NATIONAL INSTITUTE OF PLANT GENOME RESEARCH

(An Autonomous Research Institution of the Department of Biotechnology Ministry of Science and Technology, Govt. of India) Aruna Asaf Ali Marg, New Delhi – 110 067 Phone: 26735139, 26735141 Fax: 26741658, 26741146

TENDER NOTICE Tender No. 8/55/2018-19/NIPGR/S&P

Online tenders (in two bid system) are invited on behalf of the Director, NIPGR from manufactures or their authorized dealer for the Supply, Installation, Testing & Commissioning of 01 no. of High Performance Computing Cluster (HPCC) at NIPGR Campus, Aruna Asaf Ali Marg, New Delhi 110067.

i		Estimated Cost (in ₹)	EMD in (₹)	Time for Completion	Last Date Sale / Su					
		, ,		•	Tenders		1	Ü		
Ī	1.	75,00,000/-	1,50,000/-	12 Weeks	02/4	/2019		03/4/2	2019	
					1500	O Hrs.		1500	Hrs.	

The Earnest Money should be deposited in the form of Demand Draft drawn in favour of the Director, NIPGR, payable at New Delhi so as to reach the undersigned latest by 02/4/2019 (3.00 P.M). The Tender documents and detailed specifications can be obtained in person by the interested firms from the Purchase-Cum-Store Officer, NIPGR, during office hours against non-refundable cash payment of ₹ 1,000.00 (Rs. One Thousand only) as mentioned above from 13/3/2019 to 02/4/2019 upto 1500 hrs. The tender document is available on eprocure.gov.in and can also be downloaded from our website: www.nipgr.ac.in and CPP Portal https://eprocure.gov.in/eprocure/app. The tender document downloaded from the website is exempt from payment of tender document cost (₹ 1,000/-).

The tenderers registered with MSME & NSIC in the above-mentioned Service / Activity are exempt from deposit of EMD.

The Director, NIPGR, reserves the right to accept or reject all or any of the bids without assigning any reasons thereof.

Purchase cum Stores Officer

TENDER DOCUMENTS

Name of Work: Supply, Installation, Testing & Commissioning of 01 no. of High Performance Computing Cluster (HPCC) at NIPGR Campus, New Delhi

Owner:	Director, NIPGR, Aruna	Asaf Ali Marg, New Delhi – 110 067
Tender Issue	d to:	
Place for sub Place of oper	mission/ ning tender document:	Purchase Section NIPGR, Aruna Asaf Ali Marg, New Delhi-110067

Last date & time for sale of Tender Documents: 02/4/2019 up to 15:00 hrs.

Date & Time of opening of Technical Bid: 03/4/2019 at 15:00 hrs.

COST OF TENDER DOCUMENT: ₹ 500.00 (Non-refundable)

Purchase cum Stores Officer NIPGR, New Delhi

TENDER FORM

To

The Director NIPGR, ARUNA ASAF ALI MARG, New Delhi

Dear Sir,

I/We have read and examined the following Tender Documents relating to the Supply, installation, testing and commissioning of High Performance Computing Cluster (HPCC) at National Institute of Plant Genome Research, Aruna Asaf Ali Marg, New Delhi 110067.

- ➤ General Conditions
- Instructions to bidders
- ➤ General Information
- > Specific condition of contract
- Terms and Conditions of Contract Agreement
- Special Terms and conditions of Contract
- Technical specification and Bill of Quantities
- Price Bid

I/We hereby offer to execute the work complete in all respects specified in the underwritten Memorandum within the time specified therein, at the rates specified in the Price Bid and in accordance with the specifications, designs, drawings and instructions in writing referred to in the conditions of tender.

GENERAL CONDITIONS

1. Online tenders are hereby invited from manufacturers/ authorized dealers for the Supply, installation, testing and commissioning of High Performance Computing Cluster (HPCC) at National Institute of Plant Genome Research, Aruna Asaf Ali Marg, New Delhi 110067.

The tender document consists of General Conditions, Instructions to bidders, General Information, Tender form, Terms and Conditions of Contract Agreement, Special Terms and conditions of Contract, Technical specification and Price Bid which can be obtained at a cost of ₹ 1,000.00 (Rs. One Thousand only) (Non-refundable) in cash from 13/3/2019 to 02/4/2019 from the Purchase-cum-Stores Officer at NIPGR, Aruna Asaf Ali Marg, New Delhi. The tender document can also be downloaded from our website: www.nipgr.ac.in **free of cost**. The tender document is obligatory on the part of the tenderers & bid in no other form will be accepted.

- 2. The time allowed for the supply, testing and commissioning of above equipment's is 12 weeks from the date of written Supply order.
- 3. Every tender shall be accompanied by earnest money of ₹ 1,50,000/- in the form of Demand Draft drawn in favour of the "Director, NIPGR" payable at New Delhi. Any tender not accompanied by such earnest money will be rejected straight away.
- 4. The Tenderer will submit his tender in prescribed format after examining the tender documents, scope of work, specific conditions of contract, Instructions to bidders, General Information, Terms and Conditions of contract agreement, technical specification, Price Bid, special terms and conditions of contract, specific conditions of contract.
- 5. The tender shall be submitted online in two parts, viz., Technical bid and Financial bid. Submission of complete tender document duly stamped and signed by tenderer with technical bid is mandatory.
- 6. The tenderer shall submit a copy of the audited balance sheets / turnover certificate of the past three financial years ending 31/3/2018.
- 7. If a tenderer whose tender is accepted fails to undertake the work as per terms of the contract within 10 days to be reckoned from the date of issue of award letter, the earnest Money deposited will be forfeited.
- 8. NIPGR does not bind itself to accept the lowest or any tender and reserves the right to reject any or all tenders without assigning any reason.
- 9. NIPGR will not pay any expense, whatsoever incurred by tenderer for the preparation and submission of tenders.
- 10. The notice inviting tender, will form part of the contract agreement to be executed by the successful tenderer with the NIPGR.
- 11. All the correspondence on the tender shall be addressed to the Director, NIPGR, Aruna Asaf Ali Marg, New Delhi and any communication addressed to anyone else shall not in any manner to be binding upon the NIPGR, Aruna Asaf Ali Marg, New Delhi.
- 12. The tenderer shall submit a copy of Authorization Letter from the manufacturer or their authorized agents along with copy of PAN/GST numbers allotted to them.

INSTRUCTIONS TO BIDDERS

1. GENERAL INSTRUCTIONS:

The items referred here-in shall cover the entire scope of the proposal which includes supplying and installation of the equipment including the successful completion and the tests which the NIPGR desires testing and commissioning shall be carried out.

2. TENDERERS TO STUDY ENTIRE TENDER DOCUMENT CAREFULLY:

Submission of a tender by a tenderer implies that he has read all the stipulations contained in this tender document and has acquainted himself of the nature, scope and specifications of the items to be followed.

3. TENDERER TO SUBMIT THE ENTIRE TENDER DOCUMENT:

The tenderer shall submit all documents issued to him for the purpose of this tender after duly filling the same in all respects. Tenders which are found to be vague or incomplete shall be rejected summarily.

