of the said M/s _____ (Name of Vendor) but shall in all respects and for all purposes be binding and operative until payment of all dues to C-DAC in respect of such liability or liabilities.

Our liability under this guarantee is restricted to Rs. _____/- (Rupees _____ Only). Our guarantee shall remain in force until unless a suit action to enforce a claim under guarantee is filed against us within six months from (which is date of expiry of guarantee) all your rights under the said guarantee shall be forfeited and we shall be relieved and discharged from all liabilities there under.

We have power to issue this guarantee in your favour under Memorandum and Articles of Association of our Bank and the undersigned has full power to do under the power of Attorney dated.

Notwithstanding anything contained herein:

- A. Our liability under this guarantee shall not exceed Rs _____ (in words)
- B. This bank guarantee shall be valid up to _____ & unless a suit for action to enforce a claim under guarantee is filed against us within six months from the date of expiry of guarantee. All your rights under the said guarantee shall be forfeited and we shall be relieved and discharged from all liabilities there after i.e. after six months from the date of expiry of this Bank guarantee
- C. We are liable to pay the guaranteed amount or any parts thereof under this bank guarantee only and only if you serve upon us a written claim or demand or before _____
- D. The Bank guarantee will expire on (Min 38 months from the date of successful installations of the system in the order) _____

Granted by the Bank

Yours

faithfully, For (Name

of Bank)

SEAL OF THE BANK

Authorised Signatory

ANNEXURE B – Undertaking by OEM / Principal Manufacturer
(To be submitted on OEM Letterhead)

Date:

The Director General,
Centre for Development of Advanced Computing
Innovation Park, Panchavati, Pashan Road,
PUNE 411008

Subject: Undertaking by OEM / Principal Manufacturer in response to tender no. CDACP/CFDR/ENQ/26-27/457 for Supply, Installation, Integration, Testing, Commissioning, Training & Support of **Cryogen-Free Dilution Refrigerator System** with Wiring at C-DAC, Pune.

Dear Sir,

We, M/s _____ (*Name of the manufacturer*) having registered office at _____ (*address of the manufacturer*) by virtue of being manufacturer for _____ (*Name of the product/s*), hereby authorise M/s _____ (*Name of the bidder*) having their office at _____ (*Address of bidder*) to submit quote, supply, install and provide after sales, post-installation support for the system quoted by them to meet the above mentioned tender requirements.

M/s _____ (*Name of the manufacturer*) within the scope of requirement as per the tender mentioned above undertake to provide technical & other support towards fulfilling the requirements of installation, commissioning, benchmarking, acceptance criteria and product warranty services of the System to be supplied and installed at C-DAC, Pune by our authorised representative M/s. (*Name of bidder*) against said tender.

The undersigned is authorised to issue such authorisation on behalf of M/s _____
(*Name of the manufacturer*).

For M/s _____ (*Name of the manufacturer*)

Signature & company seal

Name

Designation

on Email

Mobile

No.

ANNEXURE C: TENDER ACCEPTANCE LETTER

(To be submitted on Company Letter Head).

Date:

To:

Centre For Development Of Advanced Computing
Innovation Park, Panchavati, Pashan Road,
PUNE 411008

SUB: Acceptance of Terms & Conditions of Tender.

Tender Reference No: CDACP/CFDR/ENQ/26-27/457

Name of Tender / Work: Supply, Installation, Integration, Testing, Commissioning, Training & Support of **Cryogen-Free Dilution Refrigerator System** with Wiring at C-DAC, Pune

Dear Sir,

1. I / We have downloaded / obtained the tender document(s) for the above mentioned 'Tender/Work' from the web site(s) namely: www.cdac.in / www.eprocure.gov.in / www.eprocure.gov.in/eprocure/app etc.; as per your NIT / advertisement, given in the above-mentioned website(s).
2. I / We hereby certify that I / We have read the entire terms and conditions of the tender documents from Page No.1 to 48 (including all documents like annexure(s), schedules(s), etc.), which form part of the contract agreement and I / We shall abide hereby by the terms / conditions/ clauses contained therein.
3. The corrigendum(s) issued from time to time by your department / organization too has also been taken into consideration, while submitting this acceptance letter.
4. I / We hereby unconditionally accept the tender conditions of above-mentioned tender document(S) / corrigendum(s) in its totality / entirety.
5. I / We do hereby declare that our Firm has not been blacklisted / debarred by any Govt. Department/Public sector undertaking.
6. I / We certify that all information furnished by the our Firm is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then your department/ organization shall without giving any notice or reason therefore or summarily reject the bid or terminate the contract, without prejudice to any other rights or remedy including the forfeiture of the fully said earnest money deposit absolutely.

