

# Centre for Development of Advanced Computing

A Scientific Society of Ministry of Electronics & Information Technology,

Government of India

Innovation Park, PANCHAVATI, Pashan Road, Pune - 411008

Tel: +91-20-25868086

www.cdac.in / mmg@cdac.in

Tender No: CDACP/NSM-HPC-II/2019/263

C-DAC invites ON-LINE bids for Supply, Installation & Commissioning of HPC Cluster and Storage Components/Sub-systems etc. - at C-DAC Pune & Bengaluru.

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



#### Tender Schedule

# Tender No: CDACP/NSM-HPC-II/2019/263

Name of the Institute	Centre for Development of Advanced Computing, Pune 411008.
Place of Supply, Installation &	Centre for Development of Advanced Computing, Innovation Park, PANCHAVATI, Pashan Road, Pune 411008.
Commissioning, Support etc.	Centre for Development of Advanced Computing, Knowledge Park, Old Madras Road, Byappanahalli, BANGALORE.
Date of Release of Tender	17 June, 2019
Date of Pre-Bid Meeting	26 June, 2019 @ 1100 Hrs.
Place of Pre-bid Meeting	C-DAC, Innovation Park, PANCHAVATI, Pashan Road, Pune - 411008
Last date of submission of bids	18 July, 2019 1500 Hrs
Date of opening of Technical bids	19 July, 2019 1500 Hrs
Place of opening of technical bids	C-DAC, Pune 411008.

#### 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: <a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a>.

#### 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 Ministry of Electronics & Information Technology, Government of India. As a part of the project awarded under National Supercomputing Mission (NSM), C-DAC invites 'ON-LINE' bids from eligible bidders for supply, installation and commissioning of HPC-Cluster Power Processor based (Part-A), PFS Based Storage (Part-B) & HPC-Cluster AMD processor based (Part-C)- components / sub-systems etc. as per Schedule of Requirements (Section-IV) and other terms and conditions stipulated in this document.

# 2. Contact information:

Material Management Group
Centre for Development of Advanced Computing (C-DAC)
Innovation Park, Panchavati, Pashan Road,
Pune 411008, Maharashtra, INDIA

Tel No.: +91-20-25503108, E-mail: mmg@cdac.in

# 3. Two bid System:

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

I: e-Packet No. 1: "Technical e-Bid"

II: e-Packet No. 2: "Commercial e-Bid"

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

#### 3.1 e-Packet No. 1: "Technical e-Bid":

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

- a. Covering letter, as per Annexure A.
- b. Authority letter, as per **Annexure B.**
- c. Scanned copy of Demand Draft towards tender fee of Rs. 2000/- (Rupees Two Thousand Only) (Non-refundable / Non-Exempted) drawn in favour of C-DAC payable at Pune. However, the original of Demand Draft must be submitted to C-DAC at address given at para 2 above, on or before the Due Date & Time of the Tender Submission.
- d. Scanned copy of Demand draft towards Earnest Money Deposit of Rs. 14,00,000/-(Rupees Fourteen Lakhs only) (Rs. 14,00,000/- towards (Part-A + Part-B + Part-C) OR Rs. 5,60,000/- towards (Part-A) only; Rs. 1,40,000/- towards (Part-B) only; Rs. 7,00,000/- towards (Part-C) only); drawn in favour of C-DAC payable at Pune. However, the original of Demand Draft/Bank Guarantee must be submitted to C-



<u>DAC</u> at address given in para 2 above, on or before the <u>Due Date</u> & Time of the Tender Submission. In case of claiming exemption from submission of EMD, the copy of valid exemption document must be submitted.

- e. A copy of Certificate of Incorporation, Partnership Deed / Memorandum and Articles of Association / any other equivalent document showing date and place of incorporation, as applicable, in support of eligibility criteria at para 4.3, Section II of this document.
- f. Copies of PAN and GST registration certificates, as applicable.
- g. 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.
- h. Copies of documents in support of eligibility requirements stipulated at para 4 Section II.
- i. The copies of balance sheets **OR** the certificate from a Chartered Accountant certifying the annual sales turnover of the bidder for the last 3 financial years.
- j. The undertakings from the Principal Manufacturers (OEMs) of Servers, Networking Components and Storage Systems as per **Annexure C.**
- k. In case the bidder offers/bids for all the items the MAF & other conditions must be fulfilled by the bidder to qualify for further processing.
- A photo copy of Section IV 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 un-priced commercial bid and the actual commercial bid.
- m. Other documents necessary in support of eligibility criteria, product catalogues, brochures etc.

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

# 3.2 Online – e-Packet No. 2: "Commercial e-Bid " shall contain: (BOQ format only)

Duly filled Commercial Bids as per format given in Section – IV, 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)
Innovation Park, PANCHAVATI, Pashan Road,
Pune 411008, INDIA Phone: 020-25868086.

## 5. Pre-Bid Meeting:



In case of any doubts and/ or queries pertaining to technical solution, specifications terms and conditions of the tender, prospective bidder may send their queries in writing through e-mail. (Refer point 2 mentioned above for contact details). The queries, requests for clarifications etc. must be sent at least two days prior to the date of pre-bid meeting. The bidders are requested to go through the entire tender document thoroughly, before raising any query. The pre-bid meeting will be held at C-DAC, Pune as given in schedule, to address the queries raised by the bidders. C-DAC will try to sort out the queries during the meeting, as far as possible. The replies to queries would be made available on C-DAC's web site in due course of time. All the queries, doubts, clarifications etc. must be submitted in xls format only.

Name of the bidder:				
Sl.No.	Section / Page No	Clause Reference	Query from bidder	C-DAC Response

#### 6. Last Date of submission/uploading:

The on-line bids, complete in all respect should be uploaded through <a href="https://www.eprocure.gov.in/eprocure/app">www.eprocure.gov.in/eprocure/app</a> on or before the date given in tender schedule. The bidders are advised to upload the documents at least one day before the last date for uploading of documents, in order to avoid the possibilities of any last minute surprises. C-DAC does not take any responsibility towards technical snags pertaining to CPP Portal and/or connectivity issues.