4. TENDER SHALL BE WRITTEN IN ENGLISH LANGUAGE:

Every tender shall be written in English language. All information such as documents and drawings supplied by the tenderer will also be in the English language only. Drawings and designs shall be dimensioned according to the metric system of measurements. Tenders shall be forwarded under cover or a letter type written on the tenderer's letter-head and duly signed by the tenderer. Signatures must be in long hand, executed in ink by a duly authorized principal of the tendering firm. No oral, telegraphic or telephonic tenders or subsequent modifications there-to shall be entertained; If a tender is submitted on behalf of the firm, then all the partners shall sign or may be signed by one in whose favour all the partners have given General Power Of Attorney. In case of tender submitted by a company, it shall be signed by one who has been authorized by the Board of Directors through a resolution. Copy of resolution and the authority letter in favour of the person signing must accompany the tender.

5. VALIDITY PERIOD OF OFFERS:

- A. The rates quoted in the tender shall hold good for 90 days from the date of opening of the tender. No tenderer can withdraw/or modify his tender or revoke the same within the said period of 90 days. If a tenderer on his own withdraws or revokes the tender or revises or alters or modifies the tender for any item or condition within a period of aforesaid 90 days his earnest money deposit shall stand forfeited.
- B. The validity of accepted rates is extendable for a period of 180 days from the date of issue of Award Letter, with mutual consent of both the parties.

6. TENDERER TO SIGN ALL PAGES:

The tenderer shall stamp and sign at the bottom right hand corner of every page of the tender documents in token of acceptance of tender conditions and for the purpose of identification.

7. ERASERES AND ALTERATIONS:

Tenders containing erasures and alterations of the tender documents are liable to be rejected unless these are authenticated by the person signing the Tender Documents.

8. TENDERER TO SATISFY HIMSELF OF SITE CONDITIONS:

Tenderers are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tender regarding nature of the site conditions, the means of access of the site, the accommodation they may require and in general obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their tender in any manner. A tenderer shall be deemed to have full knowledge of the site, whether he inspects it or not and no compensation or otherwise of any charges incurred or to be incurred consequent on any misunderstanding or otherwise shall be admissible.

9. EARNEST MONEY:

The tender shall be accompanied by earnest money of ₹ 1,50,000/- in the form of Demand Draft only drawn in favour of the Director, NIPGR payable at New Delhi. Earnest money of the unsuccessful bidder(s) shall be refunded after expiry of the validity period of the tenders/placement of Supply Order whichever is earlier. In case of the Successful tenderer the earnest money shall be adjusted against performance security.

10. TENDERER TO QUOTE BOTH IN FIGURES AND WORDS:

The bidder shall quote their rates for all the items both in figures as well as words given as per the attached format of Price bid. The amount of each item shall be worked out and the requisite total given. Special care shall be taken to write percentage in figures and words, and the amount in figures only in such a way that interpolation is not possible. The total amount shall be written both in figures and in words.

11. TENDER LIABLE TO REJECTION:

Tenders which do not fulfill all or any of the conditions laid down in this notice, or contain conditions not covered and / or not contemplated by the Conditions of tender document and/or expressly prohibited therein or stipulate additional/alternative conditions shall be liable to be rejected and his earnest money will be forfeited.

Tenders shall also be liable for rejection on any of the following grounds:-

- i) Tenders containing remarks uncalled for.
- iii) Conditional tenders
- iv) Tenders not submitted on prescribed Performa.
- v) Telegraphic/Fax/Postal tenders.
- vi) Tender submitted without EMD.

13. CORRESPONDENCE:

Tenderers must mention their postal address and telephone number(s) of the Chief Executive/authorized agent or attorney in the tender. The tender submitted by the tenderer will be rejected if he or his agent cannot be contacted on the last known address or on the intimated telephone number(s) after reasonable search in which event earnest money may be forfeited by the NIPGR.

14. NIPGR NOT TO ASSIGN ANY REASON FOR REJECTION OF TENDER:

Director, NIPGR hold absolute discretion to accept or reject the lowest or any other tender without assigning any reason. No claim on this account shall be entertained.

15. AMENDMENT IN TENDER DOCUMENTS:

NIPGR reserves the right to revise or amend the Bid Documents upto the date prior to the date notified for opening of the tenders and also the right to postpone the date of submission and opening of tenders without assigning any reason, whatsoever.

NIPGR also reserves the right to change the quantities of the units while issuing the letter of award of work.

16. REFERENCE IN TENDER DOCUMENTS:

Director, NIPGR, shall be referred as "Owner" in all the documents of Tender documents/contract agreement.

17. SCIENTIST INCHARGE

Where ever the word "Scientist Incharge" occurs it shall mean the authorized Scientist appointed by the NIPGR for the superintendence of the execution of related works.

Tenderers Signature with Seal

Purchase cum Stores Officer

GENERAL INFORMATION

1.	Accepting Authority	Director, NIPGR, New Delhi. ₹ 1,50,000/- (Rs. One Lakh Fifty
2.	Earnest Money	Thousand only) to be furnished with the tender in the form of the Demand draft in favour of "Director, NIPGR" payable at New Delhi. (No interest is payable on this deposit)
3.	Security Deposit	The EMD submitted by successful tenderer shall be treated as part of performance security deposit.
4.	Performance Security	The successful tenderer shall be required to deposit an amount equal to 10% of the tender value of the contract as Performance Security after adjusting the Security Deposit within 10 days from the date of issue of award letter. Performance Security may be deposited in the form of Demand Draft or Bank Guarantee from State Bank of India or any Scheduled bank.
5.	Authority competent to grant extension of time	Director, NIPGR.
6.	Tools & Plants	To be arranged by Tenderer
7.	Authority competent to reduce the Compensation amount	Director, NIPGR
8.	Defect Liability/warranty period	36 months from the date of installation and acceptance by the NIPGR
9.	Authority Competent to Appoint Arbitrator	Director, NIPGR
10.	Release of Security Deposit	The Performance Security shall be released after completion of the defect liability period.

Specific Conditions of Contract

1. **Scope of work**: The scope of work generally consist of providing of High Performance Computing Cluster (HPCC) as described in the equipment specifications of the tender documents. The supplier shall carryout and complete the work under the contract in every respect in accordance with this tenders documents and under directions & to the entire satisfaction of the Scientist-In-Charge. If any item of the work to be executed is not covered under specification, the same shall be executed as decided by the Scientist-In-Charge.

It is not the intent to specify completely herein all aspect of design and constructional features of equipment and details of work to be carried out, nevertheless, the equipment and work shall confirm in all respect to high standard of engineering, design and workmanship and shall be capable of performing in continuous commercial operation in a manner acceptable to the Scientist-In-Charge, who will interpret the meaning of the specifications and drawings and shall have the right to reject or accept any work or material, which in his assessment is not complete to meet the requirements of the specifications and or applicable code, and standards mentioned elsewhere in the specifications.

- 2. **Operation & Maintenance manuals**: Prior to completion of the work and handing over the High Performance Computing Cluster (HPCC), the supplier shall submit 3 sets of following details:
 - i) Comprehensive operation instructions, preventive and routine maintenance schedules
 - ii) Manufacturer's equipment catalogues and operating & maintenance instructions
 - iii) Electrical control diagrams, piping scheme diagrams
 - iii) List of recommended spare parts with spare part codes, specifications & source of procurements.

Supplier to provide all for testing: The supplier shall provide and pay for all necessary tools, instruments gadgets and testing equipment required for conducting various tests. Any defects in material and / or in workmanship detected during initial testing shall be rectified by the supplier at his own cost. Initial testing shall be carried out in the presence of Scientist-In-Charge or his representative to his entire satisfaction. The installation shall be commissioned after approval by Scientist-In-Charge.