Yours Faithfully,

Authorized Signatory.

(Signature of the Bidder, with Official Seal)
Email id for correspondence.

Annexure – D

Authority Letter

AUTHORIZATION

To:

The Director General,
Centre for Development of Advanced Computing
Innovation Park, Panchavati, Pashan Road,
PUNE 411008

We (name of the bidder) hereby authorise Shri / Smt (name of the authorised person) to sign and submit the bid to Centre for Development of Advanced Computing against their tender No CDACP/CFDR/ENQ/26-27/457.

Shri / Smt (name) is also authorised to negotiate the terms and conditions pertaining to the said tender on behalf of M/s (name of bidder). The specimen signature of Shri / Smt (name) is appended below.

Specimen Signature:

Name:

The undersigned is authorised to delegate the authority on behalf of M/s (name of bidder), as stipulated above

For (name of bidder)

Signature & company seal Name

Designation Email

Mobile No.

ANNEXURE E – EMD DECLARATION (Only for exempted bidders as per Govt. of India Policy)
(ON COMPANY'S LETTERHEAD)

Date:

To:

The Director General,
Centre for Development of Advanced Computing
Innovation Park, Panchavati, Pashan Road,
PUNE 411008

Subject: Undertaking as per GFR – 2017, Rule 170(iii)

Dear Sir,

We, the undersigned, offer to Supply the----- as per tender at C-DAC Pune, in response to your Tender No. CDACP/CFDR/ENQ/26-27/457 are hereby submitting our proposal for same, which includes Technical bid and the Financial Bid. As a part of eligibility requirement stipulated in said tender document, we hereby submit a declaration in lieu of Earnest Money Deposit (EMD), as given below:

1. Our bid (including commercial bid) shall remain valid for 120-days from the date of submission and that we will not withdraw or modify our bid during the validity period,
2. In case, we are declared as successful bidder and an order is placed on us, we will submit the acceptance in writing within 10 days of placement of order on us.
3. In case, we are declared as successful bidder and an order is placed on us, we undertake, to submit a Security Deposit of 5 % of the order value, as per terms stipulated in the tender.
4. In case of failure on our part to comply with any of the above said requirements, we are aware that we shall be declared as un-eligible for said tender and /or debarred from any future bidding process of C-DAC for a period of minimum one year.
5. The undersigned is authorized to sign this undertaking.

Yours sincerely,

Authorized Signatory:

Name and Title of Signatory:

e-mail:

Mobile No:

ANNEXURE F CERTIFICATE/UNDERTAKING FROM BIDDER

(ON COMPANY'S LETTERHEAD)

To:

The Director General,
Centre for Development of Advanced Computing
Innovation Park, Panchavati, Pashan Road,
PUNE 411008

Ref: Tender / Enquiry No. CDACP/CFDR/ENQ/26-27/457

We have read the clause mentioned in order (Public Procurement No.4) Ref. [OM No.F.7/10/2021-PPD \(1\)](#) dated 23/02/2023 of Public Procurement Division, Department of Expenditure, Ministry of Finance regarding restrictions on procurement from a bidder of a country which shares a land border with India.

In view of this, we certify that,

a. We are not from a country sharing land border with India and any registration as mentioned in said OM is not applicable to us.

OR

b. We are registered with the competent authority as mentioned in said OM. The copy of registration No.xxx dt.xxx is enclosed.

