

Centre for Development of Advanced Computing

A Scientific Society of Ministry of Electronics & Information Technology,

Government of India

CDAC Knowledge Park, No. 1, Old Madras Road, Baiyppanahalli, Bengaluru - 560038

Tel: +91-80-25093400

mmg-blrkp@cdac.in

www.cdac.in

Tender No: CDACB/RD24/094-1

CDAC, Bangalore invites bids for “Supply, Installation & Commissioning of Superconducting Qubits based Quantum Computing Facility (50 to 100 Qubits) at CDAC Bangalore, Electronic City”

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: CDACB/RD24/094-1

Name of the Institute	Centre for Development of Advanced Computing, Bengaluru 560038
Place of Supply, Installation & Commissioning, Support etc.	C-DAC, No. 68, Electronic City Phase I, Bengaluru, Karnataka 560100
Date of Release of Tender	09.07.2025
Last date of submission of bids	30.07.2025@ 1600 hrs.
Date of opening of Technical bids	31.07.2025 @ 1700 hrs.
Place of opening of technical bids	CDAC Knowledge Park, No. 1, Old Madras Road, Byappanahalli, Bengaluru - 560038

1. Instructions for On-line Bid Submission

The bidders are required to submit soft copies of their bids electronically through the portal (www.eprocure.gov.in) using valid Digital Signature Certificates (DSC). The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal. More information useful for submitting online bids on the CPP Portal may be obtained at:

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

2. Assistance to Bidders:

Any query relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24*7 CPP Portal Helpdesk on:- 0120-4200 462, 0120-4001 002, 0120-4001 005, 0120-6277 787

e-mail for Technical - support-eproc@nic.in.

SECTION I: INSTRUCTIONS TO BIDDERS (ITB)

1. Introduction:

Centre for Development of Advanced Computing (C-DAC) - is a scientific society under the administrative control of the Ministry of Electronics & Information Technology, Government of India. As a part of the project awarded under the Establishment of Superconducting based Quantum Computing Reference Facility', C-DAC invites 'ON-LINE' bids from eligible bidders for supply, installation and commissioning of Superconducting qubits-based Quantum Computing Facility (50 to 100 Qubits) for Research and Development (R&D) purposes, as per Schedule of Requirements (Section- IV) and other terms and conditions stipulated in this document.

1.1 Subject Matter of Procurement

1.1.1. Scope of Procurement

The scope of this procurement includes supply, installation and commissioning of a superconducting qubits-based quantum computing facility (in the range of 50 to 100 Qubits), including associated services for R&D purposes. This setup aims to serve as a reference facility with open architecture, to enhance the country's competitiveness in quantum technologies by using the modular components as part of this facility to test, validate and benchmark any indigenously developed technologies / components.

The modular architecture of this facility shall be designed to support the integration, upgrade, and replacement of key subsystems—such as quantum processors, control electronics, and cryogenic infrastructure—with components from diverse vendors. This shall ensure transparency, promote interoperability, and facilitate external collaboration for system modification, innovation, and scalable development. The project seeks to establish this innovative facility and make it accessible to other research institutes and enthusiasts in the quantum technologies domain across India. This initiative aims to position India as a global leader in quantum technology development, delivering benefits to the nation by advancing applications that harness the potential of quantum computers for the betterment of humanity. The project also aims on using this facility for conducting experiments to create capabilities in quantum hardware, device designs, quantum processing technologies, and quantum software and algorithms, ensuring long-term competitiveness and operational freedom. After the initial commissioning, further exploration of various scenarios and configurations is necessary to fully assess the capabilities and services of the reference facility.

1.1.2. Project Deliverables

The procurement involves the supply, installation and commissioning of a superconducting qubits-based quantum computing facility:

Deployment and Commissioning phase: (9 months from the date of Purchase Order release)

- Commissioning of a quantum computer in the range of 50 to 100 qubits in compliance with specified technical requirements (including acceptance from CDAC based on the specified acceptance criteria).

1.1.3. Post-Project Service Contract

A service contract will be established for a term of minimum 3 years post-project (From the date of Acceptance of the commissioned facility), covering:

- Training on the usage, maintenance, and calibration of the quantum computer and services.
- Maintenance, error categorization, and root cause analysis.
- Calibration services and automated calibration software.
- System software updates.
- Provision of spare parts if applicable.
- On-site service support with agreed reaction and resolution times.
- Training due to modifications by the supplier.

1.1.4. Components and Services Included

The procurement includes the following components and services:

- Superconducting qubit processor (50 to 100 qubits)
- Associated control electronics and related software for supporting the qubits offered and further scalable to 250 qubits.
- Peripheral elements (shielding, brackets, etc.)
- Dilution refrigerator with active and passive damping for supporting the qubits offered and further scalable to 250 qubits
- Full capacity DR wiring for supporting the qubits offered and further scalable to 250 qubits
- Comprehensive modular software stack with necessary API support.
- Power conditioning and backup systems
- Environmental monitoring and control systems
- EMI/EMC compliance as applicable
- Comprehensive maintenance & support for minimum of 3 years, and performance guarantees.
- Warranty of goods supplied for minimum of 3 years
- Comprehensive operational training
- Estimated delivery time: 9 months
- Custom duty and delivery charges along with statutory charges, if any- to be included
- Duration of contract is considered as 3 years from the date of acceptance.

List of Items/Services provided by C-DAC at the proposed facility

- C-DAC will provide Air conditioning only for the room cooling in the place where the quantum computing facility is hosted.
- C-DAC will supply a maximum power of up to 200 KVA along with backup diesel generator for the quantum computing facility. However, the vendor must provide

UPS system with at-least 10mins backup for keeping the quantum computing facility operational.

- However, it is the bidder's responsibility to supply any other items, materials and services to provision the facility and ensure that it is complete, stable and fully operational.

1.1.5. Background and Expertise

The bidder must have extensive expertise in deploying, commissioning and operating superconducting based quantum computers and expertise in integrating with HPC systems. The bidder must have participated in National/ International Quantum Flagship projects and has demonstrated significant milestones in the development/ deployment/ commissioning/ integration of superconducting based quantum computers.

1.1.6. Intellectual Property Goals and Requirements

Ownership of Intellectual property rights:

- The vendor shall grant CDAC a non-exclusive royalty-free license to use the IP provided as part of the project.
- For any IP created jointly by the vendor & CDAC during the project, a clear agreement on ownership and licensing shall be established.
- CDAC shall own the rights to any custom software developed specifically for the project.
- Any improvements or modifications made to IP during the project shall remain the property of CDAC.
- Confidentiality: Both the parties shall agree to maintain the confidentiality of any proprietary or confidential information disclosed during the project. (NDA needs to be signed).
- Both the parties shall agree to the terms to resolve disputes related to IP.

1.1.7. Co-Development Projects

Considering the capabilities of CDAC, the bidders are invited to propose co-development projects in the following areas. These co-development projects are not in the scope of the current procurement. These projects are primarily oriented towards knowledge sharing and having long-term association with the identified bidder. These projects shall be taken up for implementation/execution as separate initiatives. The evaluation shall be conducted with due consideration to the relevance of the proposed projects to the objectives of CDAC, the capability and competence of the bidders, the technical and financial feasibility of the projects, and any other criteria deemed relevant by CDAC

The bidder **shall not factor in the costs** associated with implementing these co-development projects in the current price bid.

- Hardware (HW) Co-Development:
 - Control electronics co-development and integration with QPU
 - Other relevant proposals, such as processor development, cryogenic electronics

etc., with access to fabrication facilities and labs, will be supported through arrangements made by the vendors.

- Software, Algorithms and Applications Co-Development:
 - Development of quantum software, algorithms and applications.
- Quantum Computer Optimization
 - Error correction & Optimization of the quantum computer for running algorithms

1.1.8. Documentation and Collaboration

Frequent documentation of progress and close collaboration between the supplier and the organization is required. Significant working hours on the organization's premises may be necessary.

1.1.9. Training and Support

Training shall be provided on the usage, maintenance, and calibration of the quantum computer and the subsystems involved including the QPU, Dilution Refrigerator, Control System, Cryogenic Electronics etc. Ongoing support will be included in the service contract.

2. Contact Information:

Material Management Group
Centre for Development of Advanced Computing (C-DAC)
CDAC Knowledge Park, No. 1, Old Madras Road, Baiyypanahalli, Bengaluru - 560038, INDIA
Tel No.: +91-80-25093400, E-mail: mmg-blrkp@cdac.in

3. Two bid System

The Two e-bid systems will be followed for this bid.

The documents pertaining to Technical Bid and Commercial Bid must be uploaded electronically through <https://www.eprocure.gov.in/eprocure/app>.

3.1 Technical bid shall contain

The bidder must upload the following documents through e-Packet – 1, as listed below:

- a. Covering letter, as per Annexure – A.
- b. Authorization letter (on bidder's letterhead) issued by the competent authority of bidder, authorizing the signatory to sign on behalf of the bidder, as per Annexure – B.
- c. Scanned copy of proof of remittance /transaction slip, by NEFT/RTGS in favour of C-DAC, Bangalore towards Earnest Money Deposit (EMD) of Rs. 1,50,00,000/- (INR One Crore Fifty Lakhs Only) (The proof of remittance/transaction slip or supporting documents, exempting the bidder to submit the tender fees, must be uploaded along with the other documents on or before the Due Date & Time of the Tender). The document submitted for claiming exemption of EMD should clearly indicate the appropriate category matching the Item Description. (EMD will not be accepted in any other form)

The offer without the receipt for EMD shall not be considered. The EMD shall bear no interest.

EMD will not be accepted in the form of cash /cheque.

The account details for remittance are given below:

Name of the Bank	State Bank of India
Branch	Kasturi nagar Branch, Bangalore
Account No	54005316791
IFSC Code No	SBIN0010365

Bidders who have already deposited the EMD against the earlier tender no. CDACB/RD24/094 dated 01.01.2025 and who wish to participate in the present tender are not required to resubmit the EMD. Details of the EMD submitted earlier may please be mentioned clearly in the bid. All other prospective bidders who are participating for the first time in this tender shall be required to submit the EMD as prescribed in the tender document.

- d. 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, in support of eligibility criteria at para 4.2, Section – II of this document.
- e. Copies of PAN and GST registration certificates, as applicable.
- f. The certificate/s from a Chartered Accountant for the last three financial years indicating the average annual sales turnover.
- g. Detailed technical proposal for implementing the project (Refer Section – III (A) for evaluation criteria). Bidders should not mention any details pertaining to the financial aspects of implementing the project in this technical proposal.
- h. The documents giving the details of proposed technical solution, including technical specifications, make, model, part numbers of the items & compliance of each item offered etc. as applicable.
- i. Copies of documents in support of eligibility requirements stipulated at para 4 Section – II.
- j. The undertakings from the OEMs of Superconducting quantum computing subsystems (QPU, Dilution Refrigerator, Control System, Cryogenic Electronics - TWPAs, HEMT amplifiers etc.,) or their respective subsidiary as per Annexure – C.
- k. The bidder shall provide the Manufacturer's Authorization Form (MAF) from the OEMs of Superconducting quantum computing subsystems (QPU, Dilution Refrigerator, Control System, Cryogenic Electronics etc.,). Manufacturer's Authorization Form (MAF) is a document from OEM, that a bidder must submit along with the bid. The MAF verifies that the bidder is authorized partner of OEM for supply and service of the offered product & is authorized to supply the quoted OEM products against the bid.
- l. A photocopy of Section – V of the bid (commercial bid) without prices (prices blocked). C-DAC reserves the right to reject the bid in case of discrepancy observed in the unpriced commercial bid and the actual commercial bid.

- m. Datasheets of the offered components in the technical proposal (pertaining to QPU design and specs for the capacity being offered, Dilution Refrigerator, Control System, Cryogenic Electronics - TWPAs, HEMT amplifiers etc.), containing detailed specifications, must be publicly available on the manufacturer's website for a minimum of six months prior to the bid submission date. Publications in peer-reviewed journals and conference proceedings demonstrating the research related to the offered components in the technical proposal. List of relevant patents held by the manufacturer. Reports from independent third-party testing of the offered components in the technical proposal, are highly valuable.
- n. Other documents necessary in support of eligibility criteria, product catalogs, brochures etc.

Note:

- 1. The documents submitted shall be scrutinized by experts during the tender evaluation phase. Bidders may be required to facilitate an on-site visit by a technical team from the procuring entity (and/or an appointed independent expert) to one of their operational quantum computing facilities. The exact scope and conditions of such a visit will be communicated to the bidders, if required.
- 2. All the decisions taken by the evaluation committee shall be final.
- 3. C-DAC reserves the right to contact the bidder's clients, OEM etc., independently to verify and assess the claims made by the bidder.
- 4. Failure to provide adequate and verifiable proofs for key performance metrics may lead to disqualification of the proposal.
- 5. Any false declarations or misrepresentations in the submitted proofs will result in immediate disqualification and potential debarment from future tenders.
- 6. C-DAC reserves the right to reject the bid if any of the above listed document/s is not submitted.
- 7. Please do not upload "Price Bid" (prices quoted) in the technical bid. If the price quoted is submitted / leaked with technical bid the bid will be rejected at the sole discretion of C-DAC.

3.2 Commercial Bid shall contain:

Duly filled Commercial Bids as per format given in Section – V, complete in all respects with name, designation, email id and contact no.

4. Both the technical bid and commercial bid should be addressed to:

Materials Management Group (MMG)
Centre for Development of Advanced Computing (C-DAC), Knowledge Park,
No. 1, Old Madras Road, Baiyypanahalli, Bengaluru 560038, INDIA
Phone: 080-25093400.

5. Consortium bidding

Bidders may form consortium and participate in this bid as per below terms and conditions.

- 5.1 The Consortium must enroll in the e-Procurement portal with the name of the firm as appearing in the Consortium agreement.
- 5.2 A consortium of partner companies can bid, with one Indian company designated as Primary Bidder and the other(s) as secondary. The maximum number of partners in a consortium will be 5 (Five).
- 5.3 A foreign bidder can be a consortium member. The formation of Consortium or change in the Consortium character/ members after submission of the bid and any change in the bidding regarding Consortium will not be permitted.
- 5.4 Consortium members may be
 - DR Provider OR
 - Control Electronics Provider OR
 - QPU Provider OR
 - Software Stack Provider OR
 - System Integrator with experience in Superconducting based Quantum Computer implementation, integration and operations.
- 5.5 The pre-qualification of a Consortium does not necessarily pre-qualify any of its member individually or as a member in any other Consortium. In case of dissolution of a Consortium, each one of the constituent firms may pre-qualify if they meet all the pre-qualification requirements, subject to written approval of the employer.
- 5.6 The bid submission must include documentary evidence to the relationship between Consortium members in the form of Consortium Agreement to legally bind all partners jointly and severally for the proposed agreement which should set out the principles for the constitution, operation, responsibilities regarding work and financial arrangements, participation (percentage share in the total) and liabilities (joint and several) in respect of each and all of the firms in the Consortium. Such Consortium Agreement must evidence the commitment of the parties to bid for the requirement (if pre-qualified) and to execute the contract if their bid is successful.
- 5.7 All the partners of a Consortium may together authorize the Primary Bidder to submit the bid on behalf of the Consortium, along with an undertaking that in case of a successful bid, the work shall be executed by the Consortium as per contract terms of the bid document. Note: This authorization must be a part of the consortium agreement if the Bid is submitted by the Primary Bidder on behalf of the Consortium.
- 5.8 The Consortium must provide that the Primary Bidder shall be authorized to incur liabilities and receive instructions for and on behalf of any and all members of the Consortium and the entire execution of the contract shall be done with active participation of the Primary Bidder.

