

**Annexure-A**

**(Responses to queries/Clarification)**

**“SUPPLY, INSTALLATION, INTEGRATION, TESTING & COMMISSIONING (SIITC) OF HPC-AI High Performance Storage and Archival Solution”**

**(Reference Bid No: GeM Ref. GEM/2025/B/6979425)**

<b>SI.No</b>	<b>Section / Page No.</b>	<b>Clause reference</b>	<b>Query / Amendment requested</b>	<b>C-DAC Response</b>
1.	Section IV - 2.PFS BASED STORAGE - Page No.12	Section IV/ 2.PFS BASED STORAGE/ Sr.1-Primary Storage (Scratch/Home Space):	Query1: Topic reference: Backup vs Archive Coverage Please clarify the portion (in PiB or %) of the 11 PiB PFS capacity that requires backup, archive, or both. Query2: Please clarify whether scratch data requires backup/archive, and whether home/project data must always be protected.	As per RFP

SI.No .	Section / Page No.	Clause reference	Query / Amendment requested	C-DAC Response
2.	Section IV – 4. ASSOCIATED BACKUP SOFTWARE & SERVERS - Pa Section IV – 3.Tape Library- Page No.16ge No.23	Section IV/ 4. ASSOCIATED BACKUP SOFTWARE & SERVERS/ Sr.16 - Backup targets and sizing	<p>Query1: Topic reference: Disk-based Backup Retention Please specify the retention duration for backups on disk/object storage before aging to tape. Below is an example of GFS policies and Retention, CDAC may select other approaches suitable for the deployment Daily Backup - Retention 7 Days Weekly Full Backup - Retention 4 Weeks Monthly Full Backup - Retention 3 Months Yearly Full Backup - Retention 3 Years</p> <p>Query2: Topic reference: Role of Object Storage Please clarify whether S3-compatible object storage is intended as primary backup, secondary copy, archive staging, or for specific workloads.</p> <p>Query3: Topic reference: Other Data Types Please confirm whether backup/archive is required for VM data, unified storage volumes, object storage buckets, or other data types.</p> <p>Query4: CDAC shall arrange all H/w, s/w &amp; Licenses as well as configuration, Integration, testing and commissioning services etc required on existing Tyrone Object storage and Tyrone Unified Storage w/o any cost to Bidder.</p> <p>Query5: What is the exact source environment or capacity to be considered for Backup ?</p> <p>Query6 We want to understand type of data on Tyrone Opslag erta D4ZC-24D Unified storage structured or unstructured and can be accessed via NFS.</p>	Refer Corrigendum

3.	Section IV – 3.Tape Library- Page No.16	Section IV /3.Tape Library/Sr.4 - Functionality	<p>Query1:</p> <p>Topic reference: Archive Retention Period Please specify the archive (LTR) retention duration on tape (number of years). Also please clarify if you like to have a stub to retrieve files automatically while archiving to disk.</p> <p>Query2:</p> <p>Topic reference: Archive Data Growth</p> <p>Please provide expected annual growth rate of data to be archived to tape (TB/PB per year). This shall be considered to size Server (Compute) and Backup Target Storage/Tape and model the sizing for number of years.</p> <p>Query3:</p> <p>Topic reference: Archive Trigger Criteria</p> <p>Please clarify criteria for moving data to archive (file age, last access, project completion, manual selection) and frequency. Please note Backup and Archive are different and work differently. Hence we please provide how frequently and on what criteria files shall be moved.</p>	As per RFP
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SI.No	Section / Page No.	Clause reference	Query / Amendment requested	C-DAC Response
4.	Section IV - 2.PFS BASED STORAGE - Page No. 13	Section IV/2.PFS BASED STORAGE/sr. 4 PFS Metadata:	<p>Query1: Topic refernece : File Count Under Protection Please provide estimated number of files expected to be protected under backup and archive.</p>	As per RFP
5.	Section IV – 4. ASSOCIATED BACKUP SOFTWARE & SERVERS - Page No.23	Section IV – 4/ASSOCIATED BACKUP SOFTWARE & SERVERS/Sr. 7 Archiving Features	<p>Query1: Topic reference: Backup Copy Count Please clarify number of backup copies required on disk prior to archiving to tape.</p>	As per RFP
6.	Section IV , Associated Backup Software & SERVERS - Page No.20	Section IV – 4/ASSOCIATED BACKUP SOFTWARE & SERVERS/Sr.5 Access Control List (ACL) Preservation even Cross-platform	<p>Query1:  Topic reference: Archive Format on Tape (TAR / LTFS) , requirement that solution benefits from TAR and LTFS formats on tape</p> <p>The RFP states that the solution should , benefit from the widely used Tape Archive file format (TAR) and Linear Tape File System (LTFS) format on Tape., Kindly clarify whether the intent is that archived data written to tape must be stored in an open, standard format (such as TAR over LTFS) that is directly readable on LTFS-compliant systems, or whether it is acceptable for the backup software to write data in its own proprietary format.</p>	Refer Corrigendum