- 3. **Virtual completion**: On satisfactory completion of initial testing and commissioning, the installation shall be put to continuous running test for a period of 2 days for the purpose of taking over. Any defect in material and/ or in workmanship detected in the course of testing shall be rectified by the supplier at his own cost to the entire satisfaction of the Scientist-In-Charge. The test shall be repeated after removal of defects. After successful completion of above tests, the equipment shall be taken over.
- 4. **Guarantee & Defect liability period**: The equipment covered by this contract shall be guaranteed by the supplier against faulty material and workmanship for a period of 36 months from the date of virtual completion and taking over the installation. Any part found defective shall be replaced free of all costs by the supplier. The supplier shall guarantee that all equipment shall work satisfactorily and that the <u>performance and efficiency of the equipment shall not be less than the specified values</u>. If performance of equipment during guarantee period is not found satisfactory, the guarantee period will be extended till satisfactory performance is established for further period of reasonable time decided by NIPGR. The services of the supplier's personnel if

requisitioned during the defect liability period shall be made available free of any cost to NIPGR. If the defects noticed during the guarantee period are not remedial within a reasonable time and / or some equipment or system as a whole remain out of order for a total period of one month (4 weeks) (Unless or otherwise extended) NIPGR shall have the right to remedy the defects at the supplier's risk & cost without prejudice to any other rights.

- 5. **Maintenance**: During the guarantee & defect liability, the supplier shall provide at no extra cost necessary material and personal to carry out the repairs & routine maintenance of equipment. The supplier shall attend to all problems experienced in the operation of the system within a reasonable time but not more than 48 Hrs. of receiving the complaint and take corrective action immediately.
- 6. **Training of Personnel at site**: In order to enable NIPGR's staff to get acquainted with the operation and maintenance of the Equipment, the supplier at no extra cost to NIPGR shall train the departmental personnel during the period of installation, testing, commission and prior to virtual completion and taking over by NIPGR.
- 7. **Storage of materials & safe custody**: Lockable storage space, if available shall be made available to the supplier by NIPGR. However, the supplier shall be responsible for watch & ward and safe custody of his equipment and installation till they are formally taken over by NIPGR. Non-availability of lockable storage space due to any reasons shall not relieve the supplier of his contractual obligations in any way.
- 8. **Completion period**: All work of installation, testing, commissioning and handing over of the Chromatography System in accordance with this contract shall be completed within the stipulated period or within the extended time as has been allowed by the Institute.
- 9. The supplier/manufacturer should ensure timely service and calibration of machine for successful installation and satisfactory operation.

Tenderers Signature with Seal

TERMS & CONDITIONS OF CONTRCT AGREEMENT

SECURITY DEPOSIT

1. The earnest money amounting of ₹ 1,50,000/- will be treated as part of performance security deposit of the successful tenderer.

COMPENSATION CLAUSE

2. The time allowed for carrying out the work as entered in the tender shall be strictly observed by the Tenderer, and shall be reckoned from the day of the date on which the order to commence the work is given to the Tenderer. The Tenderer shall prepare and submit the details of delivery and installation for the execution of the said work within ten days of award of work for approval of the Scientist Incharge, NIPGR. The work on the contract shall be executed according to the approved schedule as aforesaid and shall throughout the stipulated period of the contract be proceeded with all due diligence (time being deemed to be the essence of the contract on the part of the Tenderer) and the Tenderer shall pay as compensation an amount equal to one percent or such smaller amount as Scientist Incharge, NIPGR may decide on the value of work as per contract, for every week that the work remains uncommenced or unfinished after the dates mutually agreed upon by the parties. Further to ensure good progress during the execution of the work, the Tenderer shall be bound in all cases in which the time allowed for any work exceeds one month to complete one fourth of the whole of the work before one fourth of the whole time allowed under the contract has elapsed, one half of work before one half of such time has elapsed and three fourth of the work before three fourth of such time has elapsed. In the event of the Tenderer failing to comply with this condition he shall be liable to pay as compensation an amount equal to one percent or such smaller amount as the Scientist Incharge, NIPGR, may decide of the value of balance work for everyday that the due quantity of work remains incomplete. Provided always that the entire amount of compensation to be paid under the provisions of this clause shall not exceed ten percent of the awarded cost of work as shown in the tender. The Director, NIPGR, on a representation from the Tenderer, is however, empowered to reduce the amount of compensation and his decision in writing shall be final.

TIME EXTENSION

3. If the Tenderer shall desire an extension of the time limit for completion of the work on the grounds of his having been unavoidably hindered in its execution or on any other ground he shall apply in writing to the Scientist Incharge, NIPGR within 10 days of the date of the hindrance on account of which he desires such extensions as aforesaid but before the expiry of time limit and the Scientist Incharge, if in his opinion(which shall be final) reasonable grounds as shown thereof ,authorized such extension of time if any, as may, in his opinion be necessary or proper.

COMPLETION

4. Without prejudice to the rights of Scientist Incharge under any clause hereinafter contained on completion of the work, the Tenderer shall be furnished with a certificate by the Scientist Incharge or his representative of such completion, but no such certificate shall be given nor shall the work be considered to be complete until the Tenderer shall have removed from the premises on which the work has been executed,

all surplus materials and rubbish, and cleaning off the dirt from all doors, walls, floors, or any other parts of buildings said to have been completed, and the measurements in the said certificate shall be binding and conclusive against the Tenderer, if the Tenderer shall fail to comply with the requirements of this clause as to the removal of scaffolding, surplus materials, and rubbish and cleaning off dirt on or before the date fixed for the completion of the work, Scientist Incharge, NIPGR may at the expense of the Tenderer have removed such scaffolding, surplus materials and rubbish and dispose of the same as he thinks fit and clean off such dirt as aforesaid and the Tenderer shall forth with pay the amount of all expenses so incurred, and shall have no claim in respect of any such scaffolding or surplus materials as aforesaid except for any such sale proceeds actually realized by the sale thereof.

ARBITRATION

Except where otherwise provided in the contract all questions and disputes relating to 5. the meaning of the specifications, designs, drawings and instructions here in before mentioned and as to the quality of workmanship or materials used on the work or as to any other question, claim, right, matter or thing whatsoever, in any arising out of or relating to the contract, designs, drawings, specifications, estimates, instructions, orders or these conditions or otherwise concerning the works, or the execution or failure to execute the same whether arising during the progress of the work or after the completion or abandonment thereof shall be referred to the sole arbitration of the person selected from out of a panel of names to be supplied upon a request in writing by party invoking the arbitration by the Director, NIPGR, at the time of the dispute. It will be no objection to any such appointment that the arbitrator so appointed was associated with the work and that he had to deal with the matters to which the contract relates and that in the course of his duties in association with the Scientist Incharge, NIPGR, he had expressed views on all or any of the matters in dispute or difference. The arbitrator to whom the matter is originally referred being unable to act for any reason, the Director shall appoint another person to act as arbitrator in accordance with the terms of the contract. Such person shall be entitled to proceed with the reference from the stage at which it was left by his predecessor. It is also a term of this contract that no person other than a person appointed by the Director as aforesaid shall act as arbitrator. In all cases where the amount of the claim in dispute is ₹ 50000/- (Rs. Fifty thousand only) or above, the arbitrator shall give reasons for the award. Subject as aforesaid the provisions of Arbitration and Cancellation Act 1996 or any statutory modifications or reenactment thereof and the rules framed there under and for the time being in force shall apply to the arbitration proceeding under this clause. It is also a term of the contract that while invoking arbitration the party invoking arbitration shall specify the dispute or disputes to be referred to arbitration under this clause together with the amount or amounts claimed in respect of each such dispute. It is also a term of the contract that if a party does not make any demand for arbitration in respect of any claim(s) in writing within 90 days of receiving the intimation from the Scientist Incharge that the bill is ready for payment, the claim if any, shall be deemed to have been waived and absolutely barred and the owner shall be discharged and released of all liabilities under the contract in respect of these claims.