- 5.9 An entity can be a member of only one Consortium. Bid submitted by Consortium /Primary Bidder, consisting of the common entities as member will be rejected.
- 5.10 The earnest money / bids security bank guarantee can be submitted by the Consortium or one or more partners of the Consortium.
- 5.11 If Consortium breaks up midway before award of work and during bid validity/after award of work/during pendency of contract, in addition to normal penalties as per provision of bid document, all the members of the Consortium shall be debarred from participating in future bids for a minimum period of 12 months.
- 5.12 If a Bidder participates as Consortium, the benefits as per Public Procurement Policy for MSEs Order-2012 shall not be applicable for them.
- 5.13 In case the work/service is awarded to a Consortium participating in the tender, they have to submit PAN, GST registration and Verifiable Tax Residency Certificate of respective country for each foreign partner or Consortium itself (as applicable in the tender and for the Bidder status) etc. in the name of the Consortium.
- 5.14 The consortium agreement executed on a INR 100 non-judicial stamp paper should bind partners of the consortium to be liable jointly and severally for the execution of the contract in accordance with the contract terms. The consortium agreement should precisely indicate the role of each partner of the consortium in respect of the contract.
- 5.15 The consortium agreement shall authorize one of the partners of the consortium as Primary Bidder by submission of Power of Attorney signed by the legally authorized signatories of other partners. The other partner(s) should be explicitly designated as secondary partners.
- 5.16 Consortium agreement shall be enclosed with the proposal.
- 5.17 The Consortium agreement must specifically state that it is valid for the project for which bidding is done. If Consortium breaks up midway before award of work and during bid validity period bid will be rejected.
- 5.18 The contract agreement should be signed by each Consortium members. Subsequent declarations/letters/documents shall be signed by Primary Bidder authorized to sign on behalf of the Consortium or authorized signatory on behalf of Consortium.
- 5.19 The Consortium agreement may specify the share of each individual member for the purpose of execution of this contract. The Consortium Agreement should include a detailed Scope of Work (SOW) for each member, specify timelines, deliverables, and quality standards aligned with the supply order., Include provisions for penalties and liabilities for non-performance or delays.
- 5.20 Consortium agreement shall be registered in accordance with Indian law so as to be legally valid and binding on the members before making any payment.

5.21 Note: If the work is awarded to a Consortium firm, they will register the Consortium agreement under Registration Act in accordance with law.

5.22 Consortium shall open a bank account in the name of Consortium and all payments due to the Consortium shall be credited by C-DAC to that account only. To facilitate statutory deductions all statutory documents like PAN, GST registration etc. shall be submitted by Consortium at the time of execution of Agreement.

5.23 No partner of the consortium should bid individually or as a partner of another consortium.

5.24 Monitoring & Reporting Mechanisms

- Establish a Project Management Unit (PMU) to track progress and resolve issues.
- Require regular progress reports, inspections, and quality checks at different project stages.
- The lead member should have the authority to audit and review the performance of all members.

5.25 Dispute Resolution Mechanism

- Clearly outline a dispute resolution process (e.g., mediation, arbitration) in case of conflicts.
- Specify an escalation matrix to address performance issues before they escalate into disputes.

5.26 Exit & Replacement Clauses

- Define exit criteria for a non-performing member and the process for replacing them.
- The lead member should have the right to engage alternative suppliers if a member fails to meet commitments.

5.27 Compliance with Government Regulations

- Ensure all consortium members comply with government procurement norms, quality standards, and contract conditions.
- Include a compliance clause for adhering to local laws, taxes, and labor regulations.

6. Preference to MSE

Purchase preference will be given to MSEs having valid Udyam Registration and whose credentials are validated online through Udyam Registration portal as defined in Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 dated 23.03.2012 issued by Ministry of Micro, Small and Medium Enterprises and its subsequent Orders/Notifications issued by concerned Ministry. If the bidder wants to avail themselves of the Purchase preference, the bidder must be the manufacturer/OEM of the offered products. The bidder is required to submit a comprehensive list of items for which they hold the position of Original Equipment Manufacturer (OEM) or manufacturer. Traders are excluded from the purview of Public Procurement Policy for Micro and Small Enterprises

and hence resellers offering products manufactured by some other OEM are not eligible for any purchase preference. In respect of bid for Services, the bidder must be the Service provider of the offered Service. Relevant documentary evidence in this regard shall be uploaded along with the bid in respect of the offered product or service and Buyer will decide eligibility for purchase preference based on documentary evidence submitted, while evaluating the bid. If L-1 is not an MSE and MSE Seller (s) has / have quoted price within L-1+ 15% (Selected by Buyer) of margin of purchase preference /price band defined in relevant policy, such MSE Seller shall be given opportunity to match L-1 price and contract will be awarded for 25% (selected by Buyer) percentage of total quantity. The buyers are advised to refer the OM No. F.1/4/2021-PPD dated 18.05.2023 for compliance of Concurrent application of Public Procurement Policy for Micro and Small Enterprises Order, 2012 Benefits of MSE will be allowed only if seller is validated on-line on the MSE portal as well as validated and approved by C-DAC after evaluation of documents submitted.

However, CDAC retains the discretion to consider exemptions, if applicable to the present procurement scope and in accordance with the mentioned policy documents.

7. **Make in India** : This office has obtained the waiver from applicability of the provisions of the government orders regarding local contents(Make in India) with respect to this tender vide MeitY O.M. no. 9(13)/2025 dated 07.07.2025

8. Submission of Bids:

Bids should be submitted only in INR, and any bid in foreign currency shall be summarily rejected.

9. Integrity Pact

The Integrity Pact shall have to be complied by all bidders. Bidders shall have to upload scanned copy of signed (on all pages) integrity pact as per C-DAC's policy along with bid.

In case of consortium each partner has to sign (on all pages) the Integrity Pact. Format of Integrity Pact is enclosed at Annexure F of the Tender Document. Details of the Independent External Monitor (IEM)s are as follows;

1) Shri Vijay Kumar Singh
House No. 25, Police Housing Cooperative
Society, Kerwa Dam Road,
Bhopal – 4620044
Mob: 8989161940
Email: vijaykumarsingh@gmail.com

2) Shri. M Peter Johnson
Door No. 2-2-647/211
Tirumala Narayanadri Apartments
Flat No. GA Central Excise Colony
BAG Amerpet, Hyderabad – 500013
Mob: 9958727979
Email: johnson.mp@nic.in

(End of Section – I)

SECTION II: GENERAL CONDITIONS OF CONTRACT (GCC)

1. Location for the Supply, Installation & Warranty Services:

The entire solution comprising of Superconducting Qubits based Quantum Computing Facility (50 to 100 Qubits) as described in Schedule of Requirements (Section – IV) must be supplied, installed, commissioned & supported at:

Centre for Development of Advanced Computing (C-DAC), No. 68, Electronic City Phase I, Bengaluru, Karnataka 560100.

2. Delivery Period:

The entire supplies of items covered in this bid must be supplied, installed and commissioned along with the final acceptance testing within 9 months from the date of placement of order.

3. Order Placements:

The Supply Order and the payments shall be released by:

Centre for Development of Advanced Computing (C-DAC), Knowledge Park,
No. 1, Old Madras Road, Baiyypanahalli, Bengaluru 560038, Karnataka, INDIA.

4. Eligibility Criteria:

The bidder must comply with the minimum eligibility criteria stipulated below. In case of consortium, these clauses apply to only the Primary Bidder, unless stated otherwise. Supporting documents for the eligibility criteria clauses need to be submitted by/for only the Primary Bidder, unless stated otherwise:

- 4.1 The bidder must submit the documents as listed at para 3.1 and 3.2, Section – I of this document.
- 4.2 Bidder(s) must be a Legal Entity i.e., a company incorporated in India under the Companies Act, 1956 or 2013 OR LLP Act 2008/ Partnership Act, 1932 OR A partnership firm registered under Indian LLP act 2008. And subsequent amendments thereto. Bidder(s) must be Registered with the Income Tax (PAN) and GST Authorities in India with active status.
- 4.3 The bidder must be either an Original Equipment Manufacturer (OEM) of Superconducting quantum computing subsystems (QPU, Dilution Refrigerator, Control System, Cryogenic Electronics – TWPAs, HEMT Amplifiers etc.) or their respective subsidiary, or their authorized Quantum system integrator. The bidder must submit valid OEM authorization certificates from each of the respective subsystem manufacturers (namely QPU, Dilution Refrigerator, Control System, Cryogenic Electronics - TWPAs, HEMT Amplifiers etc.), affirming their technical capability, supply commitment, and post-installation support.

- 4.4 Specific authorization letter/s from OEMs, as per Annexure - C must be submitted along with the technical bid. In this case the authorization letter (Annexure – C) issued by the Indian subsidiary of OEM is acceptable. If the bid is submitted by the Indian subsidiary of OEM, the letter from OEM must be submitted certifying that the bidder is the subsidiary company of the OEM in India.
- 4.5 The bidder must quote for all the items mentioned in the schedule of requirements.
- 4.6 The bidder must have a minimum cumulative turnover of Rs. 45 Crores over the past three years from related quantum technology development, operations, with at least Rs. 20 crores in the preceding year. Copy of audited statement of account (P&L account & Balance Sheet) duly certified by CA along with CA certificate stating the turnover. Revenue Breakdown/Segment Reporting: The bidder should provide a detailed breakdown of their revenue, specifically highlighting the portion derived from related quantum technology development, operations.
- 4.7 In case of a consortium, the primary bidder's share should be at least 30% from the total turnover projected. However at least one of the consortium partners must have a minimum cumulative turnover of Rs. 45 crore over the past three years from related quantum technology development, operations. relevant for the scope of this project, with at least Rs. 20 crore in the preceding year. Copy of audited statement of account (P&L account & Balance Sheet) duly certified by CA along with CA certificate stating the turnover need to be submitted by all the partners. Revenue Breakdown/Segment Reporting: The bidder should provide a detailed breakdown of their revenue, specifically highlighting the portion derived from related quantum technology development, operations.
- 4.8 The bidder must have installed and commissioned at least two superconducting qubit-based quantum computing facilities, each with a usable capacity of a minimum of 50 qubits in a QPU. Of these, at least one installation must be a production system currently in use by clients. The bidder must submit certificate(s) from the client(s) as part of the bid document. The purpose of this facility is to function as a reference facility which has to be based on an existing equivalent or similar facility in terms of scale & complexity. Meeting this criterion showcases the bidder's capability to successfully execute the project while ensuring that the selected vendor has prior experience in deploying systems of similar scale and performance.
- 4.9 In case of the bidder being the Indian Subsidiary, installation and commissioning of the facilities by the Parent company is acceptable.
- 4.10 In case of a Consortium, the No. of installations of any of the individual partners of Consortium shall be considered OR the installations of Consortium itself may be considered.
- 4.11 In all the above cases, certificate from a client on their letter head stating the commission date, no. of functional qubits in the operational QPU, current operational status, location, details on the manufacturers of different subsystems of the quantum computing facility (namely QPU, Dilution Refrigerator, Control System, Cryogenic Electronics etc.), details of the system integrator and other relevant details needs to be submitted, failing which the bid will not be considered for further processing. Copies of purchase orders and installation

reports, testimonials stating the sustained performance and uptime of the system, including contactable references, as per eligibility criteria and any other documents in support of eligibility criteria need to be provided. Agreements indicating an intention to deliver the facilities at a later date from the tender submission date shall not be considered acceptable. If necessary, CDAC can enter into a Non-Disclosure Agreement with the relevant parties to enable the sharing of these details.

- 4.12 The bidder must supply a system with a modular design approach (as detailed in the Scope of procurement) for different subsystems of the Superconducting Quantum computing facility like QPU, Dilution Refrigerator, Control System, Cryogenic Electronics – TWPAs, HEMT Amplifiers etc., listed in SECTION IV – Schedule of Requirements. The detailed design document highlighting the modularity & interoperability aspects of the architecture, should be included in the technical proposal document.
- 4.13 All Bidders to submit signed and stamped copy of Scope Compliance (Format as per Annexure G) In case of a consortium, all the consortium members have to sign the declaration to be submitted by primary bidder (Format as per Annexure – G and M)
- 4.14 Bidder / consortium shall submit the undertaking that their entity has not been under a declaration of ineligibility for corrupt or fraudulent practices and should not be blacklisted by any State Govt. / Central Govt. / Board, Corporations and Government Societies / PSU or any other Government organizations abroad for any reason.
- 4.15 The bidder should provide sufficient documentary evidence to support the eligibility criteria and exemptions mentioned in Clause No. 5 below. C-DAC reserves the right to reject any bid not fulfilling the eligibility criteria.
- 4.16 The bidder must submit all other documents whichever applicable as per Clause no. 3.1; Section I – Instruction to Bidders (ITB)

5. Exemptions:

If in the view of bidder, any exemptions/relaxations are applicable to them from any of the eligibility requirements, under any Rules, process, Guidelines, Directives of Government of India, bidder may submit their claim for the applicable exemption /relaxation, quoting the valid Rule, process, Guidelines or Directives. In this case the bidder must submit necessary and sufficient valid documents along with the technical bid, in support of their claim. The relevant and valid certificates in support of claim of exemption must be submitted.

6. Amendment to Bidding Documents

- 6.1. 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.
- 6.2. The amendments to the bid documents, if any, will be notified by release of Corrigendum

Notice on www.eprocure.gov.in / www.cdac.in/ against this bid. The amendments/ modifications will be binding on the bidders.

- 6.3. 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.

7. Preparation of Bids

Bidders 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, the bidder shall not be entitled to amend/ add/ delete/ correct the clauses mentioned in the entire bid document.

8. Earnest Money Deposit (EMD)

- o. The Earnest Money Deposit (EMD) of Rs. 1,50,00,000/- only must be submitted prior to the DUE DATE & TIME of submission of the online technical bid. The EMD will be returned to the bidder(s) whose offer is not accepted, within 30 days from the date of opening of commercial bid(s). 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). (EMD will not be accepted in any other form)

8.1. However, if the return of EMD is delayed for any reason, no interest/ penalty shall be payable to the bidder.

8.2. 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 canceled.

8.3. The EMD may be forfeited:

- If the bidder withdraws the bid during the period of bid validity specified in the bid.
- 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.

NOTE: Bidders who have already deposited the EMD against the earlier tender no. CDACB/RD24/094 dated 01.01.2025 and who wish to participate in the present tender are not required to resubmit the EMD. Details of the EMD submitted earlier may please be mentioned clearly in the bid. All other prospective bidders who are participating for the first time in this tender shall be required to submit the EMD as prescribed in the tender document.

9. Period of validity of bids

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

- 9.2. 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 to not accept such a request without forfeiting the EMD/BG. A bidder agreeing to the request for extension will not be permitted to modify his bid.

10. Submission of Bids- Online PDF format only.

The Bid documents shall be neatly arranged and all pages should be numbered. 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.

11. Bid Opening & Evaluation of Bids

The valid technical bids will be opened through the CPPP portal and evaluated in two steps.

- 11.1. The bids will be examined based on eligibility criteria stipulated at Para 4 of Section – II to shortlist the eligible bidders.
- 11.2. The technical bids of only the shortlisted eligible bidders shall be evaluated by employing the process as described in Section – III(A) and based on technical specifications stipulated at Section–IV.
- 11.3. 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.
- 11.4. The duly constituted Tender Evaluation Committee (TEC) shall evaluate the bids. The TEC shall be empowered to take appropriate decisions on minor deviations, if any.

12. Comparison of Bids / Evaluation of Bids

- 12.1. For the purpose of selection, overall evaluation of the Proposals will be done in two stages i.e., Technical (comprising Pre-qualification Evaluation followed by Evaluation of Technical Proposal) and financial evaluation based on Quality and Cost Based Selection (QCBS).
- 12.2. Only the short-listed bids from the technical evaluation shall be considered for commercial comparison.
- 12.3. The final awarding of the contract will be done based on a Quality & Cost Based Selection (QCBS) procedure with 70% weightage towards Quality of Work (Evaluated by the Committee) and 30% weightage towards Commercial Bid.

