

**Purchase of All Flash NvME for GSDC**

**Additional Eligibility Evaluation Criteria:**

<b>S/N</b>	<b>Eligibility Criteria</b>	<b>Attachments</b>
1.	<p>The bidder would be a company registered/incorporated under Indian company Act. and must have 5 years of existence in India.</p> <p align="center"><b>AND</b></p> <p>Bidder should be an established IT System Integrator and should have been engaged in similar IT projects/solutions business for a period of at least five years as on the bid issuance date.</p>	<p>Copy of certificate of Incorporation, PAN and GST registration Certificate.</p> <p>Work Orders / Client Certificates confirming year and area of activity should be enclosed.</p>
2.	<p>The bidder should have a total sum of turnover of Rs. 20 Crore (Minimum) in the last three financial years as on 31<sup>st</sup> March 2021.</p>	<p>The copies of Audited Annual Accounts/Balance Sheet along with Profit &amp; Loss Account and CA Certified Statement for last three financial years as on 31<sup>st</sup> March 2021 shall be attached along with the bid.</p>
3.	<p>The OEM of the proposed product should have a total sum of turnover of Rs. 100 Crore (Minimum) in the last three financial years as on 31<sup>st</sup> March 2021.</p>	<p>The copies of Audited Annual Accounts/Balance Sheet along with Profit &amp; Loss Account and CA Certified Statement for last three financial years as on 31<sup>st</sup> March 2021 shall be attached along with the bid.</p>
4.	<p>The Bidder or its OEM {themselves or through re-seller(s)} should have supplied same or similar Category Products for same size of bid requirement, in at least one of the last three Financial years before the bid opening date to any Central / State Govt Organization / PSU / Public Listed Company. Copies of relevant contracts (proving supply of cumulative order quantity in any one financial year) to be submitted along with bid in support of quantity supplied in the relevant Financial year. In case of bunch bids, the category related to primary product having highest bid value should meet this criterion.</p>	<p>Details of such projects undertaken along with work order/purchase order copy/clients' on-going or completion certification/letter signed by authorized signatory or company secretary with the details w.r.t to the clause should be enclosed.</p>
5.	<p>The bidder should be authorized by its OEM to quote this bid for the authenticity, authorized representation and after sales support. The bidder should have a back-to-back support agreement/arrangement for services including supply of spare parts with providing Next Business Day (NBD) support etc. with the Original Equipment Manufacturer (OEMs).</p>	<p>Please upload the copy of Authorization on OEM letterhead and signed by authorized signatory for the item(s) to be offered in this bid</p>
6.	<p>Bidder and OEM should not be blacklisted by any Ministry of Government of India or by any State Government of India or any of the Government PSUs at the time of bidding.</p>	<p>Self-Declaration/Certificate/affidavit mentioning that the Bidder is not blacklisted as per the clause.</p>
7.	<p>The Bidder should have at least one office in Gujarat If the Bidder is not having any office in Gujarat, then bidder should submit a letter of undertaking to open the office in Gujarat within 45 days from the date of award.</p>	<p>The copy of Property tax bill/Electricity Bill/Telephone Bill/GST/CST should be enclosed. Registration/Lease agreement should be submitted as proof Or Undertaking Letter should be enclosed.</p>

**Scope of work:**

1. The scope is to supply 1 PB All Flash NVME Storage, install, configure, test and commission the required hardware, software (including all active and passive components and sub-components) and necessary licenses, if any along with the 5 years of Comprehensive warranty and OEM Support at GSDC.
2. The licenses should be in the name of Department of Science and Technology, Government of Gujarat valid perpetual for life.
3. The OEM support credentials should be in the name of DST/GIL and handed over to GSDC/DST/GIL.
4. The bidder is responsible for physical connectivity of the proposed solution. The required ports on switch for such connectivity will be provided.
5. The supplied solution should be compatible with Object storage i.e. solution should support NAS, SAN, Object storage support S3 for private/public cloud.
6. The Bidder shall configure the proposed solution in such a way that it should comply with all the policies of the Gujarat State Data Centre.
7. The bidder is required to submit the certification from the OEM of the proposed solution confirming successful implementation, testing, commissioning and satisfactory deployment of the proposed solution based on the industry best practices as a part of FAT.
8. The bidder shall have to provide various documents like technical document of delivered product, Standard Operating Procedures Templates, Troubleshooting guide, "How-To" knowledge base, Escalation matrix etc.
9. Successful bidder in coordination with the representatives from the TENDERER/GIL is required to conduct FAT of the solution.
10. The successful bidder shall be responsible for obtaining installation, commissioning and FAT certificate (Sign-off) on completion of the work as per the scope of work, functional and technical requirements. The installation, commissioning and migration shall be carried out by the OEM.
11. The Successful bidder shall be responsible for rectification of discrepancies identified by the TPA/any other authorized representative while conducting FAT. Further on rectification of all the discrepancies identified during the FAT, TENDERER/GIL representative will re-conduct the FAT or if agreed FAT will be signed.
12. After FAT, successful bidder has to handover to existing Data Center Operator for O&M.
13. The details of the currently available storages at Gujarat State Data Center (GSDC) and to be considered in the scope.