CARRYING OUT OF WORK

6. All the work shall be carried out strictly and in accordance with the specifications given in the tender to the total satisfaction of the Scientist Incharge. In the case of an item for which specification are not available in the said specifications relevant BIS specifications applicable as on the date of tenders shall be followed.

INSPECTION OF WORK

7. All work under or in course of execution or executed in pursuance of the contract shall at all times be open to the inspection and supervision of Scientist Incharge, NIPGR or his subordinate in-charge of the work and the Tenderer shall at all times, during the usual working hours and at all other times at which reasonable notice of the intention of the Scientist Incharge to visit the works shall have been given to the Tenderer, either himself be present to receive order and instructions or have a responsible agent duly accredited in writing present for that purpose. Orders given to the Tenderer's agent shall be considered to have the same force as if they had been given to the Tenderer himself.

INSURANCE

- 8. The following insurance cover is to be provided by the Tenderer in the joint names of the employer and the Tenderer for the period from the start date till completion of entire work.
 - a) Cover against damage to other people's property caused by the
 - b) Tenderer's acts or omission;
 - c) Cover against death or injury caused by the Tenderer's acts or omission to:
 - i) Anyone authorized to be on the site;
 - ii) Third parties who are not on the site;
- 9. No Escalation in rates shall be paid.
- 10. The Tenderer shall provide all necessary superintendence during execution of the work and as along thereafter as may be necessary for proper fulfilling of the obligations under the contract.
- 11. The tenderer must visit the site at NIPGR campus, Aruna Asaf Ali Marg, New Delhi 110067 before quoting the rates.
- 12. Canvassing whether directly or indirectly, in connection with tenders is strictly prohibited and the tenders submitted by the Tenderers who resort to canvassing will be liable to rejection.
- 13. The rates quoted for foreign equipments shall be CIF/CIP New Delhi.
- 14. The rates for Local equipments shall be inclusive of all taxes, octroi, cartage etc., and nothing extra will be paid.
- 15. No T&P will be issued by the department.

- 16. The final payment shall be made only after completion of the work subject to certification by Scientist –in- Charge.
- 17. The site of work is at NIPGR Campus, Aruna Asaf Ali Marg, New Delhi 110067.
- 18. The **Technical specifications** of the equipments required are detailed at page 22 24 of this Tender Document.
- 19. Installation, Testing & Commissioning of the supplied equipments will be done at our site by the bidder in the presence of Scientist-in-Charge of our Institute.

Tenderers Signature with Seal

SPECIAL TERMS AND CONDITIONS OF CONTRACT

1. TENDERER TO BE LIABLE FOR ALL TAXES ETC.

The rates specified in the tender shall be CIF/CIP New Delhi/ FOR NIPGR and inclusive of all taxes, duties and other charges etc., in respect of the contract and the rates shall be firm irrespective of any variation in the prevailing rates of taxes, levies, octroi, etc., and any fresh imposition of any of these by State/Central/Statuary bodies. The supplier shall indemnify the Director against levy of any taxes, etc., in regard to this contract and in the event of the Director being assessed for any of the said imports,

Director shall have the right to recover the total amount so assessed from the supplier's dues and the supplier shall also be responsible for all costs or expenses that may be incurred by Director in connection with any proceedings or limitation in respect of the same. We are eligible for concessional tax (rate) exemption under notification no. 45/2017- Central tax (rate)/Union territory tax (rate) & 47/2017 – Integrated tax (rate) dated 14/11/2017 and fall under the category of Public funded research institution.

2. FORCE MAJEURE:

The right of the Tenderer to proceed with the work shall not be terminated because of any delay in the completion of the work due to unforeseeable causes beyond the control and without the fault or negligence of the Tenderer, including not limited to acts of God, or of the public enemy, restraints of a sovereign state, firms, floods, unusually severe weather.

3. **JURISDICTION:**

Not with standing any other courts having jurisdiction to decide the questions forming subject matter of a suit any and all actions and proceedings arising out of or relative to this contract (including any arbitration in terms thereof) shall lie only in the court of competent Civil jurisdiction in this behalf at New Delhi., where this contract is to be signed on behalf of Director, NIPGR and only the said court shall have jurisdiction to try any such actions and/or proceedings to the exclusion of all other courts.

4. SCOPE OF WORK:

The scope of work is as per enclosed details. The Tenderer should note that during the preparation of detailed working drawings, according to which the Tenderer has to execute the work covered under this contract, may undergo changes. The scope drawings for the entire work are not enclosed, but only a few indicating the probable nature of construction are attached. The scope of work is thus not limited only to the details.

5. Scientist Incharge Role:

The Scientist Incharge shall carry out general supervision and direction of the work. He/she has authority to stop the work. Whenever he/she considering such stoppage necessary to ensure the proper execution of the work. He/she shall also have authority to inspect and reject all work and materials, which do not conform to the specifications and to direct the application of Tenderer's forces to any portion of the work, as in his/her judgment is required, and to order the said force increased or diminished and to decide questions which arise in the execution of the work.

The Scientist Incharge shall have the right to suspend the work or part thereof at any time and no claim whatsoever on this account shall be entertained. In case of any

clarification the Tenderer may appeal to the Director, NIPGR whose decision shall be final and binding on the Tenderer. The above inspection shall, however, not relieve the Tenderer of his responsibilities in regards to defective materials or workmanship and the necessity for rectifying or replacing the same.

6. TENDERER'S RESPONSIBILITY FOR THE MANNER OF EXECUTION OF WORKS

The Tenderer shall be solely responsible for the manner and the method of executing the work. The work shall be subject to the approval of Scientist Incharge from time to time for purposes of determination of the question whether the work is executed by the Tenderer in accordance with the contract.

7. SUBMISSION OF BILLS:

Tenderer is to submit the bills in triplicate along with delivery challans to the Scientist Incharge for works executed by him. Payment will be released on completion of entire work subject to certification by the Scientist Incharge.

8. ACTION AND COMPENSATION PAYABLE IN CASE OF BAD WORK:

If it shall appear to Scientist Incharge, NIPGR or his representatives, that any work has been executed with unsound, imperfect or unskillful workmanship or with materials of any inferior description or that any materials or articles provided by him for the execution of the work are unsound or of a quality inferior to the contracted for, or otherwise not in accordance with the contract specifications the Tenderer shall on demand in writing from the Scientist Incharge specifying the work materials, articles complained or not with-standing that the same have been inadvertently passed, certified and paid for, forthwith rectify or remove and reconstruct the work so specified in whole or in part as the case may require, or as the case, remove the materials or articles so specified and provide other and suitable materials or articles so specified at his own cost and in the event of his failing to do so within a period to be specified by the Scientist Incharge in his demand aforesaid, then the Tenderer shall be liable to pay compensation at the rate of one percent on the amount of the estimate for every day not exceeding ten days while his failure to do so that continue and in the case of any such failure Scientist Incharge, NIPGR may rectify or remove, and re-execute the work or remove and replace with other materials or articles complained of, as the case may be at risk and expenses in all respects of the Tenderer.