Sl.no.	Parameters	Remarks	Weightage
1	Technical Bid	Will be fairly judged by the Committee on the basis of the process described in Section – III(A)	70%
2	Financial Bid	There should be fair and competitive pricing. The committee reserves the right to not select Vendor in case the price quoted irrationally or not in line with previous work orders submitted. Process detailed in	30%

	Section – III(A)	
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13. Award of Contract

- 13.1. C-DAC shall place the order(s) on the eligible bidder ranked highest based on the combined QCBS score as detailed in Section III (A). However, C-DAC reserves the right and has sole discretion to reject the lowest bid. CDAC reserves the right to renegotiate any terms (Price / Technical) further with the successful Bidder.
- 13.2. If more than one bidder happens to quote the same lowest price in the financial bid, C-DAC reserves the right to place the order on the eligible bidder having larger sales turn-over for last financial year. The decision of C-DAC shall be final.

14. Purchaser's Right to amend / cancel

- 14.1. C-DAC reserves the right to amend the eligibility criteria, commercial terms & conditions, Scope of Supply, technical specifications etc. before bid closure date and provide sufficient time for the bidders to amend their bids accordingly.
- 14.2. C-DAC reserves the right to cancel the entire or partially bid without assigning any reasons thereof.
- 14.3. C-DAC reserves the right to reject the bid submitted by the lowest evaluated bidder.

15. Corrupt or Fraudulent Practices

- 15.1. It is expected that the bidders who wish to bid for this project have highest standards of ethics.
- 15.2. 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;
- 15.3. 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.

16. Interpretation of the clauses in the Bid Document/Contract Document

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

17. Penalties

C-DAC reserves the right to levy penalties, as given below.

Sl. No.	Parameters	Penalty
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A	Penalty for Delayed Delivery of project	0.5% of order value per week for delay in delivery of complete site in all respect, beyond schedule of 9 months. If the delay is more than 10 weeks, C-DAC reserves the right to cancel the Contract/ Order or execute the order at the cost of the bidder. Any delay because of C-DAC, or works contractor, conditions arising out of Force Majeure will not be considered while calculating the delay period for penalties. The maximum penalty levied shall be 5 % of the total order value.
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18. 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 an 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), Pandemic, hostilities, national emergencies, civil commotion and strikes at successful Bidder's premises or any other act beyond control of the bidder.

19. Arbitration

In case any dispute arises between the C-DAC and successful bidder with respect to this RFP, including its interpretation, implementation or alleged material breach of any of its provisions both the Parties hereto shall endeavor to settle such dispute amicably. If the Parties fail to bring about an amicable settlement within a period of 30 (thirty) days, dispute shall be referred to the sole arbitrator mutually appointed by both the parties. If the sole arbitrator is not appointed mutually by both the parties then the District Court Bengaluru shall have exclusive jurisdiction for appointment of sole arbitrator through court. Arbitration proceedings shall be conducted in accordance with the provisions of the Arbitration and Conciliation Act, 1996 and Rules made there under, or any legislative amendment or modification made thereto. The venue of the arbitration shall be Bengaluru.

The language of arbitration shall be English. The common cost of the arbitration proceedings shall initially be borne equally by the Parties and finally by the Party against whom the award is passed. Any other costs or expenses incurred by a Party in relation to the arbitration proceedings shall ultimately be borne by the Party as the arbitrator may decide. Courts in Bengaluru only shall have the exclusive jurisdiction to try, entertain and decide the matters which are not covered under the Arbitration and conciliation Act.

20. Indemnity

The successful bidder shall indemnify, protect and save C-DAC from/against all claims, losses, costs, damages, expenses, action suits and other proceeding, resulting from/arising out of:

- Infringement of any law pertaining to intellectual property, patent, trademarks, copyrights etc. by the bidder or
- Such other statutory infringements in respect of all the equipment's supplied by successful bidder, or
- Caused due to any act/omission/performance/under or non or part performance/failure of the bidder.

21. Assignment

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

22. 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.

23. Termination

In case of the delays in providing the stipulated services, and /or defect/delay/under or non-performance pertaining to the services / products supplied by the bidder, C-DAC will give written notice to the bidder directing to set the things right within 30 days of notice. If bidder fails to comply with the requirements, C-DAC shall have the right to terminate the contract and / or cancel the order/s. The successful bidder agrees and accepts that he shall be liable to pay damages claimed by C-DAC, in the event of termination of contract / cancellation of order, as detailed in this RFP. The successful bidder may terminate the contract by at least 30 days' written notice, only in the event of non-payment of undisputed invoices for 90 days from the due date. Except this situation, the successful bidder shall have no right of termination.

C-DAC will release the due amount payable to successful bidder towards the material and / or services provided till the date of termination, those are accepted by C-DAC. However, the amount towards penalty, if any will be deducted from the payable amounts.”

C-DAC reserves the right to terminate the contract / cancel order with or without cause/ reason, by giving 90 days' notice to the successful bidder.

In the event of termination of Contract, the Consultants have to furnish to C-DAC all the design, drawings, data, documents and details pertaining to this project, as exist with him till that date.

24. Notices

- Any notice, request or consent required or permitted to be given or made pursuant to this contract shall be in writing and shall be deemed to have been given or made when delivered in person to an authorized representative of the Party to whom the communication is addressed, or when sent by registered mail, telex, telegram or facsimile to such Party at the address specified in the contract.
- Notice will deem to be effective as specified in the contract.

25. Authorized Representatives

Any action required or permitted to be taken, and any document required or permitted to be executed, under this bid/Agreement by the C-DAC or the Consultant may be taken or executed by the officials specified in the contract.

For C-DAC: mmg-blrqp@cdac.in

For the Consultant: (Enclose Authorization by Authorized Signatory of the Consultancy Agency)

26. Limitation of Liability

The liability of the Bidder / Contractor arising out of breach of any terms/conditions of the bid/contract/work order and addendums/amendments thereto, misconduct, willful default will be limited to the total contract value. However, liability of the bidder in case of death/injury/damage caused to the personnel/property due to/arising out of/incidental to any act/omission/default/deficiency of bidder/contractor will be at actual. In no event shall Party, its officers, directors, or employees be liable for any form of incidental, consequential, indirect, and special or punitive damages of any kind.

27. Confidentiality

The Consultant, his Sub-consultants and the Personnel of either of them shall not disclose any information and data furnished to him by C-DAC to any third party nor shall disclose any drawings, reports, specification, manuals and other information developed and prepared for C-DAC by the Consultant and his Sub-consultants and the Personnel of either of them, without prior written approval of C-DAC.

28. Suspension of Services

C-DAC may, by written notice of suspension to the Consultant, suspend all payments to the Consultant there under if the Consultant fails to perform any of their obligations under this Contract, including the carrying out of the Services, provided that such notice of suspension

- shall specify the nature of the failure, and
- shall request the Consultant to remedy such failure with in a stipulated period not exceeding thirty (30) days after receipt by the Consultant of such notice of suspension.

29. Foreclosure of the Contract

It shall be within the authority of C-DAC, at any time after acceptance of the bid or during the execution of the work, to foreclose or reduce the scope of the work, for any reasons whatsoever, either partly or wholly by giving the written notice not less than 15 days to the Consultant. In such an event, the Consultant shall have not claim whatsoever on account of any profits (s) or advantage(s) which the Consultant might have derived from the execution of work in full but for the reasons of the foreclosure of the whole or part of the work. However, the Consultant shall be paid at the contract rates for the Services performed by him and the amount certified by the C-DAC.

30. Abandonment of Work

In case, the work is abandoned by the Consultant, without good and sufficient justification C-DAC is at liberty to encash the Performance Guarantee and impound any other amounts due to the consultant at the time of abandonment on account of this contract and engage another agency to complete the balance work without prejudice to any remedies available under this contract of Indian Law.

(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. The bidder may quote in INR
- 1.3. Bidder must indicate applicable taxes separately for each item. The bidder should exercise utmost care to quote the correct percentage of applicable taxes on each item.
- 1.4. In case due to any error/ oversight, the GST rate quoted by the bidder is different than the GST rate as per the tariff, the bidder will not be permitted to rectify the error/oversight. The orders/ contract will be placed with the GST rate quoted by the bidder or actual tariff rate (as on placement of order), whichever is LOWER. The difference amount payable, if any, between the quoted GST rate and actual tariff rate shall be borne by the bidder.
- 1.5. The prices quoted must be F.O.R./D.D.P. till destination, C-DAC, Bengaluru/Bengaluru including of freight, insurance, forwarding, loading/un-loading and all incidental charges etc.,
- 1.6. The exact rate of taxes, charges currently applicable must be mentioned in the “commercial bid format”. The statutory taxes applicable at the time of supply of material and billing in India shall be applicable.
- 1.7. The responsibility, cost and risk of the consignment shall rest with the bidder till receipt of goods is acknowledged by the end user at C-DAC, Bengaluru/Bengaluru. However, such receipt/ acknowledgement shall not be treated as acceptance of goods.

2. Software Licenses: (if applicable)

The software licenses, if any, shall be required in the name of C-DAC, Bengaluru/Bangalore. The licenses shall contain paper/electronic licenses (wherever applicable).

3. Security Deposit (SD)

The successful bidder will be required to furnish the Security Deposit in INR equivalent to 5% of the total order value within 10 days of receipt of Supply Order. The Security Deposit should be submitted in the form of Demand Draft/Bank Guarantee drawn in favour of C- DAC payable at Bengaluru. The Security Deposit will be valid for the period till completion of installation and commissioning and will be returned upon completion of installation & commissioning of entire system and on submission of Performance Bank Guarantee (PBG).

4. Performance Bank Guarantee (PBG)

The successful bidder will be required to furnish the Performance Guarantee towards the supplies etc. supplied, in the form of a Bank Guarantee in INR equivalent to 5% amount of the total 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 acceptance. The PBG must be negotiable at a branch of issuing bank in India. In case of no warranty/services claims towards the items under warranty and services during the validity period of bank guarantee, the PBG will be returned on completion of warranty period.

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

- a. The Components/solutions of Superconducting based quantum facility including, Quantum Processor, Dilution Refrigerator, Control Electronics, Gas handling system, software stack, fail to achieve the performance as stipulated in this document (or)
- b. The bidder fails to provide the warranty and other services in scheduled time frame, as stipulated in this document (or)
- c. The bidder delays to provide the warranty services as stipulated in this document.

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 and Support

The Supplier warrants that all the Goods are new, unused, and that they incorporate all recent improvements in design and materials, unless provided otherwise in the order. The supplier further warrants that all Goods supplied shall have no defect arising from design, materials or workmanship (except when the design and/or material is required by the Purchaser’s specifications) or from any act or omission of the supplier.

Comprehensive onsite support and maintenance:

The support and maintenance should be comprehensive on site, repair/replacement basis free of cost for **minimum of 3 years**, from the date of acceptance of the solution (18 calendar months of on-site warranty & 18 calendar months of on-demand remote support. One man-month refers to 160 hours (20 days/month × 8hrs/day) of productive contribution). If during the aforesaid period, the Goods or the integrated system be discovered not to conform to the description and quality aforesaid or have deteriorated, Purchaser will be entitled to reject the Goods or such portion of the integrated system thereof as may be discovered not to conform to the said description and quality. On such rejection, the Goods will be at the supplier’s risk and all the provisions herein contained relating to rejection of Goods or such portion of the integrated system, shall apply. The supplier if called upon to do so, shall replace within one month or such further period as may be extended by the Purchaser on his discretion on an application made thereof by the supplier the goods or such portion thereof as is rejected by Purchaser and in such an event the above mentioned period shall apply to the Goods replaced from the date of acceptance of the replacement otherwise , the supplier shall pay to the Purchaser such damages as may arise by reason of breach of the conditions therein contained.

All the Goods supplied and the integrated system must have 24x7 support along with 8 hours response time and 72 hours resolution time, covering all parts & labor starting from the date after the successful installation, demonstration of performances and acceptance by C-DAC, Bengaluru. During the comprehensive maintenance period, supplier will have to undertake comprehensive

maintenance of the entire hardware components, equipment, support and accessories supplied at the place of installation of the equipment.

Warranty of Goods supplied:

The **supplier also warrants** that the said goods and the integrated system would continue to conform to the description and quality aforesaid for a period of **minimum of 3 years** from the date of acceptance by the end user and that notwithstanding the facts that the Purchaser/ end user (Inspector) may have inspected and/or approved the said Goods.

For the Dilution refrigerator and associated items requested in Section IV – 1.2, the bidder shall arrange an SLA with an Indian supplier / entity and C-DAC, to ensure seamless operations of the systems and reduction in response times to failure.

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.

The warranty support will be backed by supplier by submitting a Performance Bank Guarantee, as per para 4 of Section – III.

7. Acceptance Criteria

Addition to scope of work defined in each part of Section IV, Bidder need to demonstrate the below parameters:

7.1. QPU Performance parameters:

- 7.1.1. Median Single-Qubit Gate Fidelity: $\geq 99.7\%$
- 7.1.2. Median Two-Qubit Gate Fidelity: $\geq 99\%$
- 7.1.3. Single-Qubit Gate Duration: ≤ 50 ns
- 7.1.4. Two-Qubit Gate Duration: ≤ 100 ns
- 7.1.5. Median Readout Fidelity: $\geq 97\%$
- 7.1.6. Median T1 time: ≥ 30 micro secs
- 7.1.7. Median T2 time: ≥ 20 micro secs

7.2. Fully functional Dilution Refrigerator parameters

- 7.2.1. Full capacity DR wiring, and DC Wiring for supporting the qubits offered and further scalable to 250 qubits.
- 7.2.2. Guaranteed Base Temperature <10 mK
- 7.2.3. Cooling power at 100 mK ≥ 850 uW
- 7.2.4. Plate Area of at least 1960 sq.cm with additional ample space

7.3. Control Electronics Parameters

- 7.3.1. Provided solution for supporting the qubits offered and further scalable to 250 qubits. The system must include a scalable architecture, ensuring that the control electronics and overall design can accommodate future expansions.
- 7.3.2. Frequency range: 0-10 GHz readout, control lines and flux lines for provided QPU. The frequency range specified in the RFP is broad and covers a range from 0 to 10 GHz, accommodating all required lines. If a system provides separate frequency ranges for

flux lines, readout lines, and control lines within this overall range, it is acceptable as long as the system meets QPU performance benchmark as mentioned in the acceptance criteria.

- 7.3.3. Flux lines output: $\sim \pm 1$ V (2 Vpp) in a 50 ohm load.
- 7.3.4. Control lines with an output upto 10 dBm, SFDR < -40 dBc, phase noise < -110 dBc/Hz. While the requirement is for 10 dBm, systems operating at 5 dBm are acceptable as long as they adhere to and satisfy the QPU performance benchmarks outlined in the acceptance criteria. This ensures flexibility while maintaining the necessary operational standards.
- 7.3.5. Readout lines with input power < -20 dBm and on card measurement result storage memory.
- 7.3.6. Relative Phase stability across multiple RF (3-8 GHz) output modules over 1 hr < 2 deg.
- 7.3.7. Low latency feedback $< 400-600$ ns.
- 7.3.8. Synchronization jitter of the order of picoseconds across multiple modules.
- 7.3.9. Open QASM complaint API and pulse level API access the control electronics solution.
- 7.3.10. Input Voltage and Frequency: Complying with Indian A/C Power specifications

7.4. Application benchmark

- 7.4.1. Demonstration of Quantum Volume Benchmark of 2^6 or higher randomly utilizing the delivered qubits in the QPU
- 7.4.2. Demonstration of Randomized Benchmarking as outlined in the following reference: <https://doi.org/10.1103/PhysRevLett.106.180504>
- 7.4.3. Hybrid Classical – QC: Demonstration of QAOA application, utilizing all the delivered qubits in the QPU.