It may please be noted that the originals of Demand Drafts, Bank Guarantees etc must be submitted on or before last date of submission of bids. (Refer para 3.1, Section – I). C-DAC shall not be responsible for any postal delays or any other reason, for on-receipt of the tender fees/ EMD etc. in the specified time and resulting in disqualification / rejection of the bid.

#### 7. Opening of Technical e-bids:

The Technical e-bids will be opened - online on the date given in tender schedule, through <a href="https://www.eprocure.gov.in/eprocure/app">www.eprocure.gov.in/eprocure/app</a> portal at:

# **Centre for Development of Advanced Computing (C-DAC)**

Innovation Park, Panchavati, Pashan Road, Pune 411008,

Maharashtra, INDIA.

Tel No.: +91-20-25868086. E-mail: mmg@cdac.in

The representatives (<u>maximum two</u>) of bidders are welcome to attend the opening of the `on-line' technical e-bids.

**Note:** Please do not put "Commercial Bid" (prices quoted) in the technical bid e-packet. If the price quoted is submitted / leaked with technical bid, the tender will be rejected at the sole discretion of C-DAC.



# 8. Opening of commercial e-bids:

Commercial e-bids of the qualified bidders only will be opened. The decision of C-DAC's bid evaluation committee in this regard will be final and binding on bidders. C-DAC's bid evaluation committee will be authorised to take appropriate decision on minor deviations, if any.

The date, time and venue of opening of commercial bids will be informed later to the qualified bidder. The representatives (maximum two) of bidders are welcome to attend the opening of the `on-line' commercial e-bids.

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

(END OF SECTION I)



#### SECTION II: GENERAL CONDITIONS OF CONTRACT (GCC)

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

The entire solution comprising of HPC Cluster (s) & Storage as described in Schedule of Requirements must be supplied, installed, commissioned & supported at

Centre for Development of Advanced Computing, Innovation Park, PANCHAVATI, Pashan Road, Pune 411008. (PART-C Only)

Centre for Development of Advanced Computing, Knowledge Park, Old Madras Road, Byappanahalli, Bangalore (PART-A & B)

#### 2. Delivery Period:

The entire supplies of HPC Cluster(S) & Storage covered in this tender must be supplied, installed and commissioned along with the final acceptance testing within **12 weeks** from the date of placement of order.

#### 3. Order Placements:

The Supply Order shall be released by:

Centre for Development of Advanced Computing (C-DAC) Innovation Park, Panchavati, Pashan Road, Pune 411008, Maharashtra, INDIA.

The payments shall be released by:

Centre for Development of Advanced Computing (C-DAC) Innovation Park, Panchavati, Pashan Road, Pune - 411008 Maharashtra, INDIA

#### 4. Eligibility Criteria:

The bidder must comply with the minimum eligibility criteria stipulated below.

- 4.1. The bidder must submit the documents as listed at para 3.1 and 3.2, Section I of this document.
- 4.2. The bidder must be either a Principal Manufacturer (OEM Original Equipment Manufacturer) of compute nodes or their respective Indian subsidiary, or their (OEM's) authorized HPC system integrator in India.
- 4.3. The bidder must be a legal Indian entity registered under appropriate Law/ Act.
- 4.4. If the bidder is an authorised system integrator, the specific authorisation letter/s from Principal/s, 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 Principal Manufacturer is acceptable.
- 4.5. If the bid is submitted by the Indian subsidiary of Principal Manufacturer (OEM), the letter from Principal Manufacturer (OEM) must be submitted



- certifying that the bidder is the subsidiary company of the Principal Manufacturer (OEM) in India.
- 4.6. The Indian agent or SI and the Principal manufacturer (OEM) of Compute Nodes cannot bid simultaneously.
- 4.7. The bidder may quote for and comply with any one or more of the three parts A, B & C given in Schedule of Requirements Section IV of this document. However, the bidder must quote for all the items from the respective part(s) selected to quote.
- 4.8. The bidder must have minimum annual sales turnover of Rs. 10 Crores for each of last three financial years.
- 4.9. For Part-B: The bidder must have installed and commissioned at least One PFS based Storage System in India having usable capacity of minimum **50 TB**. The purchase order and installation certificates from the end user in the name of bidder to this effect must be submitted with the bid document. (Any prototype installation / test set-up or installation in bidder's or its affiliate premises will not be accepted).
- 4.10. For Part-C: The bidder must have executed successfully at least one order of HPC Cluster in India having peak compute power of min. 50 TF and One PFS based Storage System in India having usable capacity of min. 50 TB of capacity.
- 4.11. The bidder must submit all the documents as per Document Checklist Annexure F.
- 4.12. The bidder must not be blacklisted by any Govt. Organizations as on date of submission of the bids. A certificate or undertaking to this effect must be submitted (Annexure A).
- 4.13. The bidder should provide sufficient documentary evidence to support the eligibility criteria and exemptions mentioned in point 5 below. C-DAC reserves the right to reject any bid not fulfilling the eligibility criteria.

#### 5. Exemptions:

If in the view of bidder, any exemption / relaxation 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 tender documents, if any, will be notified by release of Corrigendum Notice on <a href="www.eprocure.gov.in/eprocure/app/">www.cdac.in/</a> <a href="tender">tender</a> against this tender. 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

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

# 8. Earnest Money Deposit (EMD)

- 8.1. The Earnest Money Deposit (EMD) (Rs. 14,00,000/- towards Part-A + Part-B + Part-C OR Rs. 5,60,000/- towards (Part-A) only; Rs. 1,40,000/- towards (Part-B) only; Rs. 7,00,000/- towards (Part-C)) only must be submitted prior to the DUE DATE & TIME of submission of the online technical bid. The EMD is required to be in the form of Demand Draft/Bank Guarantee in favour of C-DAC payable at Pune, India.
- 8.2. The EMD/BG 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). However, if the return of EMD is delayed for any reason, no interest/ penalty shall be payable to the bidder.
- 8.3. The successful bidder, on award of contract / order, must send the contract/ order acceptance in writing, within 10 days of award of contract/ order, failing which the EMD will be forfeited and the order will be cancelled.