9. It shall always prevail, unless otherwise specifically stated, that the entire provisions of Tender document been opened upon and accepted for compliance by the Tenderer without any reservation.

10. Exemption of Customs Duty and Excise Duty

The NIPGR is exempted from payment of Custom Duty and Excise Duty for supply of equipments etc. vide Govt. of India Notification No. 51/96 dt. 23/07/1996. Since the Customs Duty/ Excise Duty and clearance charges will be borne by the Institute, Bidders are requested to quote their rates accordingly. However it will be the responsibility of the Supplier to shift the equipment to site of work including opening of crates, transportation, loading and unloading. Nothing extra will be paid on any account.

11. Terms of payment

100% of the equipments value against irrevocable LC on receipt of order acknowledgement and Performance Guarantee/Security from Principles of supplier or their Indian Agent subject to fulfillment of condition at Sl.No. 4 under General Information. In case of the payment in Indian Rupees, payments shall be released upon successful/satisfactory installation of the equipment. The payment will be released after deduction of taxes at source as per Rules.

- **12.** Bidder should provide quotations directly enclosed from the manufacturer.
- **13.** Bidder providing misleading or wrong information will be disqualified.
- **14.** Bidder will support all the claims by product catalogue, public website of the manufacturer.
- **15.** The Tender Compliance Sheet attached with the tender document should be properly filled with complete details.

Tenderers Signature with Seal

Instructions for Online Bid Submission

- 1. The tender documents are available on our website www.nipgr.ac.in & www.eprocure.gov.in and same can be downloaded.
- 2. Tender documents may be downloaded from ITPO's website www.nipgr.ac.in and CPPP site https://eprocure.gov.in/eprocure/app as per the schedule as given in the tender document.
- 3. Bids shall submitted online **CPPP** website: be only at https://eprocure.gov.in/eprocure/app. Tenderers/Contractors are advised to follow the instructions provided in the 'Instructions to the Contractors/Tenderer for the esubmission of the bids online through the Central Public Procurement Portal for eProcurement at https://eprocure.gov.in/eprocure/app'. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
- 4. Not more than one tender shall be submitted by one contactor or contractors having business relationship. Under no circumstance will father and his son(s) or other close relations who have business relationship with one another (i.e when one or more partner(s)/director(s) are common) be allowed to tender for the same contract as separate competitors. A breach of this condition will render the tenders of both parities liable to rejection.
- 5. The bidders are advised to visit CPPP website https://eprocure.gov.in/eprocure/app at least 3 days prior to closing date of submission of tender for any corrigendum / addendum/ amendment.
- 6. Bids will be opened as per date/time as mentioned in the **Tender Document.** After online opening and evaluation of technical bids, the results of their qualification as well Price-Bid opening will be intimated later.

Submission of Tender

The tender shall be submitted online in two parts, viz., Technical bid and Financial bid.

All the pages of bid being submitted must be sequentially numbered by the bidder irrespective of nature of content of the documents before uploading.

The offers submitted by Post/Fax/email shall not be considered. No correspondence will be entertained in this matter.

The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. 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.

REGISTRATION

- 1) Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: https://eprocure.gov.in/eprocure/app) by clicking on the link "Online Bidder Enrolment" on the CPP Portal which is free of charge.
- 2) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- 3) Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
- 4) Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / nCode / eMudhra/ Nic etc.), with their profile.
- 5) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.
- 6) Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.

SEARCHING FOR TENDER DOCUMENTS

- 1) There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to search for a tender published on the CPP Portal.
- 2) Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
- 3) The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

PREPARATION OF BIDS

Bidder should take into account any corrigendum published on the tender document before submitting their bids.

1) Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.

- 2) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF/JPG formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
- 3) To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, GST Certificate etc.) has been provided to the bidders. Bidders can use "My Space" or ''Other Important Documents'' area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

SUBMISSION OF BIDS

- 1) Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- 2) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- 3) Bidder has to select the payment option as "offline" to pay the tender fee / EMD as applicable and enter details of the instrument.
- 4) Bidder should prepare the EMD as per the instructions specified in the tender document. The original should be posted/couriered/given in person to the concerned official before bid opening date/time as mentioned in critical date sheet or as specified in the tender documents. The details of the DD/any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected.
- 5) Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BoQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BoQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BoQ file is found to be modified by the bidder, the bid will be rejected.
- 6) The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- 7) All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is

maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid opener's public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.

- 8) The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 9) Upon the successful and timely submission of bids (i.e after Clicking "Freeze Bid Submission" in the portal), the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- 10) The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

ASSISTANCE TO BIDDERS

1) Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.

Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk. The contact number for the helpdesk is 1800 3070 2232, 91-7878007972 and 91-7878007973.

$\frac{Technical\ Specification\ for\ supply,\ installation\ of\ High\ Performance\ Computing\ Cluster\ (HPCC)}{(Quantity\ of\ Unit-01\ No.)}$

Feature	Minimum Specifications
Form Factor	4U or Less
Server Type	Rack server, Mountable to existing 19" Rack
Server Make	nternational OEM Make only
Processor Sockets	Maximum up to 8 sockets of Scalable Family processors
CPU	4 x Platinum 8170 26C 165W 2.1GHz with 35.75MB L3 cache
Chipset	Intel C624
Memory Capacity	2TB RAM using 64GB DDR4 DIMM - Scalability up to 6TB for 4 processors and 12 TB for 8 processors server models. Should also support memory mirroring, and memory rank sparing for redundancy in the event of a non-correctable memory failure
HDDs Bays	Minimum 12 Hdds hot-swap 2.5 inch SAS/SATA/SSD drive bays expandable to 24 bays using additional cage. At least 2 bays must support PCIe NVMe drives.
No. of HDDs	09 x 2.5 inch 2.4TB 10K SAS 12Gb Hot Swap 512e HDD and 03x1.92TB Hot swap SSD 2.5 DWPD or above
PCI-E slots	Minimum 6 PCle 3.0 expandable to 15 PCle 3.0 slots,
RAID Card	12 Gb SAS RAID adaptor with 4GB flash-backed cache, All software and utility license must be bundled for supporting RAID 0, 1, 10, 5, 50, 6, 60
FC HBA	1 x Emulex 16Gb Gen6 FC Dual-port HBA
Ethernet and other ports	4-port 1Gb RJ45 Dedicated 1Gb System management port Atleast 4 USB ports 1 VGA Port for connecting external monitor
Power supplies	Hot-swap & Redundant power supplies (80 PLUS Platinum certified) required
Fans	Hot-swap & N +1 Redundant Fans required
Systems Management HW &TPM	HW required for remote presence enablement with TPM 2.0 is required.
	Vendor to provide software for managing all the servers. S/W should provide a single view to monitor health of the components of all the servers in the network. Software should be able to manage other x86 servers. Software should manage the Patch updates, Monitor Power for servers, Monitor health and resource utilization. The server must include licensed software to monitor server availability and perform remote management. remote
	KVM and remote media files (ISO and IMG image files), boot capture, and power capping. The server management software should be of the same brand as of the server supplier.
Diagnostics	LED lights indicate failing component required for cpu, memory, hdds, power supplies & fans to send pre-failure alerts to the administrator. They should be persistent without power.
Limited Warranty	Comprehensive 3 years OEM 24x7 ONSITE warranty for hardwares
Rail kits	Must include Rail kits for mounting the server
OS Certifications	Server should be certified on latest version of Microsoft Windows, RHEL, SLES, Vmware, Linux