The results of acceptance tests shall be well documented and countersigned by the representatives of bidder, C-DAC.

The approved acceptance test reports must be submitted along with the invoices for claiming payments, wherever applicable.

8. Payments:

- 40% amount of the order value will be released upon the receipt of Dilution refrigerator at site with 30 days credit.
- 20% amount of the order value will be released on receipt of QPU and Control Electronics at site with 30 days credit.
- 30% amount of the order value will be released on successful demonstration and acceptance of the integrated system.
- Balance 10% amount shall be released against submission of PBG, as per clause 4 of Section III given above. PBG must be submitted within 15 days from the date of acceptance report. Applicable TDS on GST will be deducted.

No advance payments will be made.

9. Bill to C-DAC, Bengaluru

Centre for Development of Advanced Computing (C-DAC) - Knowledge Park,

No. 1, Old Madras Road, Byappanahalli, BENGALURU 560038 INDIA

10. Jurisdiction

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

11. Risk

All risks, responsibilities and liabilities thereof in all goods shall remain with selected bidder till successful installation and commissioning of the goods as specified in this document

(End of Section – III)

SECTION III (A): EVALUATION PROCESS

1. Evaluation of Technical Proposals

1.1. Technical Pre-Qualification

- 1.1.1. Only those bidders who qualify all Pre-Qualification/Minimum Eligibility Criteria requirements (as stipulated at Para 4 of Section – II) shall be qualified for technical bid evaluation.
- 1.1.2. The Tender Committee (TC) reserves the right to reject a Service in case the offered service does not match the technical requirements/ objectives specified in Technical Bid.
- 1.1.3. The technical bid shall first be reviewed for determining the Compliance of the Technical bids with the RFP terms and conditions, Minimum/ mandatory Technical requirements, and the scope of work as defined in this RFP.
- 1.1.4. Any bid found to be non-compliant to the mandatory Technical Requirements, RFP terms, conditions, and work scope shall be rejected and shall not be considered for further evaluation. Bids that are technically compliant would only be taken up for commercial evaluation.
- 1.1.5. Bidder is required to submit all the supporting documents as per the criteria mentioned in the RFP. However, Buyer reserves the right to summarily reject any bid which does not contain all the mandatory supporting document or may ask the bidder to resubmit documents, the decision of Buyer shall be final and binding in this regard.
- 1.1.6. A score would be given to each bidder by Tender Committee based on the scoring criteria as detailed in below.
- 1.1.7. Buyer reserves the right to disqualify any bidder based on any relevant criteria, and its decision is final.
- 1.1.8. The Bidder should submit documents as a documentary proof of Work Order / Contract Agreement and any document justifying the completion of the assignment from the client.

Technical Bids shall then be evaluated for the criteria detailed below. The Bidders should enclose documentary evidence for fulfilling the Evaluation Criteria. The technical committee will evaluate the bidders those who had qualified in the previous Minimum Eligibility criteria/Pre-Qualification Criteria.

1.2. Technical Evaluation Methodology

The technical bids will be evaluated based on Quality and Cost Based System (QCBS) method as explained below. The technical proposals will be evaluated on the basis of Applicant's experience, its understanding of the scope of delivery, proposed methodology, proposed technical deliverables and Work Plan, and the proposed plan for support & training. Technical evaluation committee may seek presentations from the bidders to seek additional clarifications (if any) from the technical proposal. Bidders will be deemed qualified for the evaluation of their Financial Proposals only if they score 70 marks or more in the technical evaluation, as per the criteria outlined below. Bidders who have secured less than 70 marks shall be rejected. Further to the assignment of marks, the highest marks scored by any applicant is called the Maximum Technical Marks (MTM). With respect to this, the

Technical Score (TS) of the Applicants will be computed as follows:

$$TS = 100 * (TM / MTM)$$

(TM = Technical Marks scored as per the below mentioned Technical Evaluation criteria for the proposal under consideration)

1.3. Technical Evaluation Criteria

The scoring criteria to be used for evaluation of Technical Proposal shall be as follows:

Sl. No	Evaluation Criteria	Details of Criteria: Allocation of Marks		Proof / Document to be attached
1	Bidder/Consortium Profile	Max Marks: 12	Min. marks: 4	
1.1	Cumulative Turnover for last 3 years arising from related quantum technology development, operations relevant for the scope of this project.	Turnover in INR	Marks	Audited Financial statement along with Revenue Breakdown/Segment Reporting (from related quantum technology development, operations relevant for the scope of this project)
		More than [100] Crore	6	
		>= INR [80] Crore and < INR [100] Crore	4	
		>= INR [60] Crore and < INR [80] Crore	3	
		>= INR [45] Crore and < INR [60] Crore	2	
1.2	Project Experience In case of consortium, the number of installations by any consortium member may be submitted for evaluation of this criteria	The Bidder shall have successfully executed at least two (2) installation and commissioning of superconducting qubits-based quantum computing facilities, each having the usable capacity of min. 50 qubits in a QPU, in the last 3 years, as on Bid Submission Date. (Also please refer Section II – Criteria 4.8)		Installation Certificate endorsed by the client. Also refer to Section I - item 3.1 and Section II – item 4.11, on the document requirements
		No. of installations	Marks	
		> 3 installations	6	
		3 installations	4	
		2 installations	2	
2	Technical proposal from the bidder	Max Marks: 26	Min. marks: 21	
2.1	Technical proposal from the bidder: Approach & Methodology including Planning phase, resource	Evaluation Parameter	Marks	Annexure G
		Conformity to SECTION IV: SCHEDULE OF REQUIREMENTS in the proposed solution	If provided 1 Mark, Else Not Qualified	

	mobilization, stakeholder engagement, implementation framework, execution phase, testing & validation, deployment & training and post-implementation support.	Methodology, tools and Technologies to monitor & maintain the SLAs and managing change requests	If provided 1 Mark, Else Not Qualified	Technical Project Proposal
		Proposed structure for: 1. Project Strategy 2. Project Management 3. Risk Management 4. Resource Plan 5. Project Governance Model	If provided 1 Marks, Else Not Qualified	
		Identification of major risks and suitable mitigation plans for each of identified risks.	If provided 1 Mark, Else Not Qualified	
		Proposed solution for design & development of SOPs and KPIs (list down all the SOPs & KPIs identified for the solution)	If provided 1 Marks, Else Not Qualified	
2.2	Proposed Resources for the Project Implementation (until Acceptance). All the proposed positions shall be onsite throughout the entire project implementation phase (until Acceptance). Refer Subsection 2. Manpower deployment of SECTION III (A), for more details and expected qualifications of the deployed manpower and the associated scoring.	Profile	Marks	Educational Qualification & Experience Certificates
		Project Manager (atleast 1)	Total marks from Subsection 2. Manpower deployment of SECTION III (A) to be entered here	
		Technical Team with experience in handling the following subsystems: DR and associated services Control Electronics & Cabling QPU characterization, demonstration Quantum System and Application		

		Engineering																				
2.3	Proposed plan for Support & training. Refer Subsection 2. Manpower deployment of SECTION III (A), for more details and expected qualifications of the deployed manpower.	<table border="1"> <thead> <tr> <th>Proposed Activity</th> <th>Marks</th> </tr> </thead> <tbody> <tr> <td>On-site support post-acceptance from the client:</td> <td></td> </tr> <tr> <td>: for > 3 years</td> <td>2</td> </tr> <tr> <td>: for 3 years</td> <td>1</td> </tr> <tr> <td>Post installation operational training for all the subcomponents:</td> <td></td> </tr> <tr> <td>> 120 hrs</td> <td>2</td> </tr> <tr> <td>>= 80 hrs and <=120 hrs</td> <td>1</td> </tr> </tbody> </table>	Proposed Activity	Marks	On-site support post-acceptance from the client:		: for > 3 years	2	: for 3 years	1	Post installation operational training for all the subcomponents:		> 120 hrs	2	>= 80 hrs and <=120 hrs	1		Educational Qualification & Experience Certificates				
Proposed Activity	Marks																					
On-site support post-acceptance from the client:																						
: for > 3 years	2																					
: for 3 years	1																					
Post installation operational training for all the subcomponents:																						
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>= 80 hrs and <=120 hrs	1																					
3	System capacity metrics	Max Marks: 22	Min. marks: 9																			
3.1	No. of Qubits	<table border="1"> <thead> <tr> <th>Parameter</th> <th>Marks</th> </tr> </thead> <tbody> <tr> <td>No. of fully functional qubits offered in the QPU, which conform to the minimum performance metrics as listed in Criteria 4.1 of this table.</td> <td></td> </tr> <tr> <td>> 100</td> <td>10</td> </tr> <tr> <td>> 90 & <= 100</td> <td>7</td> </tr> <tr> <td>> 80 & <= 90</td> <td>6</td> </tr> <tr> <td>> 70 & <= 80</td> <td>5</td> </tr> <tr> <td>> 60 & <= 70</td> <td>4</td> </tr> <tr> <td>>= 50 & <= 60</td> <td>3</td> </tr> <tr> <td><50</td> <td>Not Qualified</td> </tr> </tbody> </table>	Parameter	Marks	No. of fully functional qubits offered in the QPU, which conform to the minimum performance metrics as listed in Criteria 4.1 of this table.		> 100	10	> 90 & <= 100	7	> 80 & <= 90	6	> 70 & <= 80	5	> 60 & <= 70	4	>= 50 & <= 60	3	<50	Not Qualified		Product Data sheet / Whitepaper detailing the Design with highlights pointing towards the proposed qubits. Also refer to Section I, item 3.1 on the document requirements.
Parameter	Marks																					
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>= 50 & <= 60	3																					
<50	Not Qualified																					
3.2	No. of Co-ax lines supported in DR	<table border="1"> <thead> <tr> <th>Parameter</th> <th>Marks</th> </tr> </thead> <tbody> <tr> <td>> 1008</td> <td>4</td> </tr> <tr> <td>> 800 and <=1008</td> <td>1</td> </tr> <tr> <td>Else</td> <td>Not Qualified</td> </tr> </tbody> </table>	Parameter	Marks	> 1008	4	> 800 and <=1008	1	Else	Not Qualified		Product Datasheet(s). Also refer to Section I, item 3.1 on the document requirements										
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Else	Not Qualified																					
3.3	Scalability of the Control Hardware & Software. No. of qubits the control hardware and	<table border="1"> <thead> <tr> <th>Parameter</th> <th>Marks</th> </tr> </thead> <tbody> <tr> <td>>250</td> <td>2</td> </tr> <tr> <td>=250</td> <td>1</td> </tr> <tr> <td>Else</td> <td>Not Qualified</td> </tr> </tbody> </table>	Parameter	Marks	>250	2	=250	1	Else	Not Qualified		Product Datasheet(s) & Testing reports preferably from third-party to justify the claims. Also refer to Section I, item 3.1 on the document										
Parameter	Marks																					
>250	2																					
=250	1																					
Else	Not Qualified																					

	software can scale upto for control & readout.			requirements
3.4	High Density wiring solutions for QPU with each flexible cable supporting atleast 4 channels (with a total of atleast 16 channels). The offered high density wiring solutions should have integrated components for signal conditioning. Distinct from traditional coaxial line solutions, the solution offered should enable increased channel capacity without the need for a bigger quantum refrigerator.	Parameter (No. Of cables supporting atleast 4 channels each)	Marks	Product Data sheet / Whitepaper detailing the Design with highlights pointing towards the proposed qubits. Also refer to Section I, item 3.1 on the document requirements.
		> 16	5	
		= 16	3	
		Else	0	
3.5	Damping against vibration	Parameter	Marks	
		Active & Passive damping DR	1	
		Else	Not Qualified	
4	System Performance metrics	Max Marks: 26	Min. marks: 9	Product Data sheet(s). Also refer to Section I, item 3.1 on the document requirements.
		Range for the Parameter	Marks	
4.1	Proposed QPU: Median Single-Qubit Gate Fidelity	> 99.9%	2	Product Data sheet / Whitepaper detailing the Design with highlights pointing towards the proposed qubits. Also refer to Section I, item 3.1 on the document requirements.
		>= 99.7% and <=99.9%	1	
4.2	Proposed QPU: Average T1 Coherence Time in microseconds	>50	2	
		>=30 and <=50	1	
4.3	Proposed QPU: Average T2 Time in microseconds	>40	2	
		>=20 and <=40	1	

4.4	Proposed QPU: Median Two-Qubit Gate Fidelity	>99.5%	2	
		>=99% and <=99.5%	1	
4.5	Proposed QPU: Median Readout fidelity	>99%	2	
		>=97% and <=99%	1	
4.6	Proposed QPU: Two-Qubit Gate Duration: in ns	<60	2	
		>=60 and <=100	1	
4.7	Proposed QPU: Single-Qubit Gate Duration: in ns	<40	2	
		>=40 and <= 50	1	
4.8	Tunable coupler based QPU architecture		If Yes, 4 marks Else 0	
4.9	Proposed DR: Guaranteed base temperature	<6mK	4	
		>=6mK to <8mK	2	
		>=8mK to <=10mK	1	
5.0	Proposed DR: Guaranteed cooling power at 100mK	> 1000uW	4	
		>= 850uW and <= 1000uW	1	
		<850uW	Not Qualified	
5	System Modularity	Max Marks: 16	Min. marks: 16	
		Parameter	Marks	
5.1	Modularity of the proposed Control Electronics	Relative Phase stability across multiple RF (3-8 GHz) output modules over 1 hr <2 deg	1	Product Data sheet(s). Also refer to Section I, item 3.1 on the document requirements.
		The control electronics solution shall support 100 qubits and scalable upto atleast 250 qubits operation	2	
		Synchronization jitter of the order of ps across multiple modules and Low latency feedback	1	

		<400-600 ns		
		TWPA pump lines integrable in the compact electronics rack, Direct FPGA access provision to implement decoding algorithms towards error correction, Mixer calibration free operation, Onboard integrated DC coupling provision	1	
		API level access to Control hardware and software (Access to pulse sequences generated for QPU control & readout), API Access to transpiled and optimized circuits at the software level	1	
		Automation platform / APIs for qubit characterization, tuning, optimization and scaling	1	
		Reconfigurable Control Hardware to support various qubit types upon the acquisition of additional required modules: semiconductor spin, etc.,	1	
		Parameter	Marks	
5.2	HPC-QC Integration strategy	Integration with HPC facility and demonstration of a hybrid HPC-QC algorithm / application over the established facility with SLURM integration for workload balancing	2	Product Data sheet / Whitepaper detailing the Design with highlights pointing towards the proposed solution
		Support for primitives	2	

		to enable hybrid HPC-QC programming		
5.3	Interoperability of offered QPU with multiple Control Electronics Vendors	Demonstrated capability of the QPU to be functioning with atleast 2 different control electronics vendors in the market	2	Technical white papers or case studies outlining cross-platform quantum program execution, Client deployment references or third-party evaluation reports validating multiple control electronics support. Certificates from Control Electronics Vendors.
5.4	Interoperability of offered Control Electronics solution with multiple QPU Vendors	Demonstrated capability of the control electronics stack with atleast 2 different QPU vendors in the market	2	Technical white papers or case studies outlining cross-platform quantum program execution, Client deployment references or third-party evaluation reports validating multi-QPU support. Certificates from QPU Vendors.
6	System - Non-Core components	Max Marks: 4	Min. marks: 5	
6.1	IoT Infrastructure and Telemetry	Parameter	Marks	
		Integrated Telemetry and Monitoring Systems (Cryostat to Control Electronics), Predictive Maintenance Software and Tools, Real-Time Data Collection and Analysis Systems	2	Product Data sheet(s)
		Parameter	Marks	
6.2	EMI/EMC Compliance	Filtered Power Supplies	1	Product Data sheet(s)
		EMI Shielding	2	
		Max Marks: 25	Min. marks: 10	
		Parameter	Marks	
7.0	Technical Proposal Presentation	The Bidder will need to exhibit functional and non-functional requirements through presentation to the Technical Evaluation Committee.		

