Procurement of Object storage with 5 PB usable Space in a three-site configuration (i.e., GSDC Gandhinagar, Near DR- Vadodara, Far-DR Bhubaneshwar) on Behalf of Department of Science and Technology.

Additional Eligibility Evaluation Criteria:

S/N	Eligibility Criteria	Attachments
1.	The bidder would be a company registered/incorporated under Indian company Act. and must have 5 years of existence in India.	Copy of certificate of Incorporation/PAN/ GST registration Certificate.
2.	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 last date of BID submission.	Work Orders / Client Certificates confirming year and area of activity should be enclosed.
3.	The bidder must have average annual turnover of Rs. 30 Crore (Minimum) in any three financial years out of last four Financial Year as on 31 st March 2022.	The copies of Audited Annual Accounts/Balance Sheet along with Profit & Loss Account and CA Certified Statement for last three financial years as on 31 st March 2022 shall be attached along with the bid.
4.	The bidder must have positive Net worth or should be Profit making in any three financial years out of last four Financial Year as on 31st March 2022.	The copies of CA Certified Statement for last three financial years as on 31 st March 2022 shall be attached along with the bid.
5.	The Bidder should have supplied similar object storage, in at least one of the last four financial years before the bid opening date to any Central / State Govt Organization / PSU / Large 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.	Details of such projects undertaken along with work order/purchase order copy/clients' on-going or completion certification/letter signed/ e-mail issued by authorized signatory or company secretary with the details w.r.t to the clause should be enclosed.
6	The OEM should have implemented the proposed object Storage solution to any Central / State Govt Organization / PSU / Large Public Listed Company.	Details of such projects undertaken along with work order/purchase order copy/clients' on-going or completion certification/letter signed/ e-mail issued by authorized signatory or company secretary with the details w.r.t to the clause should be enclosed.
7.	The bidder should be authorized by its OEM to quote this bid as authorized representative, bid compliance and after sales support. The bidder should have a back-to-back support agreement/arrangement for services including supply of spare parts etc. with the Original Equipment Manufacturer (OEMs).	Please upload the copy of Authorization on OEM letterhead and signed by authorized signatory for the item(s) to be offered in this bid

8.	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 as on the last date of BID submission.	Self-Declaration/Certificate/affidavit mentioning that the Bidder and OEM is not blacklisted as per the clause.
9.	The Bidder should have at least one office in Gujarat which can provide 24x7 technical support & service to meet SLA, in case 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.	The copy of Property tax bill/Electricity Bill/Telephone Bill/GST/CST, etc. should be enclosed.

- 1) All details and the supportive documents for the above should be uploaded in the GeM bid.
- 2) Bidder's experience, bidder's turn over criteria will not be considered of GeM bid. However, bidder must match eligibility criteria, experience, bidder's turn over criteria, etc. as mentioned above (& in this document) and will be considered for evaluation. EMD and PBG should submitted by bidder as per GEM.

Clarification regarding this Tender: Bidders can seek written clarifications up to 7 days after bid publishing date by email to <u>ddict-gil@gujarat.gov.in</u> & <u>mgrhninfra1-gil@gujarat.gov.in</u> No bid queries would be entertained post completion of timeline.

Scope of work:

- 1. The scope is to supply Object storage with 5 PB usable Space in a three-site configuration (i.e., GSDC Gandhinagar, Near DR- Vadodara, Far-DR Bhubaneshwar.), 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.
- The objective of this RFP to deploy and implement Scalable Object-based Storage Solution of 5 Peta Byte (PB) Usable capacity which needs to be stretched across three sites i.e., GSDC Gandhinagar, Near DR- Vadodara, Far-DR Bhubaneshwar and an Enterprise file sync and share software (native or integrated with third-party)
- 3. The licenses should be in the name of Department of Science and Technology, Government of Gujarat valid perpetual for life.
- 4. The OEM support credentials should in name of DST/GIL and handed over to GSDC/DST/GIL.
- 5. The bidder is responsible for physical connectivity (within site) of the proposed solution. The required ports on switch for such connectivity will be provided.
- 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. OEM professional should be available onsite for solution design and implementation
- 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.
- 10. Successful bidder in coordination with the representatives from the TENDERER/GIL is required to conduct FAT of the solution.
- 11. 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.
- 12. 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.
- 13. After FAT, successful bidder has to handover to existing Data Center Operator for O&M.
- 14. During the term of the contract, if any disk is required to be replaced for any reasons then the existing disk needs to be kept with GSDC and wont be returned back
- 15. 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.
- 16. The offered products should not be declared by OEM "end-of-sale and end-ofsupport" 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.