OEM	Model	Capacity Usable (TB)
EMC	VMAX 200K	584
NetApp	FAS8200	1500
HP	HP MSA 2040	72
Dell	SC 8000	21.83
HP	3 PAR Store Serv 7400	25

14. The bidder should be authorized by its OEM to quote this bid for the authenticity, authorized representation and after sales support. The maximum response time to attend any onsite call should not exceed 4 hours from the initial call to the response center. The bidder is required to arrange back-to-back support agreement/arrangement for services including supply of spare parts with 24 hours repair/replacement time commitment.
15. The offered products should not be declared by OEM "end-of-sale and end-of-support" for at least 7 years from the date of FAT sign off. The OEM is required to submit the undertaking for the same on their letter pad.
16. **Warranty Support:** As part of the warranty services bidder shall provide:
  - 1.1. Bidder shall provide a comprehensive on-site free warranty for 5 years from the date of FAT for proposed solution.
  - 1.2. Bidder shall also obtain the five year OEM premium support (ATS/AMC) on all licensed software, hardware and other equipment for providing OEM support during the warranty period.

- 1.3. Bidder shall provide the comprehensive manufacturer's warranty and support in respect of proper design, quality and workmanship of all hardware, equipment, accessories etc. covered by the bid. Bidder must warrant all hardware, equipment, accessories, spare parts, software etc. procured and implemented as per this bid against any manufacturing defects during the warranty period.
- 1.4. Bidder shall provide the performance warranty in respect of performance of the installed hardware and software to meet the performance requirements and service levels in the bid.
- 1.5. Bidder is responsible for sizing and procuring the necessary hardware and software licenses as per the performance requirements provided in the bid. During the warranty period bidder, shall replace or augment or procure higher-level new equipment or additional licenses at no additional cost in case the procured hardware or software is not adequate to meet the service levels.
- 1.6. Mean Time between Failures (MTBF): If during contract period, any equipment has a hardware failure on four or more occasions in a period of less than three months, it shall be replaced by equivalent or higher-level new equipment by the bidder at no cost. For any delay in making available the replacement and repaired equipment's for inspection, delivery of equipment's or for commissioning of the systems or for acceptance tests / checks on per site basis, DST/GIL reserves the right to charge a penalty.
- 1.7. During the warranty period bidder, shall maintain the systems and repair / replace at the installed site, at no charge, all defective components that are brought to the bidder notice.
- 1.8. The bidder shall as far as possible repair/ replace the equipment at site.
- 1.9. Warranty should not become void, if DST/GIL buys, any other supplemental hardware from a third party and installs it within these machines under intimation to the bidder. However, the warranty will not apply to such supplemental hardware items installed.
- 1.10. The bidder shall carry out **quarterly** Preventive Maintenance (PM), including cleaning of interior and exterior, of all hardware **and testing for virus**, if any, and should maintain proper records at each site for such PM. Failure to carry out such PM will be a breach of warranty and the warranty period will be extended by the period of delay in PM.
- 1.11. Bidder shall monitor warranties to check adherence to preventive and repair maintenance terms and conditions.
- 1.12. Bidder shall ensure that the warranty complies with the agreed Technical Standards, Security Requirements, Operating Procedures, and Recovery Procedures.
- 1.13. Bidder shall have to stock and provide adequate onsite and offsite spare parts and spare component to ensure that the uptime commitment as per SLA is met.
- 1.14. Any component that is reported to be down on a given date should be either fully repaired or replaced by temporary substitute (of equivalent configuration) within the time frame indicated in the Service Level Agreement (SLA).
- 1.15. Bidder shall develop and maintain an inventory database to include the registered hardware warranties.
- 1.16. To provide warranty support effectively, OEM should have spare depo in India and will be ask to deliver spare as per SLA requirement.
- 1.17. **After completion of 5 years warranty/ CAMC period, if required, DST/GIL may extend the warranty/CAMC support for further period of 2 years (6<sup>th</sup> year and 7<sup>th</sup> year) on the derived rates of average cost of 5 years CAMC cost quoted. Bidder is required to provide the undertaking for the same mentioning that they will provide 6<sup>th</sup> year and 7<sup>th</sup> year warranty/ CAMC support.**