(Delete whatever is not applicable)

Country of Origin:

Country of Manufacturing:

For (Name of Bidder)

Authorised Signatory
(Name & Signature)
(Company's Seal)

ANNEXURE G

(The Annexure is applicable only for local bidders - Class I / Class II local suppliers & not applicable for foreign bidders / Non-local suppliers)

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)

Please submit the certificate as per format given below:

To:

The Director General,
Centre for Development of Advanced Computing
Innovation Park, Panchavati, Pashan Road,
PUNE 411008

We hereby certify that the goods being offered by us vide our proposal, comply with the provisions of order No. Order No. P-45021/2/2017-PP (BE-II)-Part(4) Vol.II dated 19/07/2024 issued by Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, GoI and order issued by the relevant Ministry.

We hereby certify the details pertaining to goods offered by us, as given below:

Sr. No	Item Description, Make, Model	Country of origin of OEM	Country of Manufacture of item	Percentage of local contents as defined by MII Order No. P-45021/2/2017-PP (BE-II)-Part(4)Vol.II and order issued by relevant Ministry
1	Cryogen-Free Dilution Refrigerator System with Wiring including 02 years AMC			

Note 1: The local content percentage (%) to be declared as consolidated figure for the complete system including all items / components.

Note 2: CDAC reserves the right to Accept / Reject / Cancel the bid / GeM inquiry, at its sole discretion, based on the responses received against the MII declaration submitted by the bidders / vendors.

We also certify that, we are not from a country sharing land border with India as defined in order No. (Public Procurement No.4) Ref. [OM No.F.7/10/2021-PPD \(1\)](#) dated 23/02/2023 issued by public procurement Division, Dept. of Expenditure, Ministry of Finance, GoI and the goods offered by us comply with the provisions of said order.

For (Name of bidder)

Authorized Signatory Name & Designation:

Mobile No:

ANNEXURE H

(On OEM Letter)

INTEGRITY PACT

This Integrity Pact ("the Pact") is made and executed on this _____ Day of _____ Two Thousand Twenty _____ at _____.

By and Between

Centre for Development of Advanced Computing (C-DAC), an autonomous scientific Society under the Ministry of Electronics and Information Technology, Government of India, registered under the Societies Registration Act 1860 and the Bombay Public Trusts Act 1950, having its registered Office at Savitribai Phule Pune University Campus, Pune 411 007, hereinafter referred to as "C-DAC/Principal", which expression shall unless repugnant to the context or meaning thereof be deemed to mean and include its administrators, successors or assignees, as the case may be.

and

..... hereinafter referred to as "The Bidder(s)/Contractor(s)", which expression shall unless repugnant to the context or meaning thereof be deemed to mean and include its administrators, successors or assignees, as the case may be.

(The Principal and the Bidder (s)/Contractor(s) are collectively referred to as "the Parties".

Preamble

The Principal intends to award, under laid down organizational procedures, contract/s for - ----- ("the Contract"). The Principal values full compliance with all relevant laws and regulations, and the principles of economic use of resources, and of fairness and transparency in its relations with its Bidder/s and Contractor/s. The Principal intends to avoid all forms of corruption by following a system that is fair, transparent and free from any influence/prejudiced dealings prior to, during and subsequent to the currency of the contract to be entered into. The Principal also intends that Bidder/s and Contractor/s should abstain from bribing or indulging in any corrupt practices in order to secure the contract by providing assurance to them that their competitors will also abstain from bribing and other corrupt practices and the Bidder/s and Contractor/s shall commit to prevent corruption, in any form, by its officials by following transparent procedures.

In order to achieve these goals, the Principal, by way of this Integrity Pact ("the Pact") will appoint Independent External Monitor ("IEM") who will monitor the tender process and the execution of the Contract for compliance with the principles mentioned above.

The parties hereto hereby agree to enter into this Pact and agree as mentioned below.

Section 1 Commitments of the Principal

- 1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following:-
 - a) No employee of the Principal, personally or through relatives or any other person, will in connection with the tender, or for the execution of the Contract, demand, promise or accept for himself/herself or any third person, any material or immaterial benefit or any other advantage from the bidder/s or contractor/s which he/she is not legally entitled to.
 - b) The Principal will, during the tender process treat all Bidder/s and Contractor/s with equity and reason. The Principal will in particular, before and during the tender process, provide to all bidder/s and contractor/s the same information and will not provide to any bidder/s or contractor/s additional/confidential information through which the bidder/s and contractor/s could obtain an advantage in relation to the tender process or the contract execution.
 - c) The Principal will exclude from the process all known prejudiced persons.
- 2) If the Principal obtains information on the conduct of any of its employees, which is a criminal offence under the relevant Anti-Corruption Laws of India, or if there be a substantive suspicion and the same is prima facie found to be correct in this regard, the Principal will inform its Vigilance Office and in addition can initiate disciplinary actions In such a case while such enquiry is being conducted by the Principal, the proceedings under the contract shall not be stalled.