SAN Storage:

Feature	Storage
Storage Controller	The offered storage shall have a dual controller configuration running in an active-active mode with automatic
Storage Controller	failover capabilities, offered storage should be of the same make as the server OEM
Controller Cache Requirements	The offered storage shall have 8GB cache per controller with ability to protect data on cache. Cache should be
Controller Cache Requirements	mirrored and Battery-free cache protection with flash memory and supercapacitors
RAID	The offered storage shall have RAID 0/1, 5, 6, 10 & 50
Host Interface Ports	The offered storage shall be provided with 4 x FC 16Gb ports across the controllers along with cables to connect to
Host interface Forts	hosts
Storage Scalability	The offered storage shall be scalable to 200 LFF drives or more using additional enclosure.
	Must be licensed the following features for entire supported capacity
Storage Features and capabilities	• Real time tiering of HDD between SAS and NI -SAS disks
	Minimum pool size: 500 TB
Capacity	Minimum number of logical volumes: 500
	Minimum number of drives in a RAID drive group: 12
	Minimum global spares: 2
	Minimum number of hosts in a host group: 25
	Backend connectivity for connecting enclosures must be atleast 12Gb SAS
Management	The offered storage shall have easy to use GUI based and web enabled administration interface for configuration,
ivianagement	storage management using dedicated 1 Gb Ethernet Port
	The offered storage shall support fully redundant & hot-swappable fans & power supplies.
Built in Redundancy	There shall be support for non-disruptive microcode update & non-disruptive parts replacement.
built in Redundancy	The storage must be bundled with automated path failover for the data path between the host and the drives with
	multipathing software for the entire supported capacity.
Power Supplies	The storage systems must be configured with redundant power supplies.
Form Factor	2U rack-mount with rail-kit and other required accessories Main unit. Mountable in 19" existing rack.
OS Compatibility	Must support Hosts with the latest version of Microsoft Windows, RHEL, SLES, Vmware
Warranty	Comprehensive 3 years OEM 24x7 ONSITE warranty for hardwares

Services – Scope of work

- 1. Install the hardware in existing 19" rack

- install the hardware in existing 19 Tack
 install open source Linux OS on Server
 Configure the storage and capacities and provisions the LUN to the server as per NIPGR staff guidance.
 Configure the Management layer and demonstrate at least 2 persons about how to use the functions and feature available.

- Configure and compile as per Canu and other Bioinformatics tools.
 Install and configure necessary opensource compiler tools
 Configure the management accessibility to OEM support center for pre-failure alerts.

Mandatory Clause	Compliance Yes/No	Remarks
All parts of server and storage to be supplied by Single Original Equipment Manufacturer (OEM). The system offered should maintain Binary compatibility across the entire range. Bids must contain OEM Part No, Part No. will be checked with the OEM after supply & if necessary a certificate has to be furnished on OEM letter head. All hardware warranty and support should be directly from the OEM.		
The entire server, storage and compute nodes must be factory integrated, tested, validated and certified in the OEM site. No on-site or local assembling of the system at NIPGR site is allowed. Only rack-mounting, OS and application installation is allowed on-site.		
Bidder should be either an OEM or should be authorized System Integrator. Manufacturer's Authorization Form (MAF) for participating in this tender is mandatory for bidders and should be attached along with technical bid. The Bidder participating in the tender process should give the MAF the bidder's authorization to participate in the tender with tender number and details.		
All the hardware and software deployment will be in OEMs/bidder scope of work and OEM/bidder need to install open source software required by the end user at the time of deployment.		
Comprehensive 3 years OEM 24x7 ONSITE warranty for hardwares. The complete proposed solution must have all encompassing comprehensive onsite replacement warranty of 3 years duration which includes hardware, firmware and updates, etc.		
Bidder must have back to back warranty and support directly from the OEM. NIPGR requires that there be a Single Point of Contact (SPOC) from OEM/bidder who is responsible for all issues between NIPGR and the OEM/Bidder.		
The entire solution should be factory integrated at the OEM site and certified by the competent authority of the bidding OEM. Barebone/ assembled servers and solutions are not allowed.		
The bidder should have a local service center / service provider in NCR. OEM should have a registered office with local service center and warehouse in India. Documentary proofs should be enclosed.		
The OEM must have an India based support infrastructure by maintaining a local spares warehouse in the country. This is to ensure immediate delivery of spare parts from OEM to its channel partner/system integrator.		
Products offered should have official OEM support for next five years from the date of acceptance of installation.		
Technical pre-qualification criteria		
The OEM should have the minimum experience in server computing in Indian Market since last 5 years with logistics facility in India for easy access and availability of spares and to ensure the proper back-end support for smooth execution and post-sale support operations. Documentary proofs should be attached.		
All quotations submitted must follow the prescribed format for technical compliance. Failure to do will result in the quotation being summarily rejected.		
One bidder can propose only one technical solution and the price bid for the same should be submitted. Quoting of multiple technical solutions with multiple price bids will result in the quotation being summarily rejected.		
Compliance: ROHS/WEEE/ CSAc/us, FCC Class A, CE, CB		

TECHNICAL BID

NAME OF WORK:

Supply, Installation, Testing & Commissioning of High Performance Computing Cluster (HPCC) at NIPGR Campus, New Delhi

Tender No. 8/55/2018-19/NIPGR/S&P

Description		Qt. Req.	Rate p Unit	perRate inRate INR, FORFore Institute Cur CIF, New
Feature	Minimum Specifications			- 1
Form Factor	4U or Less			
Server Type	Rack server, Mountable to existing 19" Rack			
Server Make	International OEM Make only			
Processor Sockets	Maximum up to 8 sockets of Scalable Family processors			
CPU Chipset	4 x Platinum 8170 26C 165W 2.1GHz with 35.75MB L3 cache Intel C624			
Memory Capacity	2TB RAM using 64GB DDR4 DIMM - Scalability up to 6TB for 4 processors and 12 TB for 8 processors server models. Should also support memory mirroring, and memory rank sparing for redundancy in the event of a non-correctable memory failure			
HDDs Bays	Minimum 12 Hdds hot-swap 2.5 inch SAS/SATA/SSD drive bays expandable to 24 bays using additional cage. At least 2 bays must support PCIe NVMe drives.		I	Rates not be quoted
No. of HDDs	09 x 2.5 inch 2.4TB 10K SAS 12Gb Hot Swap 512e HDD and 03x1.92TB Hot swap SSD 2.5 DWPD or above			
PCI-E slots	Minimum 6 PCle 3.0 expandable to 15 PCle 3.0 slots,			
RAID Card	12 Gb SAS RAID adaptor with 4GB flash-backed cache, All software and utility license must be bundled for supporting RAID 0, 1, 10, 5, 50, 6, 60			
FC HBA	1 x Emulex 16Gb Gen6 FC Dual-port HBA			
Ethernet and other ports	4-port 1Gb RJ45 Dedicated 1Gb System management port Atleast 4 USB ports 1 VGA Port for connecting external monitor			
Power supplies	Hot-swap & Redundant power supplies (80 PLUS Platinum certified) required			
Fans	Hot-swap & N +1 Redundant Fans required			
Systems Management HW &TPM	HW required for remote presence enablement with TPM 2.0 is required.			
Systems	Vendor to provide software for managing all the servers.			
Management SW	S/W should provide a single view to monitor health of the components of all the servers in the network. Software should be able to manage other x86			
	servers. Software should manage the Patch updates, Monitor Power for servers, Monitor health and resource utilization.			
	The server must include licensed software to monitor server availability and perform remote management. remote KVM and remote media files (ISO and IMG image files), boot capture, and power capping.			
	The server management software should be of the same brand as of the server supplier.			
Diagnostics	LED lights indicate failing component required for cpu, memory, hdds, power supplies & fans to send pre-failure alerts to the administrator. They should be persistent without power.			
Limited Warranty	Comprehensive 3 years OEM 24x7 ONSITE warranty for hardwares			
Rail kits	Must include Rail kits for mounting the server			
OS Certifications	Server should be certified on latest version of Microsoft Windows, RHEL, SLES, Vmware, Linux			
SAN Storage: Feature	Storage			
. cature	The offered storage shall have a dual controller configuration running in an active-			
Storage Controller	The state of the s			