## Minimum Specification for All Flash NVME Storage: (1 Qty.)

Sr. #	Specifications
1.	Bidder to provide separate storage of usable capacity of 1 PB along with necessary rack, other related accessories, software & license required and installation of storage at GSDC.
2.	Solution should symmetric active-active multi-controller scale-up and scale-out architecture. <del>The proposed solution should support Block, File (NFS, CIFS/SMB3) data services natively or with add-on NAS header / gateway / appliance.</del> <del>NAS header should be in HA mode, subject to non-interruption of services</del> The proposed solution should be with No Single Point of Failure (NSPOF). All the components should be redundant and hot swappable including power supply, fans, batteries, backplane etc. Should support non-disruptive replacement of failed/damaged hardware components & Firmware without any controller reboot (except OEM release note suggestions).
3.	The solution should be based on end-to-end NVMe architecture, which is NVMe over Fabric for front-end connectivity and also be configured with latest dual ported native NVMe Flash drives, for 100 micro second latency. It should support SCM (Storage Class memory) <del>It should also support SCM (Storage Class Memory)</del>
4.	Usable Capacity - 1 PB <del>each</del> (without considering de-dup, compression) <del>and scalable upto usable 2 PB.</del>
5.	The solution should be provided with minimum of 4 controllers. Expandable upto at <del>least 8</del> controller. The controller should function such that the entire load of the solution is spread across all the controllers. However, in case of failure of any controller(s), the remaining working controller(s) should be able to cater to entire load of the solution and should not lead to decrease in Read and write performance.
6.	Each storage Controller should be supplied with min 512 GB Cache and solution's total cache should be minimum 4 TB and expandable up to 6 TB of Cache, which should be available to all LUNs /Devices across all controller as a single unit <del>across all controllers as a single unit.</del> Cache should be dynamically used for Read and Write operations. Mirrored cache, Vault to disk <del>Vault to disk</del> , to prevent data in the event of power failure.
7.	Storage array cache shall be globally shared and mirrored across controllers that are in different controller pairs, and not just across controllers within the same pair at all times (during normal operations & during any controller failures)
8.	Disk Drives - Dual ported NVME SSD drive. <del>if compatible with SAS and NL-SAS, it is preferable.</del>
9.	Each drive Capacity - Max 15.36 TB
10.	Raid Level - 5/6 or equivalent Group of Raid may limited to 10
11.	Min. Hot spare drive - 10 disk or as per best practices 1 drive per 30 capacity drive.
12.	Speed of Dual Ported Disk Drive - - PCI Gen3 NVMe or higher
13.	IOPs per second - Minimum Aggregate front-end IOPS of proposed array (8K I/O Block size, Read/Write ratio of 70:30) > 6,00,000 Random r/w
14.	Front end port - FC port - 64 x 32 Gbps speed, iSCSI port - 16 x 10 gbs speed and should also support 8 number of 10 Gb ports capable of remote replication to DR site
15.	Type of backend port - PCI Gen3 NVMe or higher
16.	Remote Replication Ethernet ports - 08 ports 10/25 G
17.	No. of snapshot per volume - Min 200 , performance for solution should not be impacted during snapshot process.
18.	Number of Volume / LUN Supported for Remote Replications - 6000
19.	Solution should support 3 Site replication and for zero data loss required licenses should be supply