2. Manpower deployment

Selected Bidder shall deploy Manpower during implementation (until acceptance) and Operation & Maintenance phases (post acceptance). The deployed resource shall report to CDAC's Project In-charge and work closely with the Program Management Office of CDAC.

Note: (One man-month refers to 160 hours (20 days/month × 8hrs/day) of productive contribution)

Following are the minimum resources required to be deployed in the Project implementation, until acceptance (Price should be quoted accordingly in commercial bid format), however the Selected Bidder may deploy additional resources based on the need of the Project and to meet the defined SLAs in this RFP:

Sl. No	Criteria	Man-months required	On-site deployment	Minimum Qualification & Experience
1	Project Manager	6	75%	MBA (IT)/B. Tech /M. Tech with min. 2 years experience in Project management
2	Technical Engineers of the team (comprising of atleast 2 members) with experience in handling the following subsystems: - DR and associated services - Control Electronics & Cabling	8	75%	B. Tech / M.Tech with min. 2 years experience in relevant areas
3	Technical Engineers of the team (comprising of atleast 2 members) with experience in handling the following subsystems: - QPU characterization, demonstration - Quantum System and Application Engineering	8	75%	Ph.D with min. 2 years experience in relevant areas

Following are the minimum resources required to be deployed in the Project support (post acceptance from CDAC) Post acceptance, bidder is required to provide 3 years warranty. This includes 18 months of onsite support and the remaining 18 months remote support along with one physical visit of the support team per quarter.

The requirement for on-site support is as follows: The bidder is required to have a minimum two support engineers (36-man months over a period of 18 calendar months of on-site warranty) with on-site deployment of 95%.

Sl. No	Criteria	Man-months required	On-site deployment	Remote deployment	Minimum Qualification & Experience
1	Support	36	95% of 18	95% of 18	B. Tech / M.Sc. (Full time)

Engineer(s)		man-months	man-months	with min. of 1 year experience
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Note: (One man-month refers to 160 hours (20 days/month × 8hrs/day) of productive contribution)

Following are the minimum resources required to be deployed for delivering the Training (post acceptance from CDAC)

Sl. No	Criteria	Minimum No. of hours (On-site)	Minimum Qualification of the trainers
1	Training	80	Ph.D. (QPU design, characterization etc.) M.Tech. (DR / Control Electronics)

Following are the evaluation criteria for the qualifications of the manpower deployed:

Sl. No	Evaluation Criteria	Details of Criteria: Allocation of Marks	
1	Project Manager		
1.1	Educational Qualification	Qualification	Marks
		MBA (IT)/M. Tech	1
1.2	Work experience in the capacity of Project Director/ Program Manager in Quantum Technology Implementation Projects	Years	Marks
		>=5 years	2
		>=2 and <5 year	1
1.3	Project Management Certification	PMP or PRINCE 2 Certificate (Bidder to submit scanned copy of valid certificate in the name of the resource)	1
		Else	0
2	Technical Engineers deployed in Project Implementation (atleast 2 no.s) - DR and associated services - Control Electronics & Cabling		
2.1	Educational Qualification in relevant streams	Qualification	Marks
		M.Tech/B.Tech	2
2.2	Work experience in related projects /services	Years	Marks
		>=2 years	2
3	Technical Engineers deployed in Project Implementation (atleast 2 no.s) - QPU characterization & demonstration - Quantum System and Application Engineering		

3.1	Educational Qualification in relevant streams	Qualification	Marks
		Ph.D	2
3.2	Work experience in related projects /services	Years	Marks
		>=2 years	2
6	Technical Trainers		
6.1	Work experience in related technologies /services	Years	Marks
		>5 years	2
		>=2 and <= 5 years	1
7	Technical Engineers deployed in Project Support		
7.1	Educational Qualification	Qualification	Marks
		Ph.D.	2
		B Tech / M.Sc (2 Years Full Time)	1
7.2	Work experience in related technologies /services	Years	Marks
		>=1 year	1

3. Evaluation of Financial Proposals

In the second stage, the financial evaluation will be carried out as per the below clause. Each Financial Proposal will be assigned a financial score (FS) as specified below.

The cost indicated in the Financial Proposal shall be deemed as final and reflecting the total cost of services. Omissions, if any, in costing any item shall not entitle the bidder to be compensated and the liability to fulfill its obligations within the total quoted price, shall be that of the Bidder. The prices quoted by the bidders including taxes as per details given in the Price Bid format, will only be compared.

The Financial Proposal shall be evaluated based on the parameter of Rate per Full stack Qubit. A Full-stack qubit refers to a qubit that is part of a comprehensive quantum computing architecture where all the layers of the quantum computing stack—from hardware & subsystems to software—are optimized and integrated to enable robust and scalable quantum computation.

Bidders should use the following formula for arriving at the Rate per Full stack Qubit (F):

$$F = TC / N$$

where:

TC = Total financial bid for the entire system including NRE and all taxes and duties

N = Number of full stack qubits offered by the bidder in their proposal

The Financial Score (FS) will be calculated on the basis of Rate per full stack Qubit quoted by the bidders as given below:

$$FS = (F_{min}/F) * 100$$

Where, F = Actual Rate per full stack Qubit quoted by the bidder,

F_{min} = Lowest Rate per full stack Qubit, among the financial proposals under consideration.

4. Combined and Final Evaluation

- 4.1. The minimum qualifying marks for the parameters stipulated in technical evaluation above shall be 70. The bidders getting marks less than 70 will be disqualified.
- 4.2. Evaluators of technical proposals will not have access to the commercial bids until the technical evaluation is concluded. The folder containing the financial proposal will not be opened until the technical evaluation is complete.
- 4.3. Declaration of Technical Marks: The technical Marks of the bidders will be declared before the Financial Bid is opened and the score of only the qualified bidders of Technical evaluation will be considered for evaluation of bids as per QCBS system of Evaluation.
- 4.4. The Technical Score (TS) secured by each qualified bidder shall be informed to the bidders present during the commercial bids opening meeting. The date and venue of the commercial bids opening will be informed separately.
- 4.5. The Combined Technical and Financial Score (CTFS) with Weightage 70:30 (70 for technical and 30 for Financial) will be calculated.
- 4.6. The **Combined Technical and Financial Score (CTFS)** will only be taken for comparison of bids and for deciding bidder securing highest score. The CTFS score is calculated as follows:

$$CTFS = TS * 0.7 + FS * 0.3$$

- 4.7. The Selected Applicant shall be the Applicant having the highest combined score. The second highest Applicant shall be kept in reserve and may be invited in its discretion for negotiations in case the first-ranked Applicant withdraws, or fails to comply with any of the requirements specified in this document.
- 4.8. An illustrative example for calculating the CTFS, is given below:

Illustration of a typical QCBS process to be followed in evaluation of BIDS is given as under with an arbitrary example just to explain the process:

Stage 1	Technical Evaluation
Bidder Detail	Technical Marks (TM) Obtained
Bidder 1	92
Bidder 2	75
Bidder 3	65
Bidder 4	85

*Bidder3 will be disqualified as the total technical Mark is below 70.

Financial Bid of Bidder 3 will not be opened

Maximum Technical Marks (MTM) = 92

Stage 2	Conversion of Technical Marks to Technical Score		TS = (TM/MTM) * 100
<u>Bidder details</u>	<u>Technical Marks</u>	<u>Technical Score (TM/MTM) * 100</u>	<u>TS</u>
Bidder 1	92	(92/92)*100	100.00
Bidder 2	75	(75/92)*100	81.52
Bidder 3	Disqualified	Disqualified	Not Calculated
Bidder 4	85	(85/92)*100	92.39

Stage 3	Financial Bid Evaluation
<u>Bidder details</u>	<u>Rate per Full stack Qubit Bid Amount Including NRE and all taxes and duties</u>
Bidder 1	1,30,000
Bidder 2	1,20,000
Bidder 4	1,25,000

Fmin = 120000 (Lowest Rate per full stack Qubit among all the financial bids under consideration)

Stage 4	Conversion of Financial Bid to Financial Score		
Bidder Detail	Rate per Full stack Qubit Bid Amount	Bid Financial Score = Fmin/F*100	FS
Bidder 1	1,30,000	(120000/130000)*100	92.31
Bidder 2	1,20,000	(120000/120000)*100	100.00
Bidder 4	1,25,000	(120000/125000)*100	96.00
F = Rate per full stack Qubit of the bid under consideration			

Consolidated Technical And Financial Scores		
<u>Bidder details</u>	<u>Technical Score (TS)</u>	<u>Financial Score (FS)</u>
Bidder 1	100	92.31
Bidder 2	81.52	100.00
Bidder 4	92.39	96.00

Stage 5	Combined Technical & Financial Score (CTFS)		
	Weightage:	Technical Weight	70%
		Financial Weight	30%
<u>Bidder</u>	<u>Applying weights for</u>	<u>CTFS</u>	<u>Final Rank</u>

Detail	Technical & Financial Scores		
Bidder 1	$100 * 0.7 + 92.31 * 0.3$	95.38	H1
Bidder 2	$81.52 * 0.7 + 100 * 0.3$	92.61	H3
Bidder 4	$92.39 * 0.7 + 96 * 0.3$	94.56	H2

(END OF SECTION III)

SECTION IV: SCHEDULE OF REQUIREMENTS

1. Detailed Specifications

1.1. Core Components

Superconducting Quantum Processing Unit (QPU)

- Qubits: in the range of 50 to 100 (in a single QPU)
- QPU Performance:
 - Median Single-Qubit Gate Fidelity: $\geq 99.7\%$
 - Median Two-Qubit Gate Fidelity: $\geq 99\%$
 - Single-Qubit Gate Duration: ≤ 50 ns
 - Two-Qubit Gate Duration: ≤ 100 ns
 - Median Readout Fidelity: $\geq 97\%$
 - Median T1 time: ≥ 30 micro secs
 - Median T2 time: ≥ 20 micro secs
- QPU Package, Enclosure, and Wiring: Fully integrable with cryogenic and control systems. Magnetic shielding as needed.
- Demonstration of a representative application utilizing all the delivered qubits in the QPU
- Qubits offered should be fully connected qubits

Amplifiers

- Cryogenic electronics to support QPU performance including travelling wave parametric amplifiers (TWPA), HEMT amplifiers, isolators, circulators, attenuators etc. These shall be provided for supporting 100 qubits or more.

1.2. Fully functional Dilution Refrigerators and Cryogenic Systems

- Dilution Unit with full capacity cryogenic wiring for supporting the qubits offered and further scalable to 250 qubits.
- Full capacity DC wiring for supporting the qubits offered and further scalable to 250 qubits.
- Guaranteed Base Temperature- <10 mK
- Cooling power at 20 mK ≥ 25 uW
- Cooling power at 100 mK ≥ 850 uW
- Plate area of atleast 1960 sq.cm with additional ample space
- Modular wiring inserts
- No. of Co-ax lines supported should be atleast 1000.
- Gas Handling System
- Passive and Active vibration dampening
- Liquid nitrogen trap or equivalent, Oil-free, Cryogenic magnetic shield, Vacuum and magnetic shield, Warm up heaters
- System shall include relevant sub-components like vacuum turbo pump (if external needed), water chiller, gas leakage detector, compressed air supply

unit, UPS etc.

- Oil-Free Pumps for System Operation
- Long-Life Cold Trap (≥ 1 year continuous operation)
- Integrated Nitrogen Heat Pipes for Fast Cool Down
- Automatic Recovery from Power Failure without Control Computer

Cryogenic System and Temperature Control

- Standalone Control Unit
- Temperature Controller

Radiation and Magnetic Shielding:

- Additional radiation and magnetic shield as required.

1.3. Control Electronics and Quantum Control System (QCS)

- The control electronics solution shall support the qubits offered and further scalable to 250 qubits.
- Compact control electronics portable rack mountable chassis to deliver QPU performance as mentioned in 1.1 of SECTION – IV.
- Plug and play module for readout, control lines and flux lines for provided QPU.
- Frequency range: 0-10 GHz readout, control lines and flux lines for provided QPU. The frequency range specified in the RFP is broad and covers a range from 0 to 10 GHz, accommodating all required lines. If a system provides separate frequency ranges for flux lines, readout lines, and control lines within this overall range, it is acceptable as long as the system meets QPU performance benchmark as mentioned in the acceptance criteria.
- Mixer calibration free operation.
- Flux lines output: $\sim \pm 2$ Vpp in a 50 ohm load.
- Integrated DC coupling as needed.
- Control lines with an output upto 10 dBm, SFDR < -40 dBc, phase noise < -110 dBc/Hz. While the requirement is for 10 dBm, systems operating at 5 dBm are acceptable as long as they adhere to and satisfy the QPU performance benchmarks outlined in the acceptance criteria. This ensures flexibility while maintaining the necessary operational standards.
- Readout lines with input power < -20 dBm and on card measurement result storage memory.
- Relative Phase stability across multiple RF (3-8 GHz) output modules over 1 hr < 2 deg.
- Low latency feedback $< 400-600$ ns.
- Synchronization jitter of the order of ps across multiple modules.
- TWPA pump lines compact electronics possibly integrable in the compact electronics rack.
- Pulse sequence programming framework allowing for gate implementation with real-time phase, frequency and amplitude adjustment and complete control over the implementation flow.
- Control electronics software UI and editor for easy management and configuration of the control electronics.
- Open QASM compliant API and pulse level API access the control electronics

solution.

- Direct FPGA access provision to implement decoding algorithms towards error correction.
- Input Voltage and Frequency: Complying with Indian A/C Power specifications.
- Ambient operating temperature: 15 degrees to 40 degrees Celsius. Support for Ethernet (1 Gbps) connectivity and serial connection.
- Control electronics calibration cycle ~ 2 years.

1.4. IT Hardware and Software

Host Server

- High-Performance Host Server for managing quantum operations.

Quantum Software:

- Full-Stack Quantum Software Environment:
- Quantum Programming Environment
- System Integration and Management Tools
- Automation Software for Qubit characterization, tuning, optimization, scaling and error correction
- Cloud based platform for user to access QPU with circuit composer and Python Interface with transpilation into control electronics instructions.

1.5. Networking and Power systems

Quantum Access Node

- Networking Equipment for integration with existing IT infrastructure.
- Power Systems
- Reliable Power Conditioning Systems.
- Backup Power Solutions with UPS and Redundant Power Supplies.

1.6. Environmental Monitoring and Control, Physical and CyberSecurity

Monitoring Systems

- Environmental Monitoring Systems for temperature, humidity, and electromagnetic interference (EMI) if required.
- Systems should ensure optimal operating conditions for quantum hardware.

IoT Infrastructure and Telemetry

- Integrated Telemetry and Monitoring Systems
- IoT Sensors and Devices (for Cryostat to Control Electronics)
- Key Metrics Generation Tools
- Predictive Maintenance Software and Tools
- Real-Time Data Collection and Analysis Systems

Physical and Cybersecurity

- Access Control Systems
- Surveillance Systems (CCTV, Motion Detectors)
- Fire Suppression System

1.7. Documentation and Training:

Documentation

- Comprehensive Instruction Manuals and Datasheets for all hardware and software components.
- Drawings and Model Files for hardware.
- Detailed Wiring Schemes, Drawings, and Tables.
- System Management and Software Documentation.
- Design and architecture document of the QPU being offered
- Quantum Control Hardware – Detailed specification & operating ranges for different subcomponents

Training

- Training covering system operation and maintenance (for atleast 80 hrs.)
- Training on planar design and fabrication of QPUs (for atleast 100hrs.)
- Yearly Refresh Training for continued proficiency.
- Training Documentation provided in both digital and printed formats.