SI.No	Section / Page No.	Clause reference	Query / Amendment requested	C-DAC Response
7.	Section II – INSTRUCTION TO BIDDERS- 4. ELIGIBILITY CRITERIA- Page No.3	Section II – INSTRUCTION TO BIDDERS- 4. ELIGIBILITY CRITERIA- Clause Y.	Query1: Tape Library OEM/ Authorized partners must have registered sales & service support center / office in India for more than 5 years; documentary proof must be submitted.	Refer Corrigendum
8.	Section II – INSTRUCTION TO BIDDERS- 4. ELIGIBILITY CRITERIA- Page No.4	Section II – INSTRUCTION TO BIDDERS- 4. ELIGIBILITY CRITERIA- Clause Z.	Query1: Tape Library OEM /Authorized partners should have spare parts warehouse located in the Pune Metropolitan Area (PMR) or Mumbai Metropolitan Area (MMR)	Refer Corrigendum
9.	Section IV – Financial Breakup - BOQ . Page No.25	SECTION IV: Financial Breakup - BOQ , Item No. 1,2,3,4,5	Query1: Delivery 45 days . Tape Library is not manufactured in India so it will require more than 45 days kindly extend delivery to 75 days	Refer Corrigendum
10.	Section IV – 3.Tape Library- Page No.16	Section IV /3.Tape Library/Sr.1 - Tape Library	<b>Query1:</b> Tape Library of min. 10PB Native capacity expandable to 14 PB - Qty-01. Max. 42U. The tape library should be a single chassis with further scope for expansion. Therequired chassis / rack to be provided by bidder.  <b>Query2:</b> We understood that standard 19" Server Rack is asked here, not the frame based library Suggestion : Please add 16PB Native and expandable to 20PB scalability for better archival storage management	Refer Corrigendum

SI.No	Section / Page No.	Clause reference	Query / Amendment requested	C-DAC Response
11.	Section IV – 3.Tape Library- Page No.16	Section IV /3. Tape Library/Sr.2 - Form Factor, Slot Capacity and Scalability	<p><b>Query1:</b> The offered tape library must be a standalone single-frame form factor with a minimum of 350 slots, scalable to 470 or more slots as required by C-DAC.</p> <p><b>Query2:</b> Please clarify whether its an standard 19" Server Rack is asked here, not the frame based library (Frame based library comes with its own rack with different architecture compare to what has been asked in this RFP)</p> <p>Suggestion: Please add scalability to 550 slots or more</p>	Refer Corrigendum
12.	Section IV – 3. Tape Library- Page No.16	Section IV /3. Tape Library/Sr.3 - Tape Cartridges and Labels	<p><b>Query1:</b> It shall support fail-over connectivity for robotics</p> <p><b>Query2:</b> Please clarify. Do we need dual robotic arm?</p>	As per RFP
13.	Section IV – 3.Tape Library- Page No.18	Section IV/3.Tape Library/Sr.8 - Media Compatibility	<p><b>Query1:</b> Offered Tape Library shall support multiple Brands Media cartridges, there should not be any vendor locking to read, write and supporting specific OEMs of Media</p> <p><b>Query2:</b> Suggestion: please add "Tape Library should support different capacity available in LTO-10 Media in future"</p>	Refer Corrigendum