Section 2

Commitments of the Bidder/ contractor

- 1) The Bidder / Contractor commits to take all measures necessary to prevent corrupt practices, unfair means and illegal activities . He commits himself to observe the following during his participation in the tender process and during the contract execution:
 - a) The Bidder / Contractor undertakes that he/she has not given, offered or promised to give directly or indirectly any bribe, gift, consideration, reward, favour any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the Principal, for which benefit etc. he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.
 - b) The Bidder / Contractor will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the Principal, for which benefit etc. he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract

- c) The Bidder / Contractor will not enter into any agreement or understanding with other Bidders in connection with the bid, including but not limited to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelisation in the bidding process.
- d) The Bidder / Contractor will not commit any offence under the relevant provisions of Anti-Corruption Laws of India/Indian Penal Code, 1860, Information and Technology Act, 2000, Competition law or any other relevant laws, enactments, rules and regulations. Further the Bidder / Contractor will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically. The Bidder / Contractor also undertakes to exercise due and adequate care of any such information so divulged.
- e) The Bidder / Contractor further confirms and declares to the Principal that the Bidder / Contractor is the original manufacturer / integrator / authorised government sponsored export entity and has not engaged any individual or firm or company whether Indian or foreign to intercede, facilitate or in any way to recommend to the Principal or any of its functionaries, whether officially or unofficially to the award of the contract to the Bidder / Contractor, nor has any amount been paid, promised or intended to be paid to any such individual, firm or company in respect of any such intercession, facilitation or recommendation.
- f) The Bidder / Contractor will, when presenting his bid, disclose any and all payments he has made, is committed to make or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract and the details of the services agreed upon for such payments.
- g) The bidder(s)/ contractor (s) of foreign origin shall disclose the name and address of agents and representatives in India related to this tender. Similarly, the bidder(s)/ contractor(s) of Indian nationality shall furnish the name and address of their foreign principals or associates, if any, related to this tender.
- h) The Bidder / Contractor shall not accept any advantage in exchange for any corrupt practice, unfair means and illegal activities.
- i) If the Bidder / Contractor or any employee of the Bidder / Contractor or any person acting on behalf of the Bidder / Contractor, either directly or indirectly, is a relative of any of the officers of the Principal, or alternatively, if any relative of an officer of the Principal has financial interest / stake in the Bidder's / Contractor's firm, proprietorship, company, etc. the same shall be disclosed by the Bidder / Contractor at the time of filing of tender/EoI. The term 'relative' for this purpose would be as defined in Section 6 of the Companies Act, 2013.

- j) The Bidder / Contractor shall not lend to or borrow any money from or enter into any monetary dealings or transactions, directly or indirectly, with any employee of the Principal.
 - k) The bidder / contractor shall disclose the circumstances, arrangements, undertakings or relationships that constitute, or may reasonably be considered to constitute, an actual or potential conflict of interest with its obligations specified in the tender process or under any Agreement which may be negotiated or executed with Principal. Bidder / Contractor and its employees, agents, advisors and any other person associated with the bidder / contractor must not place themselves in a position which may, or does, give rise to conflict of interest (or a potential conflict of interest between the interests of Principal or any other interests during this tender process or through operation of the Agreement.
 - l) The bidder(s)/ contractor (s) who have signed the Pact shall not approach the Courts while the matters/disputes/issues, related to tender process or the Contract are presented before the IEM and awaiting the final decision.
- 2) The Bidder / Contractor will not instigate third persons to commit above mentioned acts / omissions / offences outlined above or be an accessory to such offences.