# 8.4. The EMD may be forfeited:

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



# 9. Period of validity of bids

- 9.1. Bids shall be valid for minimum 120 days from the date of 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 not to accept such 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 technical bids will be 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 short listed eligible bidders shall be evaluated 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

- 12.1. Only the short-listed bids from the technical evaluation shall be considered for commercial comparison.
- 12.2. The prices quoted for Individual part(s) i.e. Part-A, Part-B and Part-C items as per Section V: Price Bid, will be considered separately for evaluation and comparison.
- 12.3. The prices offered in foreign currency, if any will be converted to INR for the comparison. The exchange rate <u>as on date of opening of technical bids</u> will be taken for this conversion.

#### 13. Award of Contract

13.1. C-DAC shall place the order(s) on the eligible bidder whose technical bid has been accepted and determined as the lowest evaluated commercial bid based on the Total calculated of each Part-A, Part-B, Part-C of the Commercial Bids



- separately. However, C-DAC reserves the right and has sole discretion to reject the lowest bid.
- 13.2. If more than one bidder happens to quote the same lowest price, 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.
- 14.2. C-DAC reserves the right to cancel the entire or partially tender 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 Tender Document / Contract Document

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

(END OF SECTION II)



# **SECTION III: SPECIAL CONDITIONS OF CONTRACT (SCC)**

#### 1. Prices

- 1.1. The price quoted shall be considered firm and no price escalation will be permitted (except Govt. Statutory Levies).
- 1.2. The bidder may quote in INR or Foreign Currency or partly in INR and partly in Foreign Currency
- 1.3. Bidder must indicate applicable Customs Duty and GST separately for each item. The bidder should exercise utmost care to quote the correct percentage of applicable Duty / GST on each item.
- 1.4. In case due to any error/ oversight, the Customs Duty/GST rate quoted by the bidder is different than the actual Duty/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 Duty/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, Pune/Bangalore including of freight, insurance, customs clearance, forwarding, loading/un-loading and all incidental charges etc
- 1.6. C-DAC, Pune may issue Certificate towards GST @ concessional rates under Notification 43/17- 47/17(Integrated Tax) (or latest thereto), wherever applicable; on submitting the appropriate documents/HSN Code etc.
- 1.7. If C-DAC places import order in foreign currency directly on supplier abroad, the customs duty payable if any after availing exemption under customs notification no. 51/96 (amended 24/2007) will be paid extra (re-imbursed) at actual on submission of documentary proofs/BoE etc. The Customs Duty Exemption Certificate will be issued by C-DAC. The Customs Duty Exemption Certificate will not be issued in cases where the order is placed in INR and / or on Indian entity.
- 1.8. The supplier/bidder must provide the proper shipping documents necessary for customs clearance availing applicable duty exemption
- 1.9. The demurrage charges incurred, if any, for the reasons attributed to C-DAC shall be re-imbursed by C-DAC. In this case, the claim towards demurrage charges must be submitted along with the original documents towards payment of demurrage charges.
- 1.10. The exact rate of duty / taxes, charges currently applicable must be mentioned in the `commercial bid format'. The statutory taxes and duties applicable at the time of supply of material shall be applicable.
- 1.11. 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, Pune/Bangalore. 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, Pune/Banaglore. 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 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 Pune. 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 10% 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 37 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 HPC Cluster, storage, Interconnect, software, 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:



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. The warranty should be comprehensive on site, repair/replacement basis free of cost.

The supplier also warrants that the said goods would continue to conform to the description and quality aforesaid for a period of min. 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. If during the aforesaid period of 3 years the Goods 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 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, 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 warranty 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 must have 3 (Three) years onsite comprehensive warranty with 24x7 support along with 8 hours response time and 48 hours resolution time, covering all parts & labor starting from the date after the successful installation, demonstration of performances and acceptance by C-DAC, Pune. During the warranty 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.

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.

Onsite comprehensive warranty and support for complete supplies including Hardware, Software for three years from the date of acceptance of the solution.

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

#### 7. Benchmark and Acceptance Criteria

Addition to scope of work defined in each part of Section IV, Bidder need to submit the below benchmarks along with the bid and demonstrate the benchmark after the supply:

1. Per Node Linpack Rmax performance of min. 70% of the theoretical peak value for the compute nodes in section A-1, C-1 and C-2



- 2. Per Node Linpack Rmax performance of min. 55% of the theoretical peak value for GPU compute nodes mentioned in section A-2 & C-3
- 3. 4GB/s write throughput on Storage as mentioned in Section IV, part B and point 6 of part C (Storage Section)

**Note:** Benchmark for single compute node should be performed in normal mode of execution (without over-clocking, turbo boost or any other special mode)

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:

Payments shall be released separately for each order.

#### 8.1. For payment in Foreign Currency:

90% amount of the order value will be released through 30 days Irrevocable Letter of Credit (LC). The LC operating charges within India shall be to C-DAC account and those for outside India shall be to beneficiary's account. LC confirmation charges, if required shall be to beneficiary account. The charges towards LC amendment required on request of beneficiary shall be to beneficiary account.

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. In case of non-submission of PBG within 15 days, any loss due to fluctuation in foreign exchange rates will be at beneficiary account.

### 8.2. For payment in INR:

90% amount of the order value will be released on receipt of material at site with 30 days credit.

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. In case of non submission of PBG within 15 days, any loss due to fluctuation in foreign exchange rates will be at beneficiary account.

- 8.3. Applicable TDS will be deducted.
- 9. Shipping Documents: Bill to C-DAC, Pune (For PART A, B & C).