1.8. Service and Maintenance

Service Level Agreement (SLA)

- Comprehensive Onsite Support & Maintenance covering all hardware, software and integrated system for 3 years (post acceptance)
- Warranty of the goods supplied and integrated system for 3 years

Maintenance Tools and Spare Parts

Provision of 2 sets of maintenance tools and spare parts for routine upkeep and emergency repairs. The requirement to provide two sets of maintenance tools and spare parts is to ensure the continuous operation of the system without any delays, particularly in case of a failure. Having two sets allows for immediate access to essential tools and parts, even if one set is in use or unavailable due to unforeseen circumstances. The SLA specifies an 8-hour response time and 72hour resolution time as outlined in the RFP. The additional set of tools and spare parts acts as a safeguard, minimizing downtime and ensuring rapid recovery during both routine maintenance and emergency repairs.

1.9. Integration Terms and Conditions

System Integration

- The bidder shall ensure that all components listed are fully integrated into a cohesive and operational 50 to 100 qubits superconducting quantum computer.
- The integration process must include comprehensive testing to verify system compatibility, performance, and reliability.

Modularity & Interoperability

- The bidder shall ensure that the architecture of the system is modular and open in nature allowing the seamless integration, upgrade, and replacement of key subsystems—such as quantum processors, control electronics, and cryogenic

infrastructure—with components from diverse vendors. This shall ensure transparency, promote interoperability, and facilitate external collaboration for system modification, innovation, and scalable development.

- Any required interface adapters, connectors, or software modules for interoperability shall be provided by the supplier.

Performance Validation

- The supplier shall perform an on-site performance validation of the integrated system, including the following:
 - QPU performance metrics (as specified in 1.1 of Section IV).
 - Dilution refrigerator base temperature (as specified in 1.2 of Section IV).
 - Control electronics functionality, including communication with the QPU and cryogenic systems (as specified in 1.3 of Section IV).
- On the integrated system, the following demonstrations to be carried out:
 - Quantum Volume of 2^6 or higher, utilizing all the delivered qubits (n) in the QPU
 - Demonstration of the Randomized Benchmarking test suite
 - Hybrid Classical – QC : Demonstration of QAOA application, utilizing all the delivered qubits in the QPU
- A final performance report detailing the results of all validation tests must be provided to the customer.

Documentation

- Comprehensive documentation must be provided, including but not limited to:
 - System architecture and design documents.
 - Specifications for integrating and interfacing various subsystems such as Quantum Processor, Control Hardware & Cryogenic Systems & Components.
 - Detailed wiring diagrams and interface schematics.
 - User manuals for all hardware and software components.
 - Maintenance and troubleshooting guides.
 - Source code (if applicable) and configuration files for all software components.

Support & Service Level Agreement (SLA)

- The supplier shall provide comprehensive onsite support and maintenance covering all the components and integration services for a minimum of 3 years. It should include on-site support, remote diagnostics, and access to spare parts and maintenance services.
- The supplier shall provide warranty on the goods supplied for a minimum of 3 years.
- The supplier shall provide a detailed SLA outlining response times, uptime guarantees, and penalties for non-compliance in the technical proposal submitted.
- The SLA must cover all components and the integrated system, ensuring continuous operation and prompt resolution of any issues.

Delivery and Installation

- The supplier is responsible for the safe delivery, installation, and setup of all components at the customer's facility.
- Installation must include all necessary infrastructure work, such as electrical wiring, networking, and cryogenic support systems.

Acceptance Testing

- After installation, the supplier must conduct acceptance testing in the presence of customer representatives.
- Acceptance testing should validate the full functionality and performance of the integrated system according to the specifications.

Change Management

- Any changes to the system design, components, or integration process must be documented and approved by the customer prior to implementation.
- The supplier shall provide impact assessments for any proposed changes, including potential effects on performance, interoperability, and delivery timelines.

(END OF SECTION IV)

SECTION- V: PRICE BID

KINDLY FILL ALL THE DETAILS CAREFULLY

1. Superconducting Quantum Computer Components

Item No.	Description	Qty	Unit	Unit Price	BASIC RATE In Figures To be entered by the Bidder (In INR)	GST (in %)	Total Price (in INR)
1	Qubit Processing Unit (QPU)						
1.1	Superconducting Quantum Processing Unit (50 to 100 qubits) with microwave package						
1.2	Travelling Wave Parametric Amplifier (TWPA)						
1.3	Other cryogenic component sets						
2	Fully functional Dilution Refrigerator						
2.1	Dilution Refrigerator for supporting the qubits offered and further scalable to 250 qubits with needed support systems and components						
2.2	Full capacity DR wiring for supporting the qubits offered and further scalable to 250 qubits.						
3	Control Electronics and Peripherals						
3.1	Control Electronics for supporting the qubits offered and further scalable to 250 qubits with wiring and sub components as required						
4	Networking Equipment and IT Infrastructure						
4.1	High-Speed Networking Infrastructure						
4.2	Quantum-Specific Networking Hardware						
4.3	Secure Data Storage Solutions						

Item No.	Description	Qty	Unit	Unit Price	BASIC RATE In Figures To be entered by the Bidder (In INR)	GST (in %)	Total Price (in INR)
4.4	Networking Equipment for IoT Integration						
5	IoT Infrastructure and Telemetry						
5.1	Integrated Telemetry and Monitoring Systems						
5.2	IoT Sensors and Devices (Cryostat to Control Electronics)						
5.3	Key Metrics Generation Tools						
5.4	Predictive Maintenance Software and Tools						
5.5	Real-Time Data Collection and Analysis Systems						
6	EMI/EMC Compliance						
6.1	EMI Shielding and Grounding Solutions						
6.2	EMC Testing and Certification						
6.3	Filtered Power Supplies						

7. Installation and Integration

Item No.	Description	Qty	Unit	Unit Price	BASIC RATE In Figures To be entered by the Bidder (In INR)	GST (in %)	Total Price (in INR)
7	Installation and Integration Services						
7.1	System Installation and Setup						
7.2	Training for Operation and Maintenance						
7.3	Training on planar design and fabrication of QPUs						
7.4	Documentation and Knowledge Transfer						

8. Maintenance and Support

Item No.	Description	Qty	Unit	Unit Price	BASIC RATE In Figures To be entered by the Bidder (In INR)	GST (in %)	Total Price(in INR)
	Service and Support						
8.1	Comprehensive Onsite Support and Maintenance for atleast 3 years						
8.2	Maintenance Tools and Spare Parts						

9. Additional Costs

Item No.	Description		Total Price(in INR)
	Miscellaneous Costs		
9.1	Shipping and Handling		
9.2	Customs and Duties		
9.3	Installation Tools and Equipment		
9.4	Any other cost		

10. Summary

Description	Total Price(in INR)
Total for QPU Components	
Total for Dilution Refrigerators	
Total for Control Electronics and Peripherals	
Total for Networking and IT Infrastructure	
Total for IoT Infrastructure and Telemetry	
Total for EMI/EMC Compliance	
Total for Installation and Integration Services	
Total for Maintenance and Support	
Total for Additional Costs	
Grand Total (TC)	
Rate per Full Stack Qubit*	

*Rate per Full Stack Qubit to be calculated as follows:

Rate per Full Stack Qubit = TC / N

where:

TC = Total financial bid for the entire system including NRE and all taxes and duties

N = Number of full stack qubits offered by the bidder in their proposal

NOTES:

- The prices quoted above must be 'all-inclusive' till destination, i.e. C-DAC, Bengaluru.
- C-DAC reserves the right to place order.

(END OF SECTION – V)

ANNEXURE A – COVERING LETTER

Form 1: Bid Form (Covering Letter)

(To be submitted as part of technical bid, along with supporting documents, if any)
(On Bidder's Letter-head)

(Strike out alternative phrases not relevant to you)

Bidder's Name

[Address and Contact Details]

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

To

The Executive Director

Centre for Development of Advanced Computing,

No.1, Old Madras Road, Byappanahalli,

Bangalore – 560038

Ref: Your Tender Document No. CDACB/RD24/094 dated 01.01.2025 “Supply, Installation & Commissioning of Superconducting Qubits based Quantum Computing Facility (50 to 100 Qubits) at C-DAC, Bangalore, Electronic City”

Sir/ Madam

Having examined the above-mentioned Tender Document, we, the undersigned, hereby submit/ upload our Technical and Financial bid (Price Schedule) for the supply of Goods and incidental Works/ Services in conformity with the said Tender Documents. (Please tick appropriate boxes or strike out sentences/ phrases not applicable to you)

1. Our Credentials:

a. We are submitting this bid:

on our behalf, and there are no agents/ dealers involved in this tender, and hence no agency agreement or payments/ commissions/ gratuity is involved. Our company law and taxation regulatory requirements and authorization for signatories and related documents are submitted in Form 1 .1 (Bidder Information).

Or

as authorized dealer offering goods manufactured by our OEMs. Our OEM's law and taxation regulatory requirements and authorization for signatories and related documents are submitted in Form 1 .3 (OEM's Authorization).

Or

as agents/associates of our foreign principals. Our foreign principal's law and taxation regulatory requirements, as well as authorization for signatories and related documents, are submitted in Form I .4 (Declaration by Agents/ Associates of Foreign Principals/ OEMs).

b. We.....hereby certify that We/ our Principals/ OEM M/s.....
are proven, established, and reputed manufacturers with factories at
which are fitted with modern equipment and where the production methods, quality

control, and testing of all materials and parts manufactured or used by us shall be open to inspection by the representative of the Procuring Entity.

2. Our Eligibility and Qualifications to participate

We comply with all the eligibility criteria stipulated in this Tender Document, and the relevant declarations are made along with documents in Form 1 .2 of this bid-form. We fully meet the qualification criteria stipulated in this Tender Document, and the relevant details are submitted along with documents in Form 4: 'Qualification Criteria Compliance.

3. Our Bid to supply Goods:

We offer to supply the subject Goods of requisite quality and within Delivery Schedules in conformity with the Tender Document. The relevant details are submitted in Form 2: 'Schedule of Requirements - Compliance and Form3: 'Technical Specifications and Quality Assurance - Compliance.'

4. Prices:

We hereby offer to perform the Services at our lowest prices and rates mentioned in the separately uploaded Price-Schedule. It is hereby confirmed that the prices quoted therein by us are:

- a. based on terms of delivery and delivery schedule confirmed by us; and
- b. Cost break-up of the quoted cost, showing inter-alia costs (including taxes and duties thereon) of all the included incidental Goods/ Works considered necessary to make the proposal self-contained and complete, has been indicated therein, and
- c. based on the terms and mode of payment as stipulated in the Tender Document. We have understood that if we quote any deviation to terms and mode of payment, our bid is liable to be rejected as nonresponsive, and
- d. have been arrived at independently, without restricting competition, any consultation, communication, or agreement with any other bidder or competitor relating to: i) those prices; or ii) the intention to submit an offer; or iii) the methods or factors used to calculate the prices offered.
- e. have neither been nor shall be knowingly disclosed by us, directly or indirectly, to any other bidder or competitor before bid opening or contract award unless otherwise required by law.

5. Affirmation to terms and conditions of the Tender Document:

We have understood the complete terms and conditions of the Tender Document. We accept and comply with these terms and conditions without reservations, although we are not signing and submitting some of the sections of the Tender Document. Deviations, if any, are submitted by us in Form 5: 'Terms and Conditions - Compliance'. We also explicitly confirm acceptance of the Arbitration Agreement as given in the Tender Document.

6. Bid Securing Declaration

We have submitted the Bid Securing Declaration (BSD, in lieu of Bid Security) in stipulated format vide Form 7: 'Documents Relating to bid security.'

7. Abiding by the Bid Validity

We agree to keep our bid valid for acceptance for a period upto -----, as required in the Tender Document or for a subsequently extended period, if any, agreed to by us and are aware of penalties in this regard stipulated in the Tender Document in case we fail to do so.

8. Non-tempering of Downloaded Tender Document and Uploaded Scanned Copies

We confirm that we have not changed/ edited the contents of the downloaded Tender Document. We realize that any such change noticed at any stage, including after the contract award, shall be liable to punitive action in this regard stipulated in the Tender Document. We also confirm that scanned copies of documents/ affidavits/ undertakings uploaded along with our technical bid are valid, true, and correct to the best of our knowledge and belief. If any dispute arises related to the validity and truthfulness of such documents/ affidavits/ undertakings, we shall be responsible for the same. Upon accepting our financial bid, we undertake to submit for scrutiny, on-demand by the Procuring Entity, originals, and self-certified copies of all such certificates, documents, affidavits/ undertakings.

9. A Binding Contract:

We further confirm that, if our bid is accepted, all such terms and conditions shall continue to be acceptable and applicable to the resultant contract, even though some of these documents may not be included in the contract Documents submitted by us. We do hereby undertake that, until a formal contract is signed or issued, this bid, together with your written Letter of Award (LOA), shall constitute a binding contract between us.

10. Performance Guarantee and Signing the contract

We further confirm that, if our bid is accepted, we shall provide you with performance security of the required amount stipulated in the Tender Document for the due performance of the contract. We are fully aware that in the event of our failure to deposit the required security amount and/ or failure to execute the agreement, the Procuring Entity has the right to avail any or all punitive actions laid down in this regard, stipulated in the Tender Document.

11. Signatories:

We confirm that we are duly authorized to submit this bid and make commitments on behalf of the Bidder. Supporting documents are submitted in Form 1.1 annexed herewith. We acknowledge that our digital/digitized signature is valid and legally binding.

12. Rights of the Procuring Entity to Reject bid(s):

We further understand that you are not bound to accept the lowest or any bid you may receive against your above-referred Tender Document.

(Signature with date)

(Name and designation)

Duly authorized to sign bid for and on behalf of
[name & address of Bidder and seal of company]

Annexure A contd...

Form 1.1: Bidder Information

(To be submitted as part of Technical bid)

(On Company Letter-head)

(Along with supporting documents, if any)

Bidder's Name _____

[Address and Contact Details]

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

Tender Document No. CDACB/RD24/094 dated 01.01.2025 for Supply, Installation & Commissioning of Superconducting Qubits based Quantum Computing Facility (50 to 100 Qubits) at C-DAC Bangalore, Electronic City

Note: Bidder shall fill in this Form following the instructions indicated below. No alterations to its format shall be permitted, and no substitutions shall be accepted. Bidder shall enclose certified copies of the documentary proof/ evidence to substantiate the corresponding statement wherever necessary and applicable. Bidder's wrong or misleading information shall be treated as a violation of the Code of Integrity. Such Bids shall be liable to be rejected as nonresponsive, in addition to other punitive actions provided for such misdemeanors in the Tender Document.

(Please tick appropriate boxes or strike out sentences/ phrases not applicable to you)

1. Bidder/ Contractor particulars:

- a. Name of the Company:
- b. Corporate Identity No. (CIN):
- c. Registration, if any, with The Procuring Entity:
- d. Place of Registration/ Principal place of business/ manufacture:
- e. Complete Postal Address:
- f. Pin code/ ZIP code:
- g. Telephone nos. (with country/ area codes):
- h. Mobile Nos.: (with country/ area codes):
- i. Contact persons/ Designation:
- j. Email IDs:

Submit documents to demonstrate eligibility as per NIT-Clause 3 and ITB-clause 3.2 - A self-certified copy of registration certificate — in case of a partnership firm — Deed of Partnership; in case of Company — Notarized and certified copy of its Registration; and in case of Society — its Byelaws and registration certificate of the firm.