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, 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 (6th year and 7th 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 6th year and 7th year warranty/ CAMC support.

Minimum Technical specifications:

	Array/Appliance with 5PB usable Space in a three-site configuration i.e. GSDC Gandhinagar, Near DR- Vadodara, Far-DR Bhubaneshwar. (Usable space means amount of	
storage space that will be available for storage after all system overheads are accounted for including but not limited to data protection, metadata, space required for objects		
1		
2	The object storage cluster shall be scalable to minimum 50 PB in a single cluster/ namespace by adding drives and nodes.	
	Proposed Object storage must provide automatic balancing of the stored capacity across	
	all nodes in a cluster, ensuring data gets distributed across all nodes. When new nodes are	
3	added or removed from the cluster, existing data should be redistributed among all nodes.	
4	Storage system must be offered with no single point of failure	
5	Proposed object storage should support NL-SAS, SATA and SSD drives	
6	Offered storage should offer read-only, point-in-time copies (snapshots)/versioning, at the granularity of object.	
	Storage should be offered with the capability of data reduction. Licenses should be	
	provided from day one for entire capacity. Storage should support encryption, auto-	
7	configuration and self-healing features.	
8	The system must support encrypting data at rest.	
9	The system must be able to support Write Once Read Many (WORM)	
	The system must support Role Base Access Control with Integration with Active Directory	
10	and LDAP.	
11	The system must be able to support System audit trail	
12	The system must be able to support Anti-Virus Scanning	
13	The system should have automated system integrity and data integrity checks built in to prevent data loss data integrity issues due to data inconsistencies or object corruption	
14	The storage system should have support to provide protection against ransomware	
15	All devices should be IPv6 implementation ready from day 1	
	All the required or necessary licenses must be perpetual and should be provided for the entire capacity. This should include licenses for Management and monitoring module and all features such as Thin provisioning, point-in-time copies (Snapshot), Replication, and share etc. in case of further capacity upgrade, tenderer should not incur additional license	
16	cost.	
18	Type of Drive: SATA/ NL-SAS	
19	Specialized ToR 10/25 Gbe or higher as Quoted (if required) Switches per rack	
	Data Protection: All Data should be available even if 1 or 2 sites failed and multiple disks at	
20	a site are failed	
21	Protocols Supported by the Storage from day 1: S3, REST API, HTTP, HTTPS, etc	
22	Must provide access for a variety of operating systems (UNIX, Mac, Linux, and Windows latest and legacy versions)	

23	Built in self-healing; automatic failure detection Global namespace with active data access and modification; support for nodes of different generations; should be expandable vertically with the addition of disks and horizontally with the addition of nodes; vertical expansion must be nondisruptive; Support for metadata search: all disk and controller rebuilds should leverage protection within same site and should not consume WAN bandwidth to greatest extent feasible and meta-data search should be fast and accordingly SSD should be factored for metadata storage; should offer content protection using replication and Erasure coding irrespective of object size; support for multi tenancy and quota limits; metering capability; built in dashboard for capacity, object count etc.; support for audit trails; REST API support for advanced monitoring and management Under no conditions shall a capacity expansion lead to a reduction in system throughput.
25	Garbage collection process must be dynamically tunable while meeting throughput requirements without impacting GET/ PUT latency. Throughput of 1GBPS up to 6K (per 1 PB usable capacity) transactions per second with 100KB size, assuming 25% PUT, 25% DEL, 50% GET. Growth to 600k transactions per
26	second. System background tasks are not included in the transaction rate.
27	Object storage system must provide for ability to recover objects deleted by end-users and/or systems administrators via API for at least 7 days. The time period that objects can remain recoverable must be dynamically tunable.
28	Object storage system must be able to dynamically grow from three site configuration to four site configuration while supporting the data protection requirements in each site, such that any one site could become primary at any time. The RTO of such failover, including both data and metadata, at the object storage level, must be zero. Similarly, RPO for object storage shall be zero or near-zero. Object storage system shall be capable of self-healing (without manual interventions) for outages up to one week in duration.
29	Bidder must ensure if Load balancer and Network Switches are recommended to integrate object storage , then same must be offered in redundant config and must be sized to offer the asked throughput. Bidder must ensure that Load Balancer supplied should be scalable
30	Bidder must ensure that object storage should be configured to protect from no data loss and data unavailability in the case of both scenarios occurring one by one (a) simultaneous failure of any 3 disks, including SSD (b) simultaneous failure of any 2 nodes/controllers
31	Scope of supply must include installation, commissioning & integration together with all necessary software, hardware, licenses, racks, iPDU, power cord, or any other component for the working of the solution etc to make the system fully functional as intended.
32	Should have ability to identify and tag data depending on content with the ability to search based on meta-data
33	Should support Object Sizes varying from few-KBs to few-GBs/TBs
34	Migration from existing storage to proposed object storage (approx. 1PB)
35	Enterprise file synchronization and sharing software services to enable users to securely synchronize and share documents from end devices (laptop, mobile, pc,etc.) Minimum File sync and share software features : Support multi-tenancy and data allocation and segregation per tenant, role based access
35a	per tenant
554	File Preview
	Easily search Metadata
	Version Control
35b	Upload singularly or in bulk