#### Ship to:

9.1. Centre for Development of Advanced Computing (C-DAC) - (PART-C ONLY)
Innovation Park, PANCHAVATI, Pashan Road, PUNE 411008



#### Maharashtra, INDIA

9.2. Centre for Development of Advanced Computing (C-DAC) (PART-A & B)
Knowledge Park, Old Madras Road, Byappanahalli,
BANGALORE

# 10. Penalty for delayed Delivery /Services

- 10.1. In case, the supplier fails to complete any part of scope of the work (i.e. delivery, inspection, installation, commissioning, acceptance and training) or part thereof within the period as stipulated in the order, C-DAC reserves the right to recover from the supplier, as agreed liquidated damages and not by way of penalty, a sum of 0.5% of the price of total order value for each week or parts thereof, of the delay, subject to a maximum of 10% of basic contract value without taxes.
- 10.2. The period of delay in delivery and/or installation not attributed to the supplier, delay in site preparation, delay in submission of required documents by C-DAC etc. and the conditions arising out of Force Majeure will be excluded from delay period while calculating the delay period for penalties.
- 10.3. C-DAC reserves the right to cancel the order in case of delays of more than 10 weeks.

#### 11. Jurisdiction:

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

#### **12.** Force Majeure:

C-DAC may consider relaxing the liquidated damages 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), hostilities, national emergencies, civil commotion and strikes at successful Bidder's premises or any other act beyond control of the bidder.

#### 13. 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 endeavour 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 Pune 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 Pune.



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 Pune only shall have the exclusive jurisdiction to try, entertain and decide the matters which are not covered under the Arbitration and conciliation Act.

#### 14. 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.

#### **15.** Limitation of Liability:

The liability of the bidder arising out of breach of any terms/conditions of the tender / contract/work order and addendums/amendments thereto, misconduct, and wilful default will be limited to the total order 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, will be at actuals.

In no event shall either Party, its officers, directors, or employees be liable for any form of incidental, consequential, indirect, and special or punitive damages of any kind.

#### 16. Termination:

Validity of order/ Contract will remain till fulfilment of all obligations (Including but not limited to providing comprehensive warranty/support till Completion of three years from acceptance of the supplies by the successful bidder. 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 tender.

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/ end user. However, the amount towards penalty, if any will be deducted from the payable amounts.



# **17.** *Indemnity:*

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

a. infringement of any law pertaining to intellectual property, patent, trademarks, copyrights etc. by the bidder

or

b. such other statutory infringements in respect of any of the equipment supplied by successful bidder,

or

c. any wilful misconduct or gross negligence act/omission/ performance/ under or non or part performance/failure of the bidder.

## **18.** Assignment:

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

# **19.** Severability:

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

(END OF SECTION III)



# **SECTION IV: SCHEDULE OF REQUIREMENTS**

# Server, Storage and Networking Components for HPC

# PART A: 100TF HPC System based on Power processor @ C-DAC, Bangalore

SI no.	Items	Description			
Α					
1	Master Node – 2 Qty				
	Processor	2 x IBM Power 9 Processor with min. 20-core and with min. 2.4Ghz frequency 256 GB (16GB x 16) DDR4, minimum 2666 MHz ECC Memory, in balanced configuration for maximum performance			
	RAM				
	Network	Four 1GbE network ports			
	Interconnect	100 Gbps EDR InfiniBand Adaptor			
	DVD	One external DVD RW/DVD combo			
	HDD	Min. 2 x 2 TB SATA disk drive with Support for Hardware RAID 0, 1			
	Remote Management	IPMI 2.0 or equivalent Support with KVM and Media over LAN features with additional licenses if any. Should have support for Redfish API or equivalent for server management.			
	OS support	Fully certified/compatible with latest CentOS 7.x			
	Power supply	Redundant and Hot Pluggable, 80 Plus Platinum or better certified power supply along with Power cables compatible with PDU connector type of IEC 19			
	Form Factor	2U rack mountable or smaller form factor			
	Depth	Should not exceed 850mm			
	Rack Mounting kit	Must include rack mounting kit			
2	Compute Nodes	s with Nvidia GPU – 4 Qty			
	Processor	2 x IBM Power 9 Processor with min. 20-core and with min. 2.4Ghz frequency			
	RAM	256 GB (16GB x 16) DDR4, minimum 2666 MHz ECC Memory, in balanced configuration for maximum performance			
	GPU	4 x Nvidia Tesla V100 based NVlink			
	Network	Two 1GbE network ports with PXE boot capability			