2. Taxation Registrations:

- a. PAN number:
- b. Type of GST Registration as per the Act (Normal Taxpayer, Composition, Casual Taxable Person, SEZ, etc.):
- c. GSTIN number: in Consignor and Consignee States
- d. Registered/ Certified Works/ Factory where the Goods would be mainly manufactured and Place of Consignor for CST Purpose:

- e. Contact Names, Nos. & email IDs for CST matters (Please mention primary and secondary contacts):

We solemnly declare that our GST rating on the GST portal/ Govt. official website is not negative/ blacklisted.

Documents to be submitted: Self-attested Copies of PAN card and GSTIN Registration.

3. Authorization of Person(s) signing the bid on behalf of the Bidder
- Full Name:
 - Designation:
 - Signing as:
 - A sole proprietorship firm. The person signing the bid is the sole proprietor/ constituted attorney of the sole proprietor,
 - A partnership firm. The person signing the bid is duly authorised being a partner to do so, under the partnership agreement or the general power of attorney,
 - A company. The person signing the bid is the constituted attorney by a resolution passed by the Board of Directors or in pursuance of the Authority conferred by Memorandum of Association.

Documents to be submitted: Registration Certificate/ Memorandum of Association/ Partnership Agreement/ Power of Attorney/ Board Resolution

4. Bidder's Authorized Representative Information
- Name:
 - Address:
 - Telephone/ Mobile numbers: (d) Email Address:

(Signature with date)

(Name and designation)

Duly authorized to sign bid for and on behalf of [name & address of Bidder and seal of company]

DA: As above

Annexure A contd...

Form 1.2: Eligibility Declarations

(To be submitted as part of Technical bid)
(On Company Letter-head)
(Along with supporting documents, if any)

Tender Document No. CDACB/RD24/094 dated 01.01.2025 for Supply, Installation & Commissioning of Superconducting Qubits based Quantum Computing Facility (50 to 100 Qubits) at C-DAC Bangalore, Electronic City

Bidder's Name

[Address and Contact Details]

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

Note: The list below is indicative only. You may attach more documents as required to confirm your eligibility criteria.

Eligibility Declarations

(Please tick appropriate boxes or cross out any declaration not applicable to the Bidder)

We hereby confirm that we are comply with all the stipulated in tender and declare as under and shall provide evidence of our continued eligibility to the Procuring Entity as may be requested:

1. Legal Entity of Bidder:
2. OEM/ Manufacturer/ Agent/ Dealership Status:
3. We are a consortium We are not a consortium
4. We solemnly declare that we (including our affiliates or subsidiaries or constituents):
 - a. are not insolvent, in receivership, bankrupt or being wound up, not have our affairs administered by a court or a judicial officer, not have our business activities suspended and are not the subject of legal proceedings for any of these reasons;
 - b. (including our Contractors/ subcontractors for any part of the contract):
 - i. Do not stand declared ineligible/ blacklisted/ banned/ debarred by the Procuring Organisation or its Ministry/ Department from participation in its Tender Processes; and/ or
 - ii. Are not convicted (within three years preceding the last date of bid submission) or stand declared ineligible/ suspended/ blacklisted/ banned/ debarred by appropriate agencies of Government of India from participation in Tender Processes of all of its entities, for offences mentioned in Tender Document in this regard. We have neither changed our name nor created a new "Allied Firm", consequent to the above disqualifications.
 - c. Do not have any association (as bidder/ partner/ Director/ employee in any capacity) with such retired public official or near relations of such officials of Procuring Entity, as counter-indicated, in the Tender Document.
 - d. We certify that we fulfil any other additional eligibility condition if prescribed in Tender Document.
 - e. We have no conflict of interest, which substantially affects fair competition. The prices quoted are competitive and without adopting any unfair/ unethical/ anticompetitive means. No attempt has been made or shall be made by us to

induce any other bidder to submit or not to submit an offer to restrict competition.

5. Restrictions on procurement from bidders from a country or countries, or a class of countries under Rule 144 (xi) of the General Financial Rules 2017: We certify as under: "We have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and on sub-contracting to contractors from such countries, and solemnly certify that we fulfil all requirements in this regard and are eligible to be considered. We certify that:
 - a. we are not from such a country or, if from such a country, we are registered with the Competent Authority (copy enclosed). and;
 - b. we shall not subcontract any work to a contractor from such countries unless such contractor is registered with the Competent Authority.
6. MSME Status:

Having read and understood the Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 (as amended and revised till date), and solemnly declare the following:

 - a. We are - Micro/ Small/ Medium Enterprise/ SSI/ Govt. Deptt. / PSU/
Others:
 - b. We attach herewith, Udyam Registration Certificate with the Udyam Registration Number as proof of our being MSE registered on the Udyam Registration Portal. The certificate is the latest up to the deadline for submission of the bid.
 - c. Whether Proprietor/ Partner belongs to SC/ ST or Women category. (Please specify names and percentage of shares held by SC/ ST Partners): .
7. Start-up Status we confirm that we are/ are not a Start-up entity as per the definition of the Department of Promotion of Industrial and Internal Trade — DPIIT.
 - a. We also declare that
 - There is no country whose bidders have been notified as ineligible on a reciprocal basis under this order for an offered Goods, or
 - We do not belong to any Country whose bidders are notified as ineligible on a reciprocal basis under this order for the offered Goods.
8. Self-Declaration by Indian Agents/ Associates of Foreign Principals
 - a. Self-attested documentary evidence about their identity (PAN, Aadhar Card, GSTIN registration, proof of address, etc.), business details (ownership pattern and documents, type of firm, year of establishment, sister concerns etc.) to establish that they are a bonafide business as per Indian Laws — are submitted as part of Form 1 .1 annexed herewith.
 - b. Agency Agreement shall be submitted with Form 1 .4. It shall cover
 - i. The precise relationship, services to be rendered, mutual interests in business - generally and/ or specifically for the tender and
 - ii. any payment the agent or associate receives in India or abroad from the foreign OEM/ principal, whether a commission or a general retainer fee.
 - c. Our Foreign principals, explicitly authorizing us to make an offer in response to the tender, either directly or in association with them, are listed in Form 1 .3 and 1 .4 annexed herewith. That also indicates their name, address, nationality, status (i.e., whether manufacturer or agents of manufacturer holding the Letter of Authority of the Principal).

- d. The amount of commission/ remuneration included in the price (s) quoted by Bidder for agents or associated bidder is detailed in Form 1 .4.
 - e. Confirmation is given in Form 1 .4 annexed herewith from the foreign principals that the commission/ remuneration, reserved for Bidder in the quoted price(s), if any, shall be paid by the Procuring Entity in India, in equivalent Indian Rupees on satisfactory completion of the Project or supplies of Goods and Spares.
9. Penalties for false or misleading declarations:
We hereby confirm that the particulars given above are factually correct and nothing is concealed and undertake to advise any future changes to the above details. We understand that any wrong or misleading self-declaration would violate the Code of Integrity and attract penalties as mentioned in this Tender Document.

(Signature with date)

(Name and designation)

Duly authorized to sign bid for and on behalf of

[Name & address of Bidder and seal of company]

DA: As in Sr 9 to 14 above, as applicable

ANNEXURE B – AUTHORITY LETTER

Date:

To:

**The Director General,
Centre for Development of Advanced Computing (C-DAC)
Knowledge Park, No. 1, Old Madras Road, Baiyypanahalli,
Bengaluru - 560038 Karnataka, INDIA**

Subject: Authority Letter

Reference: Tender no. CDACB/RD24/094

Dear Sir,

We, M/s (Name of the bidder) having registered office at
(Address of the bidder) herewith submit
our bid against the said bid document.

Mr./Ms. (Name and designation of the signatory), whose
signature is appended below, is authorized to sign and submit the bid documents on our
behalf against said RFP.

Specimen Signature:

The undersigned is authorised to issue such authorisation on behalf of us.

For M/s. (Name of the bidder)

Signature and company seal

Name
Designation
Email
Mobile No.

ANNEXURE C – UNDERTAKING(S) BY OEM

(To be submitted in Original on Letterhead separately for Superconducting Quantum Processing Unit, Dilution Refrigerator, Control System, Cryogenic Electronics components – TWPAs, HEMT amplifiers etc.)

Date:

**The Director General,
Centre for Development of Advanced Computing (C-DAC)
Knowledge Park, No. 1, Old Madras Road, Baiyypanahalli,
Bengaluru - 560038 Karnataka, INDIA**

Subject: Undertaking by OEM against **Tender no.** _____ for Supply, Installation & Commissioning of **Superconducting Qubits based Quantum Computing Facility at C-DAC, Bengaluru.**

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 certify that M/s (Name of the bidder) having their office at (Address of bidder) are our Authorized System Integrator for our range of products quoted by them, as listed below (Strike down the items from the below list which are not applicable for this OEM):

- Superconducting Quantum Processing Unit
- Dilution Refrigerator
- Control System
- Cryogenic Electronics including TWPAs, HEMT amplifiers etc.

We have factories at----- . We hereby authorise M/s. ----- (name and address of the authorised dealer) to submit a bid, process the same further and enter into a contract with you against above referred Tender Process for the supply of above Goods manufactured by us. Their registration number with us is, dated/ since.....

Within the scope of requirement as per the bid mentioned above, we undertake to provide technical & other support towards fulfilling the requirements of installation, commissioning, benchmarking, acceptance criteria and product warranty services of the components to be supplied and installed at C-DAC, site by M/s. (Name of bidder) against said bid.

We also certify that the products offered are not nearing end-of-life / end-of-support five years down the line from the date of bidding.

The undersigned is authorized to issue this certificate on behalf of M/s (Name of the manufacturer).

For M/s _____ (Name of the manufacturer)

Signature & company seal

Name

Designation

Email

Mobile No.

ANNEXURE D – PROFORMA OF BANK GUARANTEE

(on non-judicial paper of appropriate value)

To,

**Centre for Development of Advanced Computing, Knowledge Park,
No.1, Old Madras Road, Baiyappanahalli, Bengaluru – 560038**

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), Bengaluru on M/s _____ (Name & Address of vendor) for supply, installation, commissioning and warranty of (description of items) at C-DAC, 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 bidders obligations and / or liabilities under or in connection with the said contract or to vary the terms vis-a – vis the bidder or the said contract or to grant time and or indulgence to the bidder 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 bidder 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 bidder 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 _____ (date).

This undertaking guarantee shall be in addition to any other undertaking or guarantee or security whatsoever 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 favor 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 (date) & unless a suit for action to enforce a claim under guarantee is filed against us within 1 month 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 one month 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 37 months from the date of successful installations of the items in the order)

Granted by the Bank

Yours faithfully, For (Name of Bank)

SEAL OF THE BANK

Authorised Signatory

ANNEXURE E – BID ACCEPTANCE LETTER

(To be submitted on Company Letter Head).

Date:

To:

**Centre for Development of Advanced Computing
Knowledge Park, No. 1, Old Madras Road,
Baiypanahalli, BENGALURU 560038.**

Subject: Bid Acceptance Letter

Reference: Tender no.

Dear Sir,

1. I / We have downloaded / obtained the bid document(s) for the above mentioned 'Bid' from the web site(s) namely: www.cdac.in / www.eprocure.gov.in etc.; as per your NIT, given in the above-mentioned website(s).
2. I / We hereby certify that I / We have read the entire terms and conditions of the bid documents from Page No.1 to 71 (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 bid conditions of above-mentioned bid document(s) / corrigendum(s) in its totality / entirety.
5. I / We certify that all information furnished by 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 F - INTEGRITY PACT

(To be executed on plain paper)

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.

- i. 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.
2. 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 8 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 9 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 10
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.
3. 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.
4. 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.
5. Issues like warranty/ guarantee etc. shall be outside the purview of IEM.

For the Principal

Place -----

Date -----

For the Bidder / Contractor

Witness 1 : -----

Witness 2

ANNEXURE G – TEMPLATE FOR CONFORMITY TO SCHEDULE OF REQUIREMENTS

Superconducting QPU

Sl.no	Metric	Whether provided in the Bid		Remarks
		Yes	No	
1	Superconducting Quantum Processing Unit (QPU) in the range of 50 to 100 qubits			
2	Median T1 time \geq 40 micro secs			
3	Median T2 time: \geq 20 micro secs			
4	Median Single-Qubit Gate Fidelity: \geq 99.7%			
5	Median Two-Qubit Gate Fidelity: \geq 99%			
6	Single-Qubit Gate Duration: \leq 50 ns			
7	Two-Qubit Gate Duration: \leq 100 ns			
8	Median Readout Fidelity: \geq 97%			
9	QPU Package, Enclosure, and Wiring: Fully integrable with cryogenic and control systems. Magnetic shielding as needed			
10	Demonstration of a representative application utilizing all the delivered qubits in the QPU			
11	Amplifiers: Cryogenic electronics to support QPU performance including travelling wave parametric amplifiers (TWPA), HEMT amplifiers, isolators, circulators, attenuators etc. These shall be provided for supporting 100 qubits or more			

Dilution Refrigerator

Sl.no	Metric	Whether provided in the Bid		Remarks
		Yes	No	
1	Dilution refrigerator			
2	Full capacity DC wiring for supporting the qubits offered and further scalable to 250 qubits.			
3	Guaranteed Base Temperature <10 mK			
4	Cooling power at 100 mK >=850 uW			
5	Plate Area >= 1960 sq.cm			
6	No. of Co-ax lines > 1000			
8	Gas Handling System			
9	Active and Passive dampening			
10	Liquid nitrogen trap or equivalent, Oil-free, Cryogenic magnetic shield, Vacuum and magnetic shield, Warm up heaters			
11	System shall include vacuum turbo pump, water chiller, He leakage detector, compressed air supply unit, UPS			
12	Oil-Free Pumps for System Operation			
13	Long-Life Cold Trap (≥ 1 year continuous operation)			
14	Integrated Nitrogen Heat Pipes for Fast Cool Down			
15	Automatic Recovery from Power Failure without Control Computer			

Cryogenic System and Temperature Control

Sl.no	Metric	Whether provided in the Bid		Remarks
		Yes	No	
1	Standalone Control Unit			
2	Temperature Controller			

Control Electronics

Sl.no	Metric	Whether provided in the Bid		Remarks
		Yes	No	
1	Control electronics			
2	The control electronics solution for supporting the qubits offered and further scalable to 250 qubits.			
3	Compact control electronics portable rack mountable chassis to deliver QPU performance as mentioned in 1.1 of SECTION – IV.			
4	Plug and play module for readout, control lines and flux lines for provided QPU.			
5	Frequency range: 0-10 GHz readout, control lines and flux lines for provided QPU.			
6	Mixer calibration free operation			
7	Flux lines output: $\sim \pm 2$ Vpp in a 50 ohm load.			
8	Integrated DC coupling as needed			
9	Control lines with an output upto 10 dBm, SFDR < -40 dBc, phase noise < -110 dBc/Hz			
10	Readout lines with input power < -20 dBm and on card measurement result storage memory			
11	Relative Phase stability across multiple RF (3-8 GHz) output			

	modules over 1 hr <2 deg			
12	Low latency feedback <400-600 ns			
13	Synchronization jitter of the order of ps across multiple modules.			
14	TWPA pump lines compact electronics possibly integrable in the compact electronics rack			
15	Pulse sequence programming framework allowing for gate implementation with real-time phase, frequency and amplitude adjustment and complete control over the implementation flow			
16	Control electronics software UI and editor for easy management and configuration of the control electronics			
17	Open QASM compliant API and pulse level API access the control electronics solution			
18	Direct FPGA access provision to implement decoding algorithms towards error correction			
19	Input Voltage and Frequency: Complying with Indian A/C Power specifications			
20	Ambient operating temperature: 15 degrees to 40 degrees Celsius			
21	Ambient operating temperature: 15 degrees to 40 degrees Celsius			
22	Control electronics calibration cycle ~ 2 years			

IT Hardware and Software

Sl.no	Metric	Whether provided in the Bid		Remarks
		Yes	No	
1	IT hardware & Software			
2	High-Performance Host Server for managing quantum operations.			
3	Full-Stack Quantum Software			
4	Automation Software for Qubit characterization, tuning, optimization, scaling and error correction			
5	System Integration and Management Tools			
6	Networking and Power systems			
7	Quantum Access Node			
8	Power Systems			
9	IoT Infrastructure and Telemetry			
10	Physical and Cybersecurity			
11	Access Control Systems			
12	Surveillance Systems (CCTV, Motion Detectors)			
13	Fire Suppression System			

NOTE : Quantum Access Node is a classical system that will be interfacing between HPC and Quantum Computer via any additional Networking hardware required(eg. ethernet switch etc.)