Controller Cache	The offered storage shall have 8GB cache per controller with ability to protect data on	
Requirements	cache. Cache should be mirrored and Battery-free cache protection with flash memory	
Requirements	and supercapacitors	
RAID	The offered storage shall have RAID 0/1, 5, 6, 10 & 50	
Host Interface	The offered storage shall be provided with 4 x FC 16Gb ports across the controllers	
Ports	along with cables to connect to hosts	
Storage Scalability	The offered storage shall be scalable to 200 LFF drives or more using additional enclosure.	
Storage Features and capabilities	Must be licensed the following features for entire supported capacity Real time tiering of HDD between SAS and NL-SAS disks Thin provisioning 100 or more snapshot per system	
	100 TB useable capacity using 8TB 7.2K 3.5" NL-SAS dual-port and hot-swappable HDD drives configured in RAID 5 with 1 additional global hot-spare. Additional enclosures may be provided for the above capacity. The storage system should also support the following Per system:	
	Minimum pool size: 500 TB	
Capacity	 Minimum number of logical volumes: 500 	
	 Minimum number of drives in a RAID drive group: 12 	
	Minimum global spares: 2	
	 Minimum number of hosts in a host group: 25 	
	Backend connectivity for connecting enclosures must be atleast 12Gb SAS	
Management	The offered storage shall have easy to use GUI based and web enabled administration interface for configuration, storage management using dedicated 1 Gb Ethernet Port	
Built in Redundancy	The offered storage shall support fully redundant & hot-swappable fans & power supplies. There shall be support for non-disruptive microcode update & non-disruptive parts replacement. The storage must be bundled with automated path failover for the data path between the host and the drives with multipathing software for the entire supported capacity.	
Power Supplies	The storage systems must be configured with redundant power supplies.	
Form Factor	2U rack-mount with rail-kit and other required accessories Main unit. Mountable in 19" existing rack.	
OS Compatibility	Must support Hosts with the latest version of Microsoft Windows, RHEL,SLES,Vmware	
Warranty	Comprehensive 3 years OEM 24x7 ONSITE warranty for hardwares	
	<u> </u>	+

Services – Scope of work

- 8. Install the hardware in existing 19" rack
- 9. install open source Linux OS on Server
- 10. Configure the storage and capacities and provisions the LUN to the server as per NIPGR staff guidance.
- Configure the Management layer and demonstrate at least 2 persons about how to use the functions and feature available.
- Configure and compile as per Canu and other Bioinformatics tools.
- 13. Install and configure necessary opensource compiler tools
- 14. Configure the management accessibility to OEM support center for pre-failure alerts.

Mandatory Clause

All parts of server and storage to be supplied by Single Original Equipment Manufacturer (OEM). The system offered should maintain Binary compatibility across the entire range.

Bids must contain OEM Part No, Part No. will be checked with the OEM after supply & if necessary a certificate has to be furnished on OEM letter head. All hardware warranty and support should be directly from the OEM.

The entire server, storage and compute nodes must be factory integrated, tested, validated and certified in the OEM site. No on-site or local assembling of the system at NIPGR site is allowed. Only rack-mounting, OS and application installation is allowed on-site.

Bidder should be either an OEM or should be authorized System Integrator. Manufacturer's Authorization Form (MAF) for participating in this tender is mandatory for bidders and should be attached along with technical bid. The Bidder participating in the tender process should give the MAF the bidder's authorization to participate in the tender with tender number and details.

All the hardware and software deployment will be in OEMs/bidder scope of work and OEM/bidder need to install open source software required by the end user at the time of deployment.

Comprehensive 3 years OEM 24x7 ONSITE warranty for hardwares. The complete proposed solution must have all encompassing comprehensive onsite replacement warranty of 3 years duration which includes hardware, firmware and updates, etc.

Bidder must have back to back warranty and support directly from the OEM. NIPGR requires that there be a Single Point of Contact (SPOC) from OEM/bidder who is responsible for all issues between NIPGR and the OEM/Bidder.

The entire solution should be factory integrated at the OEM site and certified by the competent authority of the bidding OEM. Barebone/ assembled servers and solutions are not allowed.

The bidder should have a local service center / service provider in NCR. OEM should have a registered office with local service center and warehouse in India. Documentary proofs should be enclosed.

The OEM must have an India based support infrastructure by maintaining a local spares warehouse in the country. This is to ensure immediate delivery of spare parts from OEM to its channel partner/system integrator.

Products offered should have official OEM support for next five years from the date of acceptance of installation.

The OEM should have the minimum experience in server computing in Indian Market since last 5 years with logistics acility in India for easy access and availability of spares and to ensure the proper back-end support for smooth execution and post-sale support operations. Documentary proofs should be attached.		
All quotations submitted must follow the prescribed format for technical compliance. Failure to do will result in the quotation being summarily rejected.		
One bidder can propose only one technical solution and the price bid for the same should be submitted. Quoting of multiple technical solutions with multiple price bids will result in the quotation being summarily rejected.		
Compliance: ROHS/WEEE/ CSAc/us, FCC Class A, CE, CB	Ħ	

Name & Signature of Tenderers/ Company with Seal

PRICE BID

NAME OF WORK:

Supply, Installation, Testing & Commissioning of High Performance Computing Cluster (HPCC) at NIPGR Campus, New Delhi