SI.No	Section / Page No.	Clause reference	Query / Amendment requested	C-DAC Response
14.	Section IV – 3.Tape Library- Page No.18	Section IV /3.Tape Library/Sr. 9- Capacity and Future Expansion	<p><b>Query1:</b> The proposed tape library must be able to support future tape drive technology without changing the tape library, it shall scale up to 16 LTO-10 drives.</p> <p><b>Query2:</b> Suggestion : The proposed tape library must be able to support future tape drive technology without changing the tape library, it shall scale up to 21 LTO-10 drives.</p>	Refer Corrigendum
15.	Section IV – 3.Tape Library- Page No.18	Section IV /3.Tape Library/Sr. 12- Vaulting	<p><b>Query1:</b> Proposed Library should support in-Library Vaulting functionality which avoid and eliminate the need of physically handpick the media manually. Vaulting shall be supported within library and make the media offline even if they are kept in the library</p> <p><b>Query2:</b> This point is vendor specific please change it.</p>	Refer Corrigendum

SI.No .	Section / Page No.	Clause reference	Query / Amendment requested	C-DAC Response
16.	Section IV – 3.Tape Library- Page No.19	Section IV /3.Tape Library/Sr.14- System Endurance	<p><b>Query1:</b>  1. The MSBF of the proposed tape library should be at least 2,000,000  2. The Mean Time to Repair (MTTR) of the proposed tape library should be 30 minutes.</p> <p><b>Query2:</b>  Recommended :  3 minutes for hot-swap components.  10 minutes for non-hot-swap components Mean Cycles Between Failures (MCBF) : 3 million  Mean Time Between Failures (MTBF): 250,000 power-on hours</p>	As per RFP

SI.No .	Section / Page No.	Clause reference	Query / Amendment requested	C-DAC Response
17.	Section II – INSTRUCTION TO BIDDERS.- 4. ELIGIBILITY CRITERIA - Page No.3	Section II/INSTRUCTION TO BIDDERS/ 4. ELIGIBILITY CRITERIA - Point k	<p><b>Query1:</b> Kindly allow bidder /OEM having PO of 5PB in state /central/PSU or any state organization of 5PB in last five year</p> <p><b>Query2:</b> This clause needs to be updated as "k. The bidder or OEM must have supplied and installed successfully at least two orders of Tape based Archival Storage to any Central/State Government Organization, PSU, or any other government organization in India; having a usable capacity of a minimum of each 2PB in the last five years. Copies of contracts / work orders and documentary evidence/ proof of successful execution (signed acceptance report by end user, P.O. copy) must be submitted along with the bid."</p> <p><b>Query3:</b> Instead of "The bidder and OEM" pls make as "The bidder Or OEM"</p> <p><b>Query4:</b> Now days most of the customers are opting for the disk based back up. Therefore, we do not have many customers opting for such type of large capacity Tape Library. We request you to kindly change the clause as Bidder / OEM should have supplied such Tape Library</p> <p><b>Query5:</b> Our request to CDAC, please amend the clause as below</p> <p>"The bidder and OEM must have supplied and installed successfully at least two orders of Tape based Archival Storage to any Central/State Government Organization, PSU, or any other government organization in India; having a usable capacity of a minimum of each 1PB in the last ten years. Copies of contracts / work orders and documentary evidence/ proof of successful</p>	Refer Corrigendum