	Share & Distribute files and folders		
	Tenants, Groups & Users wise access		
	Intuitive, modern web-based user interface ,		
	RESTful API Integration, Role based access, LDAP directory integration,		
	File Locking - Lock files to prevent users from making concurrent edits that could cause file		
35c	conflicts. Users are notified when files are locked		
35d	File Versioning - Versioning-Feature for files which allows rollback to older file versions		
	File Tagging - Add specific tags to your files. This feature allows smart filtering of files and		
35e works with shared files as well			
	Content Sharing - Sharing of files and more with users via an anonymous link (password		
35f	35f protection, expiration date possible)		
Sharing Permission Management - Feature to selectively restrict access to shared conte			
35g	(Create, Edit, Delete, Reshare)		
	Tenants, Groups & Users - Only giving specific users or organisations access to certain		
35h	assets & time limit the access		
35i	Large File Support (>4 GB)		
	Sharing Assets Securely - Sharing assets securely with no file size limitations & revocable		
35j	access		

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.

IMPLEMENTATION TIMELINES & PENALTIES:

Successful bidder has to complete the Installation, Configure, Commissioning, Integration with Acceptance of the ordered work within the time period (s) specified in the below table. However, in case of any delay solely on the part of successful bidder TENDERER reserve the right to levy the appropriate penalties as per the below table:

S/n	Work type	Time Limit for Execution	Penalty for Delay	Maximum Penalty
1	Supply of the material including Licenses & OEM Warranty Certificate.	T1=T+30 days from the date of issuance of work order	5% of order value of delayed/pending work per week or part thereof	10% of order value
2	Installation, commissioning & integration	T2=T1+30	5% of order value of delayed/pending work per week or part thereof	10% of order value
2	Final Acceptance Testing (FAT)	T3=T2+15 days	5% of order value of delayed/pending work per week or part thereof	10% of order value
3	Training	15 Days from T3	Rs. 1000/- day.	Rs. 25000/-

Note:

• Material supplied, installed and commission as per this Bid/contract should be covered under the warranty for a period of five years from the date of FAT.

- T= Date of issuance of work order / LOI.
- In case of any fault arises in the installed items during the warranty period of five years, bidder is requiring to either repair the faulty items or have to install the replacement (complying to the RFP specification) for faulty material without any additional cost to the Tenderer.
- In case of Non-Compliance of RFP Specification:
 - Any time during the warranty period it is found that the materials supplied/Installed/commissioned are not as per the specification of the RFP/work order TENDERER reserves the right to ask the successful bidder to replace all such material at free of cost.
 - Successful bidder requires to attend and rectify the non-compliance within seven (7) days of receipt of such notice/information from the DST/GIL. If, successful bidder fails to attend and rectify the same, then successful bidder shall reimburse DST/GIL all costs and expenses incurred for such defect rectification.

Operational Penalty:

- The successful bidder shall repair/ replace all faulty material covered under the warranty within the shortest possible time thus ensuring minimum downtime, failing which applicable penalty will be imposed. In case of failure of appliance / solution for more than 3 consecutive time for the same issue, bidder would be bound to replace the product with no cost to GOG.
- The successful bidder shall be responsible for maintaining the desired performance and availability of the system/services.
- Successful bidder should ensure the prompt service support during warranty period.
- Timeline for resolution is within 24 hours from date of call logged / reported to Bidder/OEM. If the successful bidder fails to resolve the call as specified above, penalty will be imposed on each delayed day for 3000 Rs / Day, which will be recovered against Performance bank guarantee submitted by the successful bidder on completion of warranty period.