Tender No. 8/55/2018-19/NIPGR/S&P

Description		Qt. Req.	Rate pe Unit	rRate i INR, FO Institute	in Rate RForeigr Curren CIF/CI New Do
Feature	Minimum Specifications				I
Form Factor	4U or Less				
Server Type	Rack server, Mountable to existing 19" Rack				
Server Make	International OEM Make only				
Processor Sockets	Maximum up to 8 sockets of Scalable Family processors				
CPU	4 x Platinum 8170 26C 165W 2.1GHz with 35.75MB L3 cache				
Chipset	Intel C624				
Memory Capacity	2TB RAM using 64GB DDR4 DIMM - Scalability up to 6TB for 4 processors and 12 TB for 8 processors server models. Should also support memory mirroring, and memory rank sparing for redundancy in the event of a non-correctable memory failure				
HDDs Bays	Minimum 12 Hdds hot-swap 2.5 inch SAS/SATA/SSD drive bays expandable to 24 bays using additional cage. At least 2 bays must support PCIe NVMe drives.				
No. of HDDs	09 x 2.5 inch 2.4TB 10K SAS 12Gb Hot Swap 512e HDD and 03x1.92TB Hot swap SSD 2.5 DWPD or above				
PCI-E slots	Minimum 6 PCle 3.0 expandable to 15 PCle 3.0 slots,				
RAID Card	12 Gb SAS RAID adaptor with 4GB flash-backed cache, All software and utility license must be bundled for supporting RAID 0, 1, 10, 5, 50, 6, 60				
FC HBA	1 x Emulex 16Gb Gen6 FC Dual-port HBA				
Ethernet and other ports	4-port 1Gb RJ45 Dedicated 1Gb System management port Atleast 4 USB ports				
Power supplies	1 VGA Port for connecting external monitor Hot-swap & Redundant power supplies (80 PLUS Platinum certified) required				
Fans	Hot-swap & N +1 Redundant Fans required				
Systems Management HW &TPM	HW required for remote presence enablement with TPM 2.0 is required.				
Systems Management SW	Vendor to provide software for managing all the servers. S/W should provide a single view to monitor health of the components of all the servers in the network. Software should be able to manage other x86				
	servers. Software should manage the Patch updates, Monitor Power for servers, Monitor health and resource utilization.				
	The server must include licensed software to monitor server availability and perform remote management. remote KVM and remote media files (ISO and IMG image files), boot capture, and power capping.				
	The server management software should be of the same brand as of the server supplier.				
Diagnostics	LED lights indicate failing component required for cpu, memory, hdds, power supplies & fans to send pre-failure alerts to the administrator. They should be persistent without power.				
Limited Warranty	Comprehensive 3 years OEM 24x7 ONSITE warranty for hardwares				
Rail kits	Must include Rail kits for mounting the server				
OS Certifications	Server should be certified on latest version of Microsoft Windows, RHEL, SLES, Vmware, Linux				
SAN Storage:	Characa	_			
Feature Storage Controller	Storage The offered storage shall have a dual controller configuration running in an active- active mode with automatic failover capabilities, offered storage should be of the	-			

Controller Cache	The offered storage shall have 8GB cache per controller with ability to protect data on	
Requirements	cache. Cache should be mirrored and Battery-free cache protection with flash memory	
Requirements	and supercapacitors	
RAID	The offered storage shall have RAID 0/1, 5, 6, 10 & 50	
Host Interface	The offered storage shall be provided with 4 x FC 16Gb ports across the controllers	
Ports	along with cables to connect to hosts	
	The offered storage shall be scalable to 200 LFF drives or more using additional	
Storage Scalability	enclosure.	
	Must be licensed the following features for entire supported capacity	
Storage Features	 Real time tiering of HDD between SAS and NL-SAS disks 	
and capabilities	Thin provisioning	
	100 or more snapshot per system	
	100 TB useable capacity using 8TB 7.2K 3.5" NL-SAS dual-port and hot-swappable HDD	
	drives configured in RAID 5 with 1 additional global hot-spare.	
	Additional enclosures may be provided for the above capacity.	
	The storage system should also support the following Per system:	
	Minimum pool size: 500 TB	
Capacity	 Minimum number of logical volumes: 500 	
	 Minimum number of drives in a RAID drive group: 12 	
	Minimum global spares: 2	
	 Minimum number of hosts in a host group: 25 	
	 Backend connectivity for connecting enclosures must be atleast 12Gb SAS 	
Management	The offered storage shall have easy to use GUI based and web enabled administration	
	interface for configuration, storage management using dedicated 1 Gb Ethernet Port	
	The offered storage shall support fully redundant & hot-swappable fans & power	
	supplies.	
Built in Redundancy	There shall be support for non-disruptive microcode update & non-disruptive parts	
,	replacement.	
	The storage must be bundled with automated path failover for the data path between	
Power Supplies	the host and the drives with multipathing software for the entire supported capacity.	-
rower supplies	The storage systems must be configured with redundant power supplies. 2U rack-mount with rail-kit and other required accessories Main unit. Mountable in	-
Form Factor	20 rack-mount with rail-kit and other required accessories Main unit. Mountable in 19" existing rack.	
OS Compatibility	Must support Hosts with the latest version of Microsoft Windows, RHEL,SLES,Vmware	
Warranty	Comprehensive 3 years OEM 24x7 ONSITE warranty for hardwares	
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Services – Scope of work

- 1. Install the hardware in existing 19" rack
- 2. install open source Linux OS on Server
- Configure the storage and capacities and provisions the LUN to the server as per NIPGR staff guidance.
- Configure the Management layer and demonstrate at least 2 persons about how to use the functions and feature available.
- Configure and compile as per Canu and other Bioinformatics tools.
- 6. Install and configure necessary opensource compiler tools
- 7. Configure the management accessibility to OEM support center for pre-failure alerts.

Mandatory Clause

All parts of server and storage to be supplied by Single Original Equipment Manufacturer (OEM). The system offered should maintain Binary compatibility across the entire range.

Bids must contain OEM Part No, Part No. will be checked with the OEM after supply & if necessary a certificate has to be furnished on OEM letter head. All hardware warranty and support should be directly from the OEM.

The entire server, storage and compute nodes must be factory integrated, tested, validated and certified in the OEM site. No on-site or local assembling of the system at NIPGR site is allowed. Only rack-mounting, OS and application installation is allowed on-site.

Bidder should be either an OEM or should be authorized System Integrator. Manufacturer's Authorization Form (MAF) for participating in this tender is mandatory for bidders and should be attached along with technical bid. The Bidder participating in the tender process should give the MAF the bidder's authorization to participate in the tender with tender number and details.

All the hardware and software deployment will be in OEMs/bidder scope of work and OEM/bidder need to install open source software required by the end user at the time of deployment.

Comprehensive 3 years OEM 24x7 ONSITE warranty for hardwares. The complete proposed solution must have all encompassing comprehensive onsite replacement warranty of 3 years duration which includes hardware, firmware and updates, etc.

Bidder must have back to back warranty and support directly from the OEM. NIPGR requires that there be a Single Point of Contact (SPOC) from OEM/bidder who is responsible for all issues between NIPGR and the OEM/Bidder.

The entire solution should be factory integrated at the OEM site and certified by the competent authority of the bidding OEM. Barebone/ assembled servers and solutions are not allowed.

The bidder should have a local service center / service provider in NCR. OEM should have a registered office with local service center and warehouse in India. Documentary proofs should be enclosed.

The OEM must have an India based support infrastructure by maintaining a local spares warehouse in the country. This is to ensure immediate delivery of spare parts from OEM to its channel partner/system integrator.

Products offered should have official OEM support for next five years from the date of acceptance of installation.

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All quotations submitted must follow the prescribed format for technical compliance. Failure to do will result in the quotation being summarily rejected.		
One bidder can propose only one technical solution and the price bid for the same should be submitted. Quoting of multiple technical solutions with multiple price bids will result in the quotation being summarily rejected.		
Compliance: ROHS/WEEE/ CSAc/us, FCC Class A, CE, CB		

Name & Signature of Tenderers/ Company with Seal