Application benchmarks

Sl.no	Metric	Whether provided in the Bid		Remarks
		Yes	No	
1	Demonstration of Quantum Volume of n or higher, utilizing all the delivered qubits (n) in the QPU			
2	Demonstration of the Randomized Benchmarking test suite			
3	Hybrid Classical – QC: Demonstration of QAOA			

	application, utilizing all the delivered qubits in the QPU			
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Documentation & Training

Sl.no	Metric	Whether provided in the Bid		Remarks
		Yes	No	
1	Comprehensive Instruction Manuals and Datasheets for all hardware and software components. Detailed specification, interfaces and operating ranges for different subcomponents allowing interoperability of components from different vendors			
2	Design and architecture document of the QPU being offered			
3	Quantum Control Hardware – Detailed specification & operating ranges for different subcomponents			
4	Training covering system operation and maintenance (for atleast 80 hrs.)			
5	Training on planar design and fabrication of QPUs (for atleast 100hrs.)			
6	Yearly Refresh Training for continued proficiency.			

Support, Maintenance and Acceptance

Sl.no	Metric	Whether provided in the Bid		Remarks
		Yes	No	
1	Comprehensive Onsite Support & Maintenance covering all hardware, software and integrated system for 3 years (post acceptance)			
2	Warranty of the goods supplied and integrated system for 3 years			
3	Provision of 2 sets of maintenance tools and spare parts for routine upkeep and emergency repairs.			

4	The supplier shall provide a detailed SLA outlining response times, uptime guarantees, and penalties for non-compliance in the technical proposal submitted			
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ANNEXURE H - CERTIFICATE FROM BIDDER

To:

**Executive Director,
Centre for Development of Advance Computing,
C-DAC Knowledge Park, No.1, Old Madras Road,
Byappanahalli, Bangalore-560038
Phone Nos.080-25093400**

Ref: Tender No:

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

Sr. No	Item Description	Make & Model No.	Country of origin of OEM	Country of Manufacture of item	Country of Shipment
1	Supply, Installation & Commissioning of Superconducting Qubits based Quantum Computing Facility (50 to 100 Qubits) at C-DAC Bangalore, Electronic City (Breakup of components with relative details to be provided line item wise)				

We also certify that, we are not from a country sharing land border with India as defined in order No. F/No/6/18/2019-PPD dated 23 July 2020 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 I – DOCUMENTS CHECK-LIST

Sl. No	Document	Page Numbers	Yes/No
e-Packet – A			
1	Covering Letter(Annexure-A containing Forms 1.1 and 1.2)		
2	Authority Letter (Annexure-B)		
3	Transaction details towards online payment of EMD		
4	Documents check list (Annexure I)		
5	A self-attested copy of Partnership deed / Memorandum and Articles of Association as applicable.		
6	Self-attested copies of GST registration certificate, as applicable.		
7	A self-attested copy of PAN card, if applicable		
8	Self-certified copy of Balance Sheets/ Certificate from CA towards certification of turnover for last three years.		
9	Undertaking(s) from OEMs/Principal Manufacturers of the various components (Annexure- C)		
10	Bid Acceptance Letter (Annexure – E)		
11	Integrity Pact (Annexure – F)		
12	Copies of purchase orders and installation reports, as per eligibility criteria and any other documents in support of eligibility criteria		
14	Technical Bid, Documents Brochures, Catalogs, data sheets, tables etc. on the solution offered.		
16	Duly filled compliance statements and BoM Tables (Compliance to be provided as per Annexure G)		
17	Benchmark Results and Tables. Datasheets of the offered components in the technical proposal (pertaining to QPU , Dilution Refrigerator, Control System, Cryogenic Electronics etc.),		
18	Copy of Un-priced commercial bid along with commercial terms and conditions		
19	Conformity to Schedule of Requirements (Annexure – G)		
20	Consortium Agreement As per Annexure K		
21	Letter of Intent to execute a consortium agreement and register same		
22	Declaration by consortium partner as per Annexure L		
e-Packet – B			
1	Commercial bid along with commercial terms and conditions		

ANNEXURE K - CONSORTIUM AGREEMENT

CONSORTIUM AGREEMENT FORMAT

CONSORTIUM AGREEMENT to be changed and signed as per consortium members.

(To be executed on stamp paper of appropriate value)

THIS CONSORTIUM AGREEMENT is entered into on this the..... day of 2025
AMONGST

1. { , a company incorporated under the provisions of Companies Act,1956 / a partnership firm registered under the Indian Partnership Act, 1932/ Limited Liability Partnership Act,2008}and having its{registered office/office} at.....

(hereinafter referred to as the “First Part” or the “Primary Bidder” which expression shall, unless repugnant to the context include its successors and permitted assigns)

AND

2. { , a company incorporated under the provisions of Companies Act,1956/ a partnership firm registered under the Indian Partnership Act, 1932/ Limited Liability Partnership Act,2008}and having its{registered office/office}at

.....(hereinafter referred to as the “Second Part” or the “1st Consortium Member” which expression shall, unless repugnant to the context include its successors and permitted assigns)

AND

3. { , a company incorporated under the provisions of Companies Act,1956/ a partnership firm registered under the Indian Partnership Act, 1932/ Limited Liability Partnership Act,2008}and having its{registered office/office}at..... (hereinafter referred to as the “Third Part” or the “2nd Consortium Member” which expression shall, unless repugnant to the context include its successors and permitted assigns)

The above mentioned parties of the FIRST, SECOND and THIRD PART are collectively referred to as the “Parties” and each is individually referred to as a “Party”

WHEREAS:

- a. Centre For Development of Advanced Computing, Bangalore (hereinafter referred to as the “C-DAC” which expression shall, unless repugnant to the context or meaning thereof, include its administrators, successors and assigns) has invited bids (“bids”) by its tender vide reference No CDACB/RD24/094 dated 01.01.2025 (hereinafter referred as “TENDER”) for Supply, Installation & Commissioning of Superconducting Qubits based Quantum Computing Facility (50 to 100 Qubits) at C-DAC, Bangalore (the “Project/Contract”).
- b. The Parties are interested in jointly bidding for the Contract as members of a

Consortium and in accordance with the terms and conditions of the Tender Bidding Documents in respect of the Contract, and

- c. It is a necessary condition under the Bidding Documents that the members of the Consortium shall enter into a Consortium Agreement (the “Agreement”) and furnish a copy thereof with the bid.

NOW IT IS HEREBY AGREED as follows:

1. Definitions and Interpretations

In this Agreement, the capitalized terms shall, unless the context otherwise requires, have the meaning ascribed thereto under the Bidding Documents.

2. Consortium

The Parties do hereby irrevocably constitute a consortium (the “Consortium”) for the purposes of jointly participating in the bidding process for the Project.

The Parties hereby undertake to participate in the bidding process only through this Consortium and not individually and/ or through any other Consortium constituted for this Contract, either directly or indirectly or through any of their associates.

3. Role of the Parties

The Parties hereby undertake that Party of the First Part is fulfilling the prequalification criteria as per the requirement of “Tender” in all respects and shall be the “Primary Bidder” of the Consortium and shall have the Power of Attorney from all Parties for conducting all business for and on behalf of the Consortium during the Bidding Process and until the signing of the Contract when all the obligations of the Consortium shall become effective.

The project shall be executed by the 'Primary Bidder' along with the other members of this Consortium and Primary Bidder shall solely be responsible to C-DAC for all the communication, correspondence etc. on behalf of other consortium members.

4. Joint and Several Liability

All the members of this Consortium do hereby undertake to be jointly and severally responsible to C-DAC for all the activities mentioned in the Tender Document including financial liabilities and all the obligations and liabilities relating to the Project and in accordance with the terms of the Tender Bidding Documents and the Contract/Agreement, during its subsistence.

5. Representation of the Parties

Each Party represents to the other Parties and C-DAC as of the date of this Agreement that:

- a. Such Party is duly organised, validly existing and in good standing under the laws of India and has all requisite power and authority to enter into this Agreement;
- b. The execution, delivery and performance by such Party of this Agreement has been authorised by all necessary and appropriate corporate or governmental action and a copy

of the extract of the charter documents and board resolution or any other resolution/ Power of Attorney in favour of the person executing this Agreement for the delegation of power and authority to execute this Agreement on behalf of the Consortium Member is annexed to this Agreement, and will not:

- i. require any consent or approval not already obtained;
 - ii. violate any Applicable Law presently in effect and having applicability to it;
 - iii. violate the memorandum and articles of association, bye-laws or other applicable organisational documents thereof;
 - iv. violate any clearance, permit, concession, grant, license or other Governmental authorisation, approval, judgment, order or decree or any mortgage agreement, indenture or any other instrument to which such Party is a party or by which such Party or any of its properties or assets are bound or that is otherwise applicable to such Party; or
 - v. create or impose any liens, mortgages, pledges, claims, security interests, charges or encumbrances or obligations to create a lien, charge, pledge, security interest, encumbrances or mortgage in or on the property of such Party, except for encumbrances that would not, individually or in the aggregate, have a material adverse effect on the financial condition or prospects or business of such Party so as to prevent such Party from fulfilling its obligations under this Agreement;
- c. this Agreement is the legal and binding obligation of such Party, enforceable in accordance with its terms against it; and
- d. there is no litigation pending or, to the best of such Party's knowledge, threatened to which it or any of its Affiliates is a party that presently affects or which would have a material adverse effect on the financial condition or prospects or business of such Party in the fulfillment of its obligations under this Agreement.

6. Conflict of Interest:

The Parties herein undertake to take all necessary measures in order to avoid any conflict of interest during the performance of the project or the contract for “Supply, Installation & Commissioning of Superconducting Qubits based Quantum Computing Facility (50 to 100 Qubits) at C-DAC, Bangalore, Electronic City” and also to identify any conflict of interest and convey the same as early as possible to C-DAC so that C-DAC can consult with the Primary Member and other Parties to sort out such conflicts and take necessary action.

7. Post Contract Liabilities:

For any loss or damage on account of any breach of this Agreement or the contract for “Supply, Installation & Commissioning of Superconducting Qubits based Quantum Computing Facility (50 to 100 Qubits) at C-DAC, Bangalore, Electronic City” or any shortfall in the execution of the Project, meeting the guaranteed performance / parameters as per technical specifications / documents relating to the Tender, “Primary Bidder” undertake to promptly make good such loss or damage on C-DAC’s demand without any demur. C-DAC shall have the right to proceed against any one of the Consortium members herein in this regard without establishing the individual liability of such party and it shall neither be necessary nor

obligatory on the part of C-DAC to proceed against the “Primary Bidder” before proceeding against the other Parties herein.

8. Assignment:

The rights and obligations of the Consortium Members under this Agreement shall not be assigned to any third party without the prior written consent of C-DAC.

9. Employers’ responsibility:

Each Party will be responsible according to the applicable laws and rules for their own personnel and property.

10. Insurance:

The Parties herein shall at their own expense take out and maintain insurance cover as may be necessary to cover their liabilities.

11. Applicable Law:

This Consortium Agreement shall be governed, construed and interpreted in accordance with the laws of India and the Courts in Bangalore (Name of the place) shall have the exclusive jurisdiction in all matters arising hereunder.

12. Termination

This Agreement shall be effective from the date hereof and shall continue till the expiry of the Defect Liability period under the Agreement executed with C-DAC. However, in case the Consortium is either not pre-qualified or does not get selected for award of the Contract, the Agreement will stand terminated in case the Consortium is not pre-qualified or upon return of the tender EMD by C-DAC to the Consortium, as the case may be. None of the parties will be entitled to terminate their association with the Consortium, till return of the tender EMD by the Consortium or payment of the amount specified in the Financial Bid by the Consortium, whichever is later.

13. Indemnification:

All consortium members of this agreement shall fully indemnify, hold harmless and defend C-DAC and its officers etc., from and against all claims, liabilities, suits, damages including any criminal liability due to false declaration by the consortium members with regard to this Agreement (or) Tender transaction (or) Project (or) contract etc., caused due to negligence/commission/omission of the any of the consortium members (or) its employees and agents including representatives (or) sub-contractors (or) any other person claiming (or) any other person claiming under this tender (or) under the applicable laws of India.

14. Parties acknowledge that C-DAC shall not be liable to any of the Consortium members for whatsoever loss, damage etc. occurred during the bid process/subsistence of the project/Contract/tenure of the Agreement executed with C-DAC.

The Parties acknowledge and accept that this Agreement shall not be amended by the Parties without the prior approval of C-DAC.

IN WITNESS WHEREOF THE PARTIES ABOVE NAMED HAVE EXECUTED AND DELIVERED THIS AGREEMENT AS OF THE DATE FIRST ABOVE WRITTEN.
SIGNED, SEALED AND DELIVERED SIGNED, SEALED AND

DELIVERED
For and on behalf of
LEADMEMBER by:

DELIVERED
For and on behalf of
SECONDPART

(Signature)
(Name)
(Designation)
(Address)

(Signature)
(Name)
(Designation)
(Address)

SIGNED, SEALED AND DELIVERED
For and on behalf of THIRD PART by:

(Signature)
(Name)
(Designation)
(Address)

In the presence of:

1.

2.

Notes:

1. The mode of the execution of the Consortium Agreement should be in accordance with the applicable laws.
2. Each Consortium Agreement should attach a copy of the extract of the charter documents and documents such as resolution / Power of Attorney in favour of the person executing this Agreement for the delegation of power and authority to execute this Agreement on behalf of the Consortium Member.

ANNEXURE L – DECLARATION BY CONSORTIUM PARTNERS

(Original signed copy on company letterhead of Primary Bidder)

Date:

To,

**The Executive Director
Centre for Development of Advanced Computing,
No.1, Old Madras Road, Byappanahalli,
Bangalore – 560038**

Dear Sir,

Ref: Tender Ref.....

- I/We agree to adhere with the schedule of implementation and deliver the services as specified in this invitation for application document.
- I/We agree to submit the Consortium Agreement duly stating the Primary Bidder and the Secondary partner(s).
- I/We agree to that the Primary Bidder will be held accountable by C-DAC for all the delivery and tender conditions and will be held responsible for breach of conditions, agreements, SLAs as stated in this document.
- I/We agree that C-DAC would release payment only to the Primary Bidder.
- I/We agree to submit any other agreements with the bidding consortium partner that conflict with the terms and conditions of this document.
- I/We agree that our bid might be summarily rejected in case the Proposal Evaluation committee finds any such agreement that effect the execution of the terms of this document.
- If there is any prior agreement between Primary and the Secondary partner which conflicts with any of the clauses of this tender document, I/We agree that it is the responsibility of the Primary Bidder to ensure that the prior agreement is modified so that it is compliant with the conditions of this document.

Primary Bidder Name:

Signature:

Signing Authority Name:

Designation:

Seal of the Primary Bidder:

(Non-Primary Bidders)

Secondary Partner Name: Seal of the Secondary Partner Signature:

Signing Authority Name:

Designation:

[Please add the above for all the secondary partners]

(END OF DOCUMENT)