SI.No .	Section / Page No.	Clause reference	Query / Amendment requested	C-DAC Response
			execution (signed acceptance report by end user, P.O. copy) must be submitted along with the bid."	
18.	Section II – INSTRUCTION TO BIDDERS.-4. ELIGIBILITY CRITERIA - Page No.3	Section II/INSTRUCTION TO BIDDERS/4. ELIGIBILITY CRITERIA- point h	<p><b>Query1:</b> This clause needs to be updated as “h. Bidder <b>or OEM</b> should have well established Installation, Commissioning, Training, Troubleshooting and Maintenance Service Centre in Pune for attending the after sales service. Details of Service Centers near consignee destinations are to be uploaded along with the bid.”</p>	Refer Corrigendum
19.	Section II – INSTRUCTION TO BIDDERS. -4. ELIGIBILITY CRITERIA - Page No.3	Section II/INSTRUCTION TO BIDDERS/4. ELIGIBILITY CRITERIA- point j	<p><b>Query1:</b> This clause needs to be updated as "j. The bidder <b>or OEM</b> must have supplied and installed successfully at least, two orders of PFS based HPC-AI Storage to any Central/State Government Organization, PSU, or any other government organization in India; having a usable capacity of a minimum of <b>each 2PB</b> in the last five years. Copies of contracts / work orders and documentary evidence/ proof of successful execution (signed acceptance report by end user, P.O. copy) must be submitted along with the bid.”</p>	Refer Corrigendum

SI.No .	Section / Page No.	Clause reference	Query / Amendment requested	C-DAC Response
			<p><b>Query2:</b> Instead of "The bidder and OEM" pls make as "The bidder Or OEM"</p> <p><b>Query3:</b> Our request to CDAC, please ammend the clause as below-</p> <p>"The bidder and OEM must have supplied and installed successfully PFS based HPC / HPC-AI Storage to any Central/State Government Organization, PSU, or any other government organization in India; at least two orders of having a usable capacity of a minimum of each 5PB or at least one order of having a usable capacity of a minimum of each 10PB in the last ten years. Copies of contracts / work orders and documentary evidence/ proof of successful execution (signed acceptance report by end user, P.O. copy) must be submitted along with the bid."</p>	
20.	Section II – INSTRUCTION TO BIDDERS-8. BID SECURITY / EARNEST MONEY DEPOSIT (EMD)-Page No.6	Section II – INSTRUCTION TO BIDDERS-8. BID SECURITY / EARNEST MONEY DEPOSIT (EMD)-Point a.	<p><b>Query1:</b> EMD of INR 80,00,000/- weighs to high for any bidder; we request here to kindly have relook at EMD amount and reduce the value of EMD, so that there would be larger participation from bidders</p> <p><b>Query2:</b> We would like to seriously bid for this tender. But such a large amount of EMD may prevent us from bidding. To increase the bidders' participation in this tender, we request you to reduce the EMD amount.</p>	As per RFP

SI.No	Section / Page No.	Clause reference	Query / Amendment requested	C-DAC Response
21.	Section II – INSTRUCTION TO BIDDERS-2.EXECUTION & DELIVERY PERIOD-Page No. 3	Section II – INSTRUCTION TO BIDDERS-2.EXECUTION & DELIVERY PERIOD-Point a & Point b	<p><b>Query1:</b> As per our discussions with OEM delivery period is too short looking at current constraints on global component delivery schedules; we request to increase the delivery to 70 days and then installation in next 30 days to be allowed separately</p> <p><b>Query2:</b> Delivery period should be extended to 75 days</p> <p><b>Query3:</b> RFP asks for 45 days while we request to kindly allow 75 days for the delivery and installation together</p> <p><b>Query4:</b> Our request to CDAC, please amend the clause as below-</p> <p>"HPC-AI High Performance Storage and Archival Solution along with all necessary components, accessories, hardware etc. must be supplied within 75 Days from the Date of award of contract. b. The execution of installation, testing, commissioning and acceptance shall be completed within 45 Days post-delivery."</p>	Refer corrigendum