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

- Successful implementation, compliance of all technical and functional specifications and scope mentioned in the RFP
- After successful installation of the System in accordance with the requirements as mentioned in Schedule of Requirement, Final Acceptance Test will be conducted. After successful testing, Acceptance Test Certificate will be issued by DST/its designated agency to the successful bidder. FAT Checklist is as per Form below:
- The date on which Acceptance certificate is issued shall be deemed to be the date of successful commissioning of the System. Warranty and licenses should be valid for period of 5 years from the date of issuance of Acceptance Certificate (FAT).
- Any delay by the successful bidder in the Acceptance Testing shall render the successful bidder liable to the imposition of appropriate Penalties.
- All goods and services that are not specifically asked for certification should have quality standard applicable in India such as ISI.

Sr. No.	Item	Remarks
1	Device Should be configured as per GOG instruction. Should follow ISO Norms as	
	per datacenter.	
2	Device as per the technical specification	
3	Numbering / tagging	
4	Network Architecture – Implementation.	
5	Bill of Materials details	
6	Customer Site completion report.	

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 Letterhead.
- 2. BOQ with part-code on OEM letterhead for proposed solution 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.

MIS Reports:

#	Types of Reports	Periodicity
1	 System performance report, which includes CPU, memory, Cache, disks, etc. All type of event reports SLA Compliance report Reports as directed by the State for SLA calculation Summary of system reboot Summary of issues / complaints logged with the OEMs. Patch update status as notified by the OEM 	Weekly, Monthly, quarterly
2	 Log of preventive / scheduled maintenance undertaken Details of Patch, updates, Vulnerability fixes released and implementation status of same Details of break-fix maintenance undertaken 	Monthly, quarterly

SERVICE LEVEL AGREEMENT:

Sr No	Target	Penalty
1	Priority Level 1 Incident - Within 1 hr. Priority Level 2 Incident - Within 6 hr. Priority Level 3 Incident - Within 12hr.	 Level 1 Incident 0.25% of yearly payment for every 2-hr. delay in resolution; with max cap of 10% of total AMC value. Level 2 Incident 0.25% of yearly payment for every 3-hr. delay in resolution; with max cap of 10% of total AMC value. Level 3 Incident 0.25% of yearly payment for every 6 hrs. delay in resolution; with max cap of 10% of total AMC value.

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

Payment Schedule

- 1. 80% on successful hardware, software, licenses delivery of Capex
- 10 % Capex on Successful installation, configuration, integration and migration of approx.
 500TB of unstructured data
- 3. 10 % successful FAT & Training of Capex
- 4. Payment of 5 years Comprehensive Warranty & OEM Support Charges in five equal instalments at the end of every year.

PRICE BID SCHEDULE:

Sr. No.	Description	Cost including GST (Rs.)
1	Capex-Cost of object storage with 5 PB usable Space in a three-site configuration and Enterprise file sync and share software (native or integrated with third- party): 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, commissioning and training etc.	
1.1	Propose solution - Cost for 1st year Comprehensive warranty and OEM Support	
1.2	Propose solution - Cost for 2nd year Comprehensive warranty and OEM Support	
1.3	Propose solution - Cost for 3rd year Comprehensive warranty and OEM Support	
1.4	Propose solution - Cost for 4th year Comprehensive warranty and OEM Support	
1.5	Propose solution - Cost for 5th year Comprehensive warranty and OEM Support	
Total	cost (Rs.)	

- Note: L1 will be the lowest sum total of rates of all line items including GST as per GeM GTC.
- TENDERER/GIL may negotiate the prices with L1 Bidder, under each item/head offered by Bidder.
- RA has been enabled in the GEM Bid.
- The Bidder has to submit detailed breakup in separate sealed for proposed solution on or before bid submission date. L1 bidder post RA has also to submit the same within 3 days after RA.
- Bidder has to submit separate sealed cover for EMD & financial break up. Also, subject should be super-scribed on sealed cover.

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 <u>M/s <<Name of Company>></u>

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 <u>M/s <<Name of Company>></u>