Section 3

Disqualification from tender process and exclusion from future contracts

- 1) If the Bidder, before the Contract is awarded, has committed a transgression through a violation of Section 2 or in any other form such as to put his reliability or credibility as Bidder into question:
 - a) the Principal is entitled to disqualify the Bidder from the tender process or to terminate the Contract, if already signed, for such reason.
 - b) the Principal is entitled to exclude the Bidder / Contractor from participating in future contracts/tenders. The imposition and duration of the exclusion will be determined by the Principal based on the severity of the transgression. The severity will be determined by the circumstances of the case, in particular the number of transgressions, the position of the transgressors within the company hierarchy of the Bidder / Contractor and the amount of the damage. The exclusion will be imposed for a minimum of six (6) months and maximum of three (3) years.
- 2) An act/omission would be treated as a transgression after due consideration of the available evidence by the Principal.
- 3) The Bidder / Contractor accepts and undertakes to respect and uphold the Principal's absolute right to resort to and impose such disqualification/exclusion and further accepts and undertakes not to challenge or question such exclusion on any ground, including the lack of any hearing before the decision of disqualification/exclusion is taken. This undertaking is given freely and after obtaining independent legal advice.
- 4) If the Bidder / Contractor can prove that he has restored the damage caused by him and has installed a suitable corruption prevention system, the Principal may revoke the aforesaid disqualification/exclusion prematurely.

Section 4 Compensation for Damages

- 1) Without prejudice to any rights that may be available to the Principal under any law or the contract or its laid down policies and procedures, the Principal shall have the following rights in case of breach of this Pact by the Bidder/Contractor:
 - a) To forfeit the Earnest Money/Bid Security if the Bidder is disqualified from the tender process prior to the award in terms of Section 3;
 - b) To forfeit/invoke the Security Deposit/ Performance Bank Guarantee if the Principal has either terminated or is entitled to terminate the Contract of the Bidder in terms of Section 3.
 - c) To immediately call of the pre contract negotiations without assigning any reason or giving any compensation to the Bidder / Contractor.
 - d) To immediately cancel the contract, if already signed, without giving any compensation to the bidder / contractor. The Bidder / Contractor shall be liable to pay the compensation for any loss or damage to the Principal resulting from such cancellation / rescission and the Principal shall be entitled to deduct the amount so payable from the amount due to the Bidder / Contractor.
 - e) To recover all sums already paid by the Principal, with interest at __% @ p.a. if any outstanding payment is due to the Bidder / Contractor from the Principal in connection with any other contract, such outstanding payment could also be set off to recover the aforesaid sum and interest.
 - f) To recover all sums paid in violation of this Pact by the Bidder / Contractor to any middleman or agent or broker with a view to securing the contract.

Section 5 Previous transgression

- 1) The Bidder declares that he has not committed any transgressions in the last three (3) years against any Company in any country conforming to the anti-corruption approach or with any other Public Sector Enterprise in India that could invite/justify his exclusion from this tender process.

Any concealment of information or misrepresentation of facts, in regard to the aforesaid, can lead to his disqualification from the tender process or termination of the Contract, if already awarded, or invite any other appropriate action(s) as deemed fit.

Section 6

Equal treatment of all Bidders / Contractors / Subcontractors

- 1) The Principal will enter into Pacts on identical terms with all bidders and contractors.
- 2) The Bidder(s) / Contractor(s) assures to procure from all their subcontractors an undertaking for the adoption of this Pact. The Bidder (s) / Contractor(s) shall alone be responsible for any violation (s) of the provisions laid down in the Pact by any/all of their sub-contractor (s) or sub-vendor (s).

- 3) The Principal will be entitled to disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