22.	Section IV – 4. ASSOCIATED BACKUP SOFTWARE & SERVERS - Page No.20	Section IV – 4/ASSOCIATED BACKUP SOFTWARE & SERVERS	<p><b>Query1:</b> Please help with Backup Window for the First Full Backup and Daily Incremental Backup</p> <p><b>Query2:</b> Please help with the existing Backup infrastructure details, i.e., Backup Software being used and target repository / appliance</p> <p><b>Query3:</b> Is the given Media Server Sizing tentative or can be modified</p> <p><b>Query4:</b> Asked Archival capabilities are for Production Data Archival or Backup Data Archival ?</p> <p><b>Query5:</b> We need to quote only the given vendor mentioned in Backup Target and Sizing or can have different vendor ? As this pointing towards a named RFP</p> <p><b>Query6:</b>  What is the Backup Frequency and associated retention of the same ?</p> <p><b>Query7:</b> What is the per day Backup Window ?</p> <p><b>Query8:</b> How much is the Daily % Change Rate or Daily Data to be backed up ? Is the given 100 TB is the Daily Backup Data?</p>	As per RFP
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SI.No .	Section / Page No.	Clause reference	Query / Amendment requested	C-DAC Response
23.	Section III- SPECIAL CONDITIONS OF CONTRACT-5.- Page No. 9	Section III-SPECIAL CONDITIONS OF CONTRACT-5.- 5. WARRANTY:  All items supplied shall include 3 (Five) years onsite comprehensive warranty with NBD support.	<b>Query1:</b> Please clarify its, Five or Three	Refer Corrigendum

## Annexure-B

### “SUPPLY, INSTALLATION, INTEGRATION, TESTING & COMMISSIONING (SIITC) OF HPC-AI High Performance Storage and Archival Solution”

(Reference Bid No: GeM Ref. GEM/2025/B/6979425)

Sl. No.	Section / Page No.	Clause reference	Changed To
1.	Section IV – 4. ASSOCIATED BACKUP SOFTWARE & SERVERS - Page No.23	Section IV/ 4. ASSOCIATED BACKUP SOFTWARE & SERVERS/ Sr.16 - Backup targets and sizing	16. Backup sources and sizing  1. 10 PB NL-SAS tiers of the proposed HPC and AI high performance storage delivered over HDR 200 2. Tyrone FluidIO ObjectStorage : S3 compliant 2PB storage Object storage delivered over 100G ethernet 3. Tyrone Opslag Verta D4ZC-24D: Unified storage used for VM store and size of Unified storage is 3PB. It is delivered over 100G ethernet. 4. All necessary Media Agents and associated capacity-based licenses must be provided in unlimited quantities.
2.	Section IV , Associated Backup Software & SERVERS - Page No.20	Section IV – 4/ASSOCIATED BACKUP SOFTWARE & SERVERS/Sr.5 Access Control List (ACL) Preservation even Cross-platform	Point 2 is deleted

Sl. No.	Section / Page No.	Clause reference	Changed To
3.	Section II – INSTRUCTION TO BIDDERS- 4. ELIGIBILITY CRITERIA- Page No.3	Section II – INSTRUCTION TO BIDDERS- 4. ELIGIBILITY CRITERIA- Clause Y.	Y. Tape Library OEM/ Authorized partners must have registered sales & service support center / office in India for more than 5 years; documentary proof must be submitted.
4.	Section II – INSTRUCTION TO BIDDERS- 4. ELIGIBILITY CRITERIA- Page No.4	Section II – INSTRUCTION TO BIDDERS- 4. ELIGIBILITY CRITERIA- Clause Z.	Z. Tape Library OEM /Authorized partners should have spare parts warehouse located in the Pune Metropolitan Area (PMR) or Mumbai Metropolitan Area (MMR)
5.	Section IV – 3.Tape Library- Page No.16	Section IV /3.Tape Library/Sr.1 - Tape Library	Sr.1. Tape Library  Tape Library of min. 10PB Native capacity with 350 slots to be provided. The tape library should be provided with frame/rack as required.
6.	Section IV – 3.Tape Library- Page No.LTFS16	Section IV /3. Tape Library/Sr.2 - Form Factor, Slot Capacity and Scalability	Sr.2 - Clause is deleted
7.	Section IV – 3.Tape Library- Page No.18	Section IV/3.Tape Library/Sr.8 - Media Compatibility	Sr.8 - Media Compatibility clause is deleted
8.			Sr. 9-Capacity and Future Expansion clause is deleted