20.	Solution should having De-Duplication functionality min 2.5 x, Inline, hardware assisted data reduction so that there is no performance impact. It should be possible to enable or disable data reduction functionality on volumes for specific applications or group of volumes as and when required.
21.	Solution should having RESTful API for integration with third party tool & management
22.	Solution should support all existing versions of all Operating System. Defective HDD will not be given back to OEM/SI.
23.	Solution should provide a Web and Mobile App based interface of Management software with Dashboard with minimum features of: <ol style="list-style-type: none"> <li>1. A single command console for entire storage system.</li> <li>2. The Solution should allow role-based access for auditing, monitoring and other general operations and administration capabilities through GUI/CLI</li> <li>3. System status i.e. CPU, Memory, Disks, Network resources, Display total, allocated and utilized capacity, performance, throughput, storage utilization, Hardware details like disk, controllers, overall status of compaction of data, System Audit Log,</li> <li>4. Should generate Alert, Notification</li> <li>5. Reports – Scheduled or Manual</li> <li>6. Historical logs of storage performance utilization for at least one quarter</li> </ol>
24.	Proposed storage should be designed to store and retrieve data without any possibility of silent data corruption, it should comply to T10-DIF (Data Integrity Field) standards or equivalent data protection standard. Data movement within the array from Front-End module to Cache to backend to Flash/NVMe drives be protected with T10-DIF or equivalent data protection standard.
25.	The proposed solution should also support creation of secure snapshots/volume to protect against intentional or accidental deletion. It should be possible to define a retention period for such snapshots during creation. It should be possible to automatically delete such snapshots, but only on expiry of the retention period.
26.	Application aware snapshot (normal) - Oracle, SAP etc
27.	Data Migration from Existing Storage to new Storage
28.	After FAT, Bidder has to handover storage solution to existing Data Center Operator for O&M

**Uptime:** It is required to maintain uptime of 99.741% in line with the existing GSDC uptime. Further, bidder is responsible for providing comprehensive warranty and support (24x7x365) for the period of five years from the date of successful completion FAT.

**MIS Reports:**

#	Types of Reports	Periodicity
1	<ul style="list-style-type: none"> <li>• System performance report, which includes CPU, memory, Cache, disks, etc.</li> <li>• All type of event reports</li> <li>• SLA Compliance report</li> <li>• Reports as directed by the State for SLA calculation</li> <li>• Summary of system reboot</li> <li>• Summary of issues / complaints logged with the OEMs.</li> <li>• Patch update status as notified by the OEM</li> </ul>	Weekly, Monthly, Quarterly
2	<ul style="list-style-type: none"> <li>• Log of preventive / scheduled maintenance undertaken</li> <li>• Details of Patch, updates, Vulnerability fixes released and implementation status of same</li> <li>• Details of break-fix maintenance undertaken</li> </ul>	Monthly, Quarterly

**SERVICE LEVEL AGREEMENT:**

#	Target	Penalty
1	Priority Level 1 Incident - Within 1 hr. Priority Level 2 Incident - Within 6 hr. Priority Level 3 Incident - Within 12 hr.	<ul style="list-style-type: none"> <li>• Level 1 Incident 0.25% of QP for every 2-hr. delay in resolution;</li> <li>• Level 2 Incident 0.25% of QP for every 3-hr. delay in resolution;</li> <li>• Level 3 Incident 0.25% of QP for every 6 hrs. delay in resolution</li> </ul>

- Priority Level 1: Complete Storage failure or not in working condition or not accessible.
- Priority Level 2: Storage is not functioning properly due to failure of any hardware/software/part(s)/ component(s) or performance of the storage is down (in terms of latency and response time)
- Priority Level 3: Any other issues except Priority 1 & 2 above

**IMPLEMENTATION TIMELINES & PENALTIES:**

S/N	Measurement	Target	Penalty for Delay
<b>Applicable for overall contract</b>			
1	Kick-off meeting	1 week from issuance of Lol/WO	Rs 50,000/week or part thereof. Delay Beyond 4 weeks, DST/GIL may terminate the contract and Forfeit the PBG.
<b>Applicable for each storage separately</b>			
2	Delivery of Components (Hardware, Software, License, etc.)	T1 = T + 12 weeks	A penalty of 0.5% of <b>particular Storage Value</b> per week or part thereof. Delay beyond T + 10 weeks DST/GIL may terminate the contract and Forfeit the PBG
3	Installation and Commissioning	T2 = T1 + 4 weeks	A penalty of 0.5% of <b>particular Storage Value</b> per week or part thereof. Delay beyond T1 + 8 weeks DST/GIL may terminate the contract and Forfeit the PBG
4	Final Acceptance Test (FAT)	T3 = T2 + 2 weeks	A penalty of 0.5% of <b>particular Storage Value</b> per week or part thereof.
5	Training	T4 = T3 + 2 weeks	A penalty of 0.5% of <b>particular Storage Value</b> per week or part thereof.

The warranty support will start from the date of FAT sign off so Warranty certificate to be submitted at the time of FAT sign off.