	Interconnect	100 Gbps EDR InfiniBand Adaptor			
	HDD	960 GB SATA SSD or better with Disk must have endurance of 3 or more Drives Write Per Day (DWPD) for 5 years.			
	Remote Management	IPMI 2.0 or equivalent Support with KVM and Media over LAN features with additional licenses if any. Should have support for Redfish API or equivalent for server management.			
	OS support	Fully certified/compatible with latest CentOS 7.x			
	Power supply	Redundant and Hot Pluggable, 80 Plus Platinum or better certified power supply along with Power cables compatible with PDU connector type of IEC 19			
	Form Factor	2U rack mountable or smaller form factor			
	Depth	Should not exceed 850mm			
	Rack Mounting kit	Must include rack mounting kit			
3	Monitor, keyboard and Mouse – 1 Qty	2U or better rack mountable 17" LCD Monitor console, with integrated Keyboard and Mouse			
4	HPC Communication Network				
4A	Primary Communication Network (Qty: 01)				
	Switch	36 port EDR InfiniBand switch			
	Management	Support for Out-of-band management based on RJ45 1G management port Built-in Fabric Manager.			
	Management Cables				
	_	management port Built-in Fabric Manager.			
	Cables	management port Built-in Fabric Manager.  12 Copper cables, QSFP (6 no. of 2mtr, and 6 no. of 3mtr each)  Host Software, performance monitoring tool and other			
	Cables Software	management port Built-in Fabric Manager.  12 Copper cables, QSFP (6 no. of 2mtr, and 6 no. of 3mtr each)  Host Software, performance monitoring tool and other required software to complete the connectivity			
	Cables Software Power Supply	management port Built-in Fabric Manager.  12 Copper cables, QSFP (6 no. of 2mtr, and 6 no. of 3mtr each)  Host Software, performance monitoring tool and other required software to complete the connectivity  Redundant power supply			
4B	Cables Software Power Supply Power cables	management port Built-in Fabric Manager.  12 Copper cables, QSFP (6 no. of 2mtr, and 6 no. of 3mtr each)  Host Software, performance monitoring tool and other required software to complete the connectivity  Redundant power supply  IEC 14 type Power cables			
4B	Cables Software Power Supply Power cables	management port Built-in Fabric Manager.  12 Copper cables, QSFP (6 no. of 2mtr, and 6 no. of 3mtr each)  Host Software, performance monitoring tool and other required software to complete the connectivity  Redundant power supply  IEC 14 type Power cables  Rack mounting kit if required			
4B	Cables Software Power Supply Power cables  Secondary Comments	management port Built-in Fabric Manager.  12 Copper cables, QSFP (6 no. of 2mtr, and 6 no. of 3mtr each)  Host Software, performance monitoring tool and other required software to complete the connectivity  Redundant power supply  IEC 14 type Power cables  Rack mounting kit if required  munication Network (Qty: 01)			
4B	Cables Software Power Supply Power cables  Secondary Comment Ethernet Switch	management port Built-in Fabric Manager.  12 Copper cables, QSFP (6 no. of 2mtr, and 6 no. of 3mtr each)  Host Software, performance monitoring tool and other required software to complete the connectivity  Redundant power supply  IEC 14 type Power cables  Rack mounting kit if required  munication Network (Qty: 01)  Managed 24 port Gigabit Ethernet switch			



4C	IPMI Communication Network (Qty : 1)			
	Ethernet Switch	24 port Gigabit Ethernet switch		
	Cables	16 CAT6 cable (8 no. of 3mtr, 8 no. of 2mtr)		
	Power cables	IEC 14 type power cables		

# **SCOPE OF WORK for Part-A**

- 1 Racking, stacking and cabling of the supplied hardware
- 2 Running of HPL benchmark/Any other compute intensive load for 24 hr on entire cluster for verifying the reliability.
- 3 Bidder should provide the total cooling and Power rating of the quoted hardware.
- 4 Documentation and Manuals of all systems to be supplied.
- 5 3 year standard warranty



PART B: PFS based storage for PART-A @ C-DAC, Bangalore

Storage – 1 Qty	•		
Capacity	PFS based <u>200 TiB</u> usable capacity with RAID 6 (8+2) or equivalent with dual parity, with 4 GB/s write throughput performance. Metadata capacity to accommodate 300 million files. Read performance should not be less than write. Separate Meta Data Space if required should be based on 10K/15K RPM SAS or SSD Disks.		
File-system	OEM Supported Lustre / GPFS compatible with power9 based system on CentOS 7.x as mentioned in part A. (with three years support for updates, upgrades & patches etc.)		
Scalability	Storage should be able to scale up to double the usable capacity within same name space.		
Global Hot Spare	Disks amounting to 2% of total capacity need to be additionally provided as Global Hot spare.		
Rebuild	RAID rebuild time should be less than 24 hrs while system is live		
Management	Storage system must have a management and monitoring console for RAID and file system monitoring.		
I/O server	Required number of I/O servers to achieve the benchmark.  I/O servers (MDS/OSS) should have interface compatible with EDR InfiniBand interconnect.  Necessary HBA cards/cables to connect Storage controller		
Connectivity	Connectivity between Storage servers to Storage enclosures with Redundant Connects & Links.  Required number of 5 Mtr optical cables to connect I/O servers to EDR InfiniBand switch.		
High- Availability	The solution should be highly available. Storage subsystem should be configured with no Single Point of Failure (SPOF) including I/O servers, Metadata servers, Storage array, HBA Cards and power supply. Fan modules, Power supply should be redundant and hot pluggable/replaceable.		
Benchmarks	Benchmark:  1. Bidder must submit storage benchmark results along with bid and should demonstrate 4 GB/s write throughput after installation.		



	2. Open-source IOR/IOZone benchmarks running on compute nodes with 1 MB block size and file size double than total storage cache and I/O node memory.
	3. Benchmarks must be run on compute nodes where each node is writing to same-shared file as well as each node writing to separate unique file. Bidder must submit storage benchmark results along with tender response.
Rack Mounting kit	Must include rack mounting kit
Deployment/ Integration	Bidder need to integrate, configure and install the complete storage solution and demonstrate the above benchmarks on PART A system.  Bidder need to ensure the compatibility of quoted storage with PART-A systems.

# **SCOPE OF WORK for Part-B**

- 1 Racking, stacking and cabling of the supplied hardware
- 2 Installation and commissioning of Storage subsystem and integration with PART A.
- 3 Demonstration of Storage benchmark.
- 4 Bidder should provide the total BTU and Power rating of the quoted hardware.
- 5 Documentation and Manuals of all systems to be supplied.
- 6 3 year standard warranty