Sl. No.	Section / Page No.	Clause reference	Changed To
	Section IV – 3.Tape Library- Page No.18	Section IV /3.Tape Library/Sr. 9-Capacity and Future Expansion	
9.	Section IV – 3.Tape Library- Page No.18	Section IV /3. Tape Library/Sr. 12-Vaulting	Sr. 12-Vaulting clause is deleted
10.	Section II – INSTRUCTION TO BIDDERS.-4. ELIGIBILITY CRITERIA - Page No.3	Section II/INSTRUCTION TO BIDDERS/ 4. ELIGIBILITY CRITERIA - Point k	k. The bidder/ OEM must have supplied and installed successfully at least two orders of Tape based Archival Storage to any Central/State Government Organization, PSU, or any other government organization in India; having a usable capacity of a minimum of each 1PB in the last five years. Copies of contracts / work orders and documentary evidence/ proof of successful execution (signed acceptance report by end user, P.O. copy) must be submitted along with the bid.
11.	Section II – INSTRUCTION TO BIDDERS.-4. ELIGIBILITY CRITERIA -Page No.3	Section II/INSTRUCTION TO BIDDERS/4. ELIGIBILITY CRITERIA- point h	h. Bidder/OEM should have well established Installation, Commissioning, Training, Troubleshooting and Maintenance Service Centre in Pune for attending the after sales service. Details of Service Centers near consignee destinations are to be uploaded along with the bid.
12.	Section II – INSTRUCTION TO BIDDERS.-4. ELIGIBILITY CRITERIA -Page No.3	Section II/INSTRUCTION TO BIDDERS/4. ELIGIBILITY CRITERIA- point j	j. The Bidder / OEM must have supplied and installed successfully at least two orders of PFS based HPC-AI Storage to any Central/State Government Organization, PSU, or any other government organization in India; having a usable capacity of a minimum of each 5PB in the last five years. Copies of contracts / work orders and documentary evidence/ proof of successful execution (signed acceptance report by end user, P.O. copy) must be submitted along with the bid.
13.	Section II – INSTRUCTION TO BIDDERS- 2.EXECUTION & DELIVERY PERIOD- Page No. 3	Section II – INSTRUCTION TO BIDDERS-2.EXECUTION & DELIVERY PERIOD- Point a & Point b	<p>a. HPC-AI High Performance Storage and Archival Solution along with all necessary components, accessories, hardware etc. must be supplied and installed within 60 Days from the Date of award of contract.</p> <p>b. Clause is deleted</p>

Sl. No.	Section / Page No.	Clause reference	Changed To
14.	Section III-SPECIAL CONDITIONS OF CONTRACT-5.-Page No. 9	<p>Section III-SPECIAL CONDITIONS OF CONTRACT-5.- 5. WARRANTY:</p> <p>All items supplied shall include 3 (Five) years onsite comprehensive warranty with NBD support.</p>	<p>The warranty period mentioned in Clause No. 5 (Warranty) in the line “All items supplied shall include 3 (Five) years onsite comprehensive warranty with NBD support” contains a typographical error. The term “3 (Five) years” shall be read as “<b>3 (Three) years</b>” only.</p> <p>All other terms, conditions, clauses, and specifications of Clause No. 5 (Warranty) remain unchanged and valid.</p>