Section 7

Independent External Monitor / Monitors

- 1) The Principal appoints competent and credible Independent External Monitor as nominated and approved by the Central Vigilance Commission. The task of the IEM is to review independently and objectively, whether and to what extent the Parties comply with the obligations under this Pact. The IEM would be required to sign 'Non- Disclosure Agreements' alongwith a declaration of 'Absence of Conflict of Interest'. In case of any conflict of interest arises at a later date, the IEM shall inform Chairperson of the Board of the Principal and recuse himself/herself from that case.
- 2) The IEM is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the Chairperson of the Board of the Principal. The IEM would be provided access to all documents/records pertaining to the contract for which a complaint or issue is raised before them, as and when warranted. However, the documents/records/ information having National Security implications and those documents which have been classified as Secret/Top Secret are not to be disclosed.
- 3) The Bidder / Contractor accepts that the IEM has the right to access, without restriction, all Project documentation available with the Principal including the documents/ records/ information provided by the Bidder/Contractor. The Bidder/Contractor will also grant the IEM, upon their request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Subcontractors. The IEM is under contractual obligation to treat the documents/ records/ information of the Bidder/Contractor/ Subcontractor with confidentiality.
- 4) The Principal will provide to the IEM sufficient information about all meetings among the parties related to the Project provided that such meetings could have an impact on the contractual relations between the Principal and the Bidder/Contractor. The Parties will offer to the IEM the option to participate in such meetings.
- 5) As soon as the IEM notices, or suspects, a violation of this Pact, he will inform the Management of the Principal and request the Management to discontinue or rectify the violation, or take any other relevant action. The IEM can in this regard submit nonbinding recommendations. Beyond this, the IEM has no right to demand from the Parties that they act in a specific manner, refrain from action or tolerate action. However, the IEM shall give an opportunity to the Bidder / Contractor to present his case before making its recommendations to the Principal.
- 6) The IEM is expected to tender their recommendation on all the complaints within 30 days of their receipt, to the Chairperson of the Board of the Principal. Further, should the occasion arise, the IEM may submit proposals for correcting problematic situations.
- 7) If the IEM has reported to the Chairperson of the Board of the Principal a substantiated suspicion of an offence under relevant Anti-Corruption Laws of India/Indian Penal Code, 1860, or any other relevant laws and the Chairperson has not, within reasonable time, taken visible action to proceed against such offence or reported it to the Vigilance Office, the IEM may transmit this information directly to the Central Vigilance Commissioner, Government of India.

8) The word 'IEM' would include both singular and plural.

Section 8 Pact Duration

- 1) This Pact comes into force when both parties have signed it. It expires for the Bidder / Contractor 12 months after the last payment under the respective contract, and for all other Bidders / Contractors 6 months after the contract has been awarded.
- 2) If any claim is made / lodged during the aforesaid duration, the same shall continue to be valid despite the lapse of this pact as specified above, till it is discharged / determined by Chairperson of the Board of the Principal.

Section 09 Other provisions

- 1) This Pact is subject to Indian Laws. Place of performance and jurisdiction is the Registered Office of the Principal, i.e. Pune. The Arbitration clause provided in the main tender document / contract shall be applicable to any issue / dispute arising under this Pact.
- 2) If the Contractor is a partnership or a consortium, this Pact must be signed by all partners or consortium members.

In case of any allegation of violation of any provisions of this Pact or payment of commission etc. the Principal or its agencies shall be entitled to examine all the documents including the Books of Accounts of the Bidder / Contractor and Bidder / Contractor shall provide necessary information and documents and shall extend all possible help for the purpose of such examination.

- 3) If one or several provisions of this Pact are held to be invalid/unenforceable, the remainder of this Pact shall remain valid as though the invalid or unenforceable parts had not been included herein. In this case, the parties will strive to come to an agreement to their original intentions.
- 4) Issues like warranty/ guarantee etc. shall be outside the purview of IEM.

For the Principal

For the Bidder / Contractor

Place -----

Witness 1 : -----

Date -----

Witness 2: -----

Summary Information Sheet

Tender No.: CDACP/CFDR/ENQ/26-27/457

Sr. No.	Information heading	Details
1	Name of the Vendor	
2	Name of the person(s) to whom, all references shall be made, regarding this TENDER/ PROJECT (Authorized Signatory)	
3	Address of the Contact Person	
4	Designation of the Contact Person	
5	Telephone number(s) of the Contact Person.	
6	Mobile number of the Contact Person	
7	Fax number of the Contact Person	
8	Email ID(s) of the Contact Person	
9	Annual Turnover (in Lakhs): Last three Years (In INR)	1
		2
		3
10	Years of Operation (in Years):	
11	PAN Number	
12	GSTIN Nos.	
13	Make / Models offered of the System	