# PART C: 100TF HPC System based on AMD processor @ C-DAC, Pune.

	AMD based HPC cluster			
1	Master Node –	2 Qty		
	Processor	2 x AMD EPYC ROME processor with min. 32-core and with mi 2.5Ghz frequency having 16 DP flops / cycle for each core ar native AVX2 support		
	RAM	256GB (16GB x 16) DDR4 minimum 2666 MHz ECC Memory, in balanced configuration for maximum performance		
	Network	Four 1GbE network ports		
	Interconnect	100 Gbps EDR InfiniBand Adaptor		
	DVD	One number DVD RW/DVD combo		
	HDD 6 x 600GB SAS drives 10K RPM with Support for Hardwa 0, 1, 10, 5			
	Remote Management	IPMI 2.0 or equivalent Support with KVM and Media over LAN features with additional licenses if any. Should have support for Redfish API or equivalent for server management.		
	OS support	Fully certified/compatible with latest CentOS 7.x		
	Power supply	Redundant and Hot Pluggable, 80 Plus Platinum or better certified power supply along with IEC 14 type Power cables		
	Form Factor	2U rack mountable or smaller form factor  Must include rack mounting kit		
	Rack Mounting kit			
2	Compute Nodes	s – 16 Qty		
	Processor	2 x AMD EPYC ROME processor with min. 32-core and with min. 2.5Ghz frequency having 16 DP flops / cycle for each core and native AVX2 support		
	RAM	256GB (16GBx16) DDR4 minimum 2666 MHz ECC Memory, in balanced configuration for maximum performance		
	Network	Two 1GbE network ports with PXE boot capability		
	Interconnect	100 Gbps EDR InfiniBand Adaptor		
	HDD	400 GB 6Gbps SATA SSD or better with Disk must have endurance of 3 or more Drives Write Per Day (DWPD) for 5 years.		



	Remote Management	IPMI 2.0 or equivalent Support with KVM and Media over LAN features with additional licenses if any. Should have support for Redfish API or equivalent for server management.		
	OS support	Fully certified/compatible with latest CentOS 7.x		
	Power supply	80 Plus Platinum or better certified power supply along with IEC 14 type Power cables		
	Form Factor	1U rack mountable or smaller form factor.		
	Rack Mounting kit	Must include rack mounting kit		
3	Compute Nodes	s with NVIDIA GPU - 4 Qty		
	Processor	2 x AMD EPYC ROME processor with min. 32-core and with min. 2.5Ghz frequency having 16 DP flops / cycle for each core and native AVX2 support		
	RAM	256GB (16GBx16) DDR4 minimum 2666 MHz ECC Memory, in balanced configuration for maximum performance		
	GPU	2 x Nvidia Tesla V100 based on x16 PCle Gen3/4		
	Network	Two 1GbE network ports with PXE boot capability  100 Gbps EDR InfiniBand Adaptor		
	Interconnect			
	HDD	400 GB 6Gbps SATA SSD or better with Disk must have endurance of 3 or more Drives Write Per Day (DWPD) for 5 years.		
	Remote Management	IPMI 2.0 or equivalent Support with KVM and Media over LAN features with additional licenses if any. Should have support for Redfish API or equivalent for server management.		
	OS support	Fully certified/compatible with latest CentOS 7.x		
	Power supply	80 Plus Platinum or better certified power supply along with IEC 14 type Power cables		
	Form Factor	2U or better form factor rack mountable		
	Rack Mounting kit	Must include rack mounting kit		
4	Monitor, keyboard and	2U or better rack mountable 17" LCD Monitor console, with integrated		
	Mouse – 1 Qty	Keyboard and Mouse		
5	HPC Communic	ation Network		
5.1	Primary Commu	unication Network		



	Switch	36 port EDR InfiniBand switch  Support for Out-of-band management based on RJ45 1G management port Built-in Fabric Manager  36 Copper cables, QSFP (10 no. of 2mtr, and 26 no. of 3mtr each)				
	Management					
	Cables					
	Software	Host Software, performance monitoring tool and other required software to complete the connectivity  Redundant power supply				
	Power Supply					
	Power cables	IEC 14 type Power cables				
		Rack mounting kit if required				
5.2	Secondary Com	nmunication Network (Qty: 01)				
	Ethernet Switch	Managed 48 port Gigabit Ethernet switch				
	Cables	40 CAT6 cable (8 no. of 1mtr, 22 no. of 2mtr and 10 no. of 3mtr each)				
	Power cables	IEC 14 type power cables				
5.3	IPMI Communi	nunication Network (Qty : 1)				
	Ethernet Switch	48 port Gigabit Ethernet switch				
	Cables	40 CAT6 cable (8 no. of 1mtr, 22 no. of 2mtr and 10 no. of 3mtr each)				
	Power cables	IEC 14 type power cables				
6	Storage – 1 Qty	/·				
	Capacity	PFS based <u>200 TiB</u> usable capacity with RAID 6 (8+2) or equivalent with dual parity, with 4 GB/s write throughput performance. Metadata capacity to accommodate 300 million files. Read performance should not be less than write. Separate Meta Data Space if required should be based on 10K/15K RPM SAS or SSD Disks.				
	File-system	OEM supported Lustre / GPFS (with three years support for updates, upgrades & patches etc.)				
	Scalability	Storage should be able to scale up to double the usable capacity within same name space.				