**FINAL ACCEPTANCE TEST:** To be carried out based on followings but not limited to:

- Verification of installation and commissioning (Hardware, software and licenses)
- OEM Certifications
- All Functional and Technical requirements
- Successfully hosting Two Enterprise Applications provided by DST/GIL for verification of all the parameter/requirements.

**MILESTONE BASED PAYMENT TERMS:**

- ✓ Payment of Storage box in following manner;
  - Delivery of all components (Hardware, Software, Licenses, etc.) at respective location - 70%
  - Successful Installation, Testing, Integration and Commissioning – 10%
  - Successful migration of existing SAN storage to new solution – 10 %

- o Successful completion of Three-month post completion of Final Acceptance test as per the scope – 10%
- ✓ Payment of 5 years Comprehensive Warranty & OEM Support Charges in five equal instalment at the start of every year

**PRICE BID SCHEDULE:**

Sr. No.	Description	Cost including GST (Rs.)
1.	<b>Cost of All Flash NvME 1 PB Storage Solution at SDC:</b> - Inclusive of all the required hardware, Software and necessary Licenses required to make the solution fully functional. - As per the Scope of work, functional and Technical requirement, including all cable & accessories, Installation, testing and commissioning etc.	
1.1	SDC All Flash NvM Storage - Cost for 1st year Comprehensive warranty and OEM Support	
1.2	SDC All Flash NvM Storage - Cost for 2nd year Comprehensive warranty and OEM Support	
1.3	SDC All Flash NvM Storage - Cost for 3rd year Comprehensive warranty and OEM Support	
1.4	SDC All Flash NvM Storage - Cost for 4th year Comprehensive warranty and OEM Support	
1.5	SDC All Flash NvM Storage - Cost for 5th year Comprehensive warranty and OEM Support	
<b>Total cost (Rs.)</b>		

Note: L1 will be the lowest sum total of rates of all line items including GST as per GeM GTC

Please note that yearly CAMC & OEM support cost should not be less than 5% of the CAPEX cost as per item no. 1 of table above. In case of any bidder is quoting less than 5%, the bid is liable to be rejected.

**ADDITIONAL DOCUMENT TO BE SUBMITTED:**

In the technical bid section of GeM, the bidder is required to upload following documents;

1. Brochure and OEM Compliance of the Offered product on OEM Letterpad.
2. BoQ with part-code on OEM letterhead for NAS Box as well as other software and/or hardware components required to complete the solution.
3. Compliance of the SoW, SLA and Payment terms etc as uploaded as part of the GeM Bid on bidder's letterhead.
4. Undertaking as per guidelines published by Ministry of Finance, Dept. of Expenditure, Public Procurement division dated 23.07.2020 in the given format by Bidder as well as OEM.

**On letterhead of Bidder**

**Sub : Undertaking as per Office Memorandum No.: F. No.6/18/2019-PPD dated 23.07.2020  
published by Ministry of Finance, Dept. of Expenditure, Public Procurement division**

**Ref: Bid Number:** \_\_\_\_\_

I have read the clause regarding restriction on procurement from a bidder of a country which shares a land border with India. I certify that we as a bidder and quoted product from following OEMs are not from such a country or, if from such a country, these quoted products OEM has been registered with competent authority. I hereby certify that these quoted product & its OEM fulfills all requirements in this regard and is eligible to be considered for procurement for Bid number\_\_\_\_\_.

No.	Item Category	Quoted Make & Model

In case I'm supplying material from a country which shares a land border with India, I will provide evidence for valid registration by the competent authority, otherwise GIL/End user Dept. reserves the right to take legal action on us.

(Signature)

Authorized Signatory of M/s <<Name of Company>>



**On letterhead of OEM**

**Sub : Undertaking as per Office Memorandum No.: F. No.6/18/2019-PPD dated 23.07.2020  
published by Ministry of Finance, Dept. of Expenditure, Public Procurement division**

**Ref: Bid Number:** \_\_\_\_\_

Dear Sir,

I have read the clause regarding restriction on procurement from a bidder of a country which shares a land border with India. I certify that our quoted product and our company are not from such a country, or if from such a country, our quoted product and our company have been registered with competent authority. I hereby certify that these quoted product and our company fulfills all requirements in this regard and is eligible to be considered for procurement for Bid number \_\_\_\_\_.

No.	Item Category	Quoted Make & Model

In case I'm supplying material from a country which shares a land border with India, I will provide evidence for valid registration by the competent authority; otherwise GIL/End user Dept. reserves the right to take legal action on us.

(Signature)

Authorized Signatory of **M/s <<Name of Company>>**