Disks	Must be configured with 2TB or higher capacity 7.2K RPM Enterprise SATA or NL-SAS disks.
Global Hot Spare	Disks amounting to 2% of total capacity need to be additionally provided as Global Hot spare.
Rebuild	RAID rebuild time should be less than 24 hrs while system is live
Management	Storage system must have a management and monitoring console for RAID and file system monitoring.
	Required number of I/O servers to achieve the benchmark.
I/O server	I/O servers (MDS/OSS) should have interface compatible with quoted primary interconnect.
	Necessary HBA cards/cables to connect Storage controller
Connectivity	Connectivity between Storage servers to Storage enclosures with Redundant Connects & Links. Required number of 5 meter optical cables to connect I/O servers to primary interconnect (100G) switch.
High- Availability	The solution should be highly available. Storage subsystem should be configured with no Single Point of Failure (SPOF) including I/O servers, Metadata servers, Storage array, HBA Cards and power supply. Fan modules, Power supply should be redundant and hot pluggable/replaceable.
	Benchmark:
	benchmark:
	<ol> <li>Bidder must submit storage benchmark results along with bid and should demonstrate 4 GB/s write throughput after installation.</li> </ol>
Benchmarks	Bidder must submit storage benchmark results along with bid and should demonstrate 4 GB/s write throughput after
Benchmarks	<ol> <li>Bidder must submit storage benchmark results along with bid and should demonstrate 4 GB/s write throughput after installation.</li> <li>Open-source IOR/IOZone benchmarks running on compute nodes with 1 MB block size and file size double than total</li> </ol>
Benchmarks  Rack Mounting kit	<ol> <li>Bidder must submit storage benchmark results along with bid and should demonstrate 4 GB/s write throughput after installation.</li> <li>Open-source IOR/IOZone benchmarks running on compute nodes with 1 MB block size and file size double than total storage cache and I/O node memory.</li> <li>Benchmarks must be run on compute nodes where each node is writing to same-shared file as well as each node writing to separate unique file. Bidder must submit storage</li> </ol>
Rack Mounting	<ol> <li>Bidder must submit storage benchmark results along with bid and should demonstrate 4 GB/s write throughput after installation.</li> <li>Open-source IOR/IOZone benchmarks running on compute nodes with 1 MB block size and file size double than total storage cache and I/O node memory.</li> <li>Benchmarks must be run on compute nodes where each node is writing to same-shared file as well as each node writing to separate unique file. Bidder must submit storage benchmark results along with tender response.</li> </ol>



# **SCOPE OF WORK for Part-C**

- 1 Racking, stacking and cabling of the supplied hardware
- 2 Installation and commissioning of Storage
- 3 Demonstration Storage benchmark.
- 4 Running of HPL benchmark/Any other compute intensive load for 24 hr on entire cluster for verifying the reliability.
- 5 Bidder should provide the total cooling and Power rating of the quoted hardware.
- 6 Documentation and Manuals of all systems to be supplied.
- 7 3 year standard warranty

(END OF SECTION IV)



# **SECTION- V: PRICE BID**

# PART-A + PART -B + PART - C : (KINDLY FILL ALL THE DETAILS CAREFULLY FOR THE PARTS YOU WISH TO BID)

Sr. No.	Item Description	Qty	Unit	Quoted Currency in INR / Other Currency (INR/EUR/ USD/JPY)	BASIC RATE In Figures To be entered by the Bidder (In Currency) (INR/EUR/USD/J PY)	Customs Duty / GST (in %)
1	PART - A 100 TF POWER					
1.01	PROCESSOR BASED HPC		NOC			
1.01	MASTER NODES	2	NOS			
1.02	COMPUTE NODES WITH NVIDIA GPU	4	NOS			
1.03	Monitor, KB and Mouse Console 17" LCD - 2U or better	1	SET			
2	HPC COMMUNICATION NETWORK					
2.01	Primary Comm Network	1	SET			
2.02	Secondary Comm Network	1	SET			
2.03	IPMI Comm Network	1	SET			
3	Any other components/items required to complete the total HPC Cluster	1	LOT			
4	Other Charges like customs clearance, installation, etc. (if any)	1	LOT			
<u>5</u>	PART-B: STORAGE - 200 TiB					
5.01	PFS BASED STORAGE - 200 TiB	1	SET			
5.02	Any other components/items required to complete the total PFS Storage	1	SET			
5.03	Other Charges like customs clearance, installation, etc. (if any)	1	LOT			
<u>6</u>	PART-C - 100TF HPC System					
	based on AMD processor					
6.01	MASTER NODES	2	NOS			
6.02	COMPUTE NODES	16	NOS			
6.03	COMPUTE NODES WITH	4	NOS			ef 20



	NVIDIA GPU				
7	MONITOR, KB & MOUSE - 17"	1			
_ ′	CONSOLE - 2U or better		SET		
8	HPC COMMUNICATION				
0	NETWORK				
8.01	PRIMARY COMM NETWORK	1	SET		
8.02	SECONDARY COMM	1			
8.02	NETWORK	1	SET		
8.03	IPMI COMM NETWORK	1	SET		
	Any other components/items				
9	required to complete the total	1	SET		
	HPC Cluster & Storage				
	Other Charges like customs				
10	clearance, installation, etc. (if	1	LOT		
	any)				

# **NOTES:**

- a) The prices quoted above must be 'all-inclusive' till destination, i.e. C-DAC, Pune / Bangalore.
- b) C-DAC reserves the rights to place order for Part-A, Part-B & Part-C individually on lowest responsive bids received.

(END OF SECTION – V)



ANNEXURE A – COVERING LETTER
Date:
To:
The Director General, Centre for Development of Advanced Computing (C-DAC) Innovation Park, Panchavati, Pashan Road, Pune - 411008 Maharashtra, INDIA
Subject: Submission of bid for Supply and installation of HPC Cluster, storage etc.
Dear Sir,
We, the undersigned, offer to supply HPC Cluster Solutions to C-DAC, in response to your Tender No <b>CDACP/NSM-HPC-II/2019/263</b> . We are hereby submitting our proposal for same, which includes Technical bid and the Financial Bid on <a href="https://www.eprocure.gov.in">www.eprocure.gov.in</a>
We hereby declare that all the information and statements made in this bid are true and we accept that any misinterpretation contained in it, may lead to our disqualification.
We undertake, if our proposal is accepted, to submit a Security Deposit of 5 $\%$ of the contract / order value, as per terms stipulated in the tender.
We hereby certify that my/ our firm has not been disqualified and / or blacklisted by any Office/ Department/ Undertaking of the State Government / Central Govt. of India, PSU/ Autonomous Body of Government of India, at the time of submission of this bid.
We agree to abide by all the terms and conditions of the tender document, including corrigenda. We would hold the terms of our bid valid for 120 days as stipulated in the tender document.
We understand you are not bound to accept any Proposal you receive.
The undersigned is authorized to sign this bid document. The authority letter to this effect is enclosed.
Yours sincerely,
Authorized Signatory: Name and Title of Signatory: e-mail: Mobile No:



# ANNEXURE B – AUTHORITY LETTER

Date:
То:
The Director General, Centre for Development of Advanced Computing (C-DAC) Innovation Park, Panchavati, Pashan Road, Pune - 411008 Maharashtra, INDIA
Subject: Authority Letter
Reference: Tender No CDACP/NSM-HPC-II/2019/263
Dear Sir,
We, M/s (Name of the bidder) having registered office at (address of the bidder) herewith submit our bid against the said tender 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 PRINCIPAL MANUFACTURER/OEM

(To be submitted in Original on Letterhead-For Nodes + Communication Network + Storage components separately)

Date:

The Director General,
Centre for Development of Advanced Computing (C-DAC)
Innovation Park, Panchavati, Pashan Road,
Pune - 411008 Maharashtra, INDIA

Subject: Undertaking by Principal Manufacturer against tender no. CDACP/NSM-HPC-II/2019/263 for Supply, Installation & Commissioning of HPC Clusters, Storage components etc at C-DAC. Pune/Bangalore.

Dear Sir,
We, M/s (Name of the manufacturer) having registered office at a graduation (address of the manufacturer) by virtue of being manufacturer for the manufacturer of the manufacturer of the manufacturer of the manufacturer).
(Name of the product/s), hereby certify that M/s (Name of
the bidder) having their office at (Address of bidder) are our Authorised System Integrator for our range of products quoted by them, as listed below:
1. HPC Servers
2. HPC Storage and archival system
3. HPC interconnects
Within the scope of requirement as per the tender 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 tender.
We also certify that the products offered are not nearing end-of-life $\prime$ end-of-support five years down the line from the date of bidding.
The undersigned is authorised 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 Innovation Park, PANCHAVATI, Pashan Road, Pune – 411 008
BANKS GUARANTEE NO:
DATE:
Dear Sir(S)
This has reference to the Purchase Order No Dated been placed by Centre for Development of Advanced Computing(C-DAC), Pune on M/s (Name & Address of vendor) for supply, installation, commissioning and warranty of (description of items) at 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

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



to the	te or to forbear from endorsing any power or rights or by reason of time being given said M/s (Name of Vendor) which under law relating to the sureties 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/
M/s _	pended by reason of the fact that any dispute or disputes have been raised the said (Name of Vendor) and/ or that any dispute or disputes are pending any officer, tribunal or court or Arbitrator.
The guwindir	uarantee herein contained shall not be determined or affected by the liquidation or ng up, dissolution or change of constitution or insolvency of the said M/se of Vendor) but shall in all respects and for all purposes be binding and operative until ent of all dues to C-DAC in respect of such liability or liabilities.
action	liability under this guarantee is restricted to Rs/- (RupeesOnly). Our guarantee shall remain in force until unless a suit to enforce a claim under guarantee is filed against us within six months from (which is of expiry of guarantee) all your rights under the said guarantee shall be forfeited and
We ha	all be relieved and discharged from all liabilities there under.  eve power to issue this guarantee in your favour under Memorandum and Articles of ation of our Bank and the undersigned has full power to do under the power of ney dated.
Notwi	thstanding anything contained herein:
A.	Our liability under this guarantee shall not exceed Rs (in words)
В.	This bank guarantee shall be valid up to & 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 – TENDER ACCEPTANCE LETTER

(To be submitted on Company Letter Head).

Date:

To:

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

Subject: Tender Acceptance Letter

Reference: RFP document no. CDACP/NSM-HPC-II/2019/263

Dear Sir,

- 1. I / We have downloaded / obtained the tender document(s) for the above mentioned `Tender' from the web site(s) namely: www.cdac.in / www.eprocure.gov.in/eprocure/app 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 tender documents from Page No.1 to 41 (including all documents like annexure(s), schedules(s), etc.), which form part of the contract agreement and I / We shall abide hereby by the terms / conditions/ clauses contained therein.
- 3. The corrigendum(s) issued from time to time by your department / organization too has also been taken into consideration, while submitting this acceptance letter.
- 4. I / We hereby unconditionally accept the tender conditions of above mentioned tender document(s) / corrigendum(s) in its totality / entirety.
- 5. I / We certify that all information furnished by the our Firm is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then your department/ organization shall without giving any notice or reason therefore or summarily reject the bid or terminate the contract, without prejudice to any other rights or remedy including the forfeiture of the fully said earnest money deposit absolutely.

Yours Faithfully,
Authorized Signatory.
(Signature of the Bidder, with Official Seal)
Email id for correspondence.



# ANNEXURE F – DOCUMENTS CHECK-LIST

S. No.	Document	Page Numbers	Yes/No
	e-Packet – A		
1	Covering Letter(Annexure-A)		
2	Authority Letter (Annexure-B)		
3	Demand Draft towards Document Fee		
4	Demand Draft / Bank Guarantee towards EMD		
5	Documents check list (Annexure F)		
6	A self-attested copy of Partnership deed / Memorandum and Articles of Association as applicable.		
7	Self-attested copies of GST registration certificate, as applicable.		
8	A self-attested copy of PAN card, if applicable		
9	Self-certified copy of Balance Sheets/ Certificate from CA towards certification of turnover for last three years.		
10	Undertaking(s) from OEMs/Principal Manufacturers of the various components (Annexure- C)		
11	Copies of purchase orders and installation reports, as per eligibility criteria		
12	Any other documents in support of eligibility criteria		
13	Technical Bid, Documents Brochures		
14	Catalogs, data sheets, tables etc. on the solution offered.		
15	Duly filled compliance statements and BoM Tables		
16	Benchmark Results and Tables		
17	Copy of Un-priced commercial bid along with commercial terms and conditions		



	e-Packet – B (BOQ Format)
18	Commercial bid along with commercial terms and conditions (PART-A)
19	Commercial bid along with commercial terms and conditions (PART-B)
20	Commercial bid along with commercial terms and conditions (PART-C)

(END OF DOCUMENT)