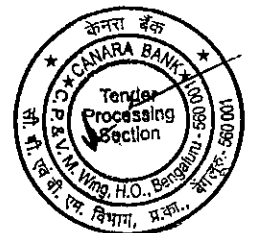
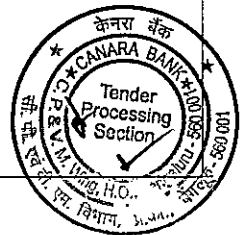


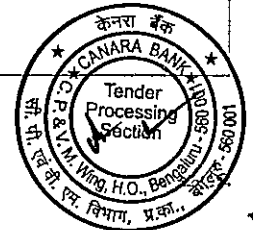
Replies to Pre bid Queries for GeM Bid ref. no GEM/2024/B/4915191 dated 04/05/2024 for Selection of vendor for Supply, Installation, Configuration, Implementation and Maintenance of 500 Nos. of Servers and other IT Infra Components in Canara Bank						
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
1	64	Annexure-2 Pre-Qualification Criteria	Sl. No. 6	Pre-Qualification Criteria: The bidder should have yearly average turnover of 300 Crores in India for the last three financial years 2020-2021, 2021-2022, 2022-2023 from their Indian operation as per the audited Financial Statements. This must be the individual company turnover and not of any group of companies.	The bidder/OEM should have yearly average turnover of 300 Crores in India for the last three financial years 2020-2021, 2021-2022, 2022-2023 from their Indian operation as per the audited Financial Statements. This must be the individual company turnover and not of any group of companies. (OR) The average annual turnover of the Bidder should be Rs.60 crore or above in last three financial years (2020-21, 2021-22 & 2022-23)  Remarks Request you to kindly consider Bidder /OEM for 300 cr (OR) Request you to kindly consider for 60 Crores turnover to enable us to participate in this opportunity.	Bidders to comply with RFP/GeM bid terms and conditions
2	87, 93, 99, 105, 111 & 118	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 9 SAN & Network FC HBA CARD- Two FC Card with minimum 1 number of 32 Gbps FC ports in each card with Supported SFP+ transceivers (With NVME Capable)	Single card with 2x32G FC Ports, and we Need to know what is jvme capability in FC card	Bidders to comply with RFP/GeM bid terms and conditions
3	87	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC)	Sl. No: 9 SAN & Network Network cards 1 Gbps 2*1Gbps - Two Network Cards, each equipped with at least two 1-gigabit network ports (Four Port of 1Gbase-T On-Board or separate NIC with supported minimum 5 meter of compatible Cat6/Cat7 UTP Cable)	Can we provideSingle card with 4x1G ports.	Bidders to comply with RFP/GeM bid terms and conditions



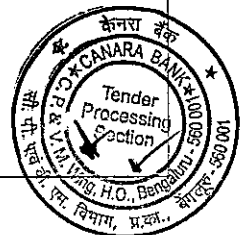
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
4	87,93, 99, 105, 111 & 119	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 9 SAN & Network  Network cards 10 Gbps 2*10Gbps -Two Network Cards, each equipped with at least two 10-gigabit network ports (Four Port BaseT NIC LOM or separate NIC with minimum 5 meter Cat6A/Cat7 UTP Cable.	can we provide Single card with 4x10G ports..	Bidders to comply with RFP/GeM bid terms and conditions
5	87, 93, 99, 105, 111 & 118	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 9 SAN & Network FC HBA CARD- Two FC Card with minimum 1 number of 32 Gbps FC ports in each card with Supported SFP+ transceivers (With NVME Capable)	Single card with 2x32G FC Ports, and we Need to know what is nvme capability in FC card..	Bidders to comply with RFP/GeM bid terms and conditions
6	93, 99, 105, 111 & 119	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 9 SAN & Network Network cards 1 Gbps 2*1Gbps (Four Port of 1Gbase-T On-Board or separate NIC with supported minimum 5 meter of compatible Cat6/Cat7 UTP Cable)	Can we provideSingle card with 4x1G ports	Bidders to comply with RFP/GeM bid terms and conditions



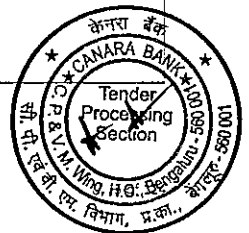
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
7	87,93, 99, 105, 111 & 119	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 9 SAN & Network Network cards 10 Gbps 2*10Gbps -Two Network Cards, each equipped with at least two 10-gigabit network ports (Four Port BaseT NIC LOM or separate NIC with minimum 5 meter Cat6A/Cat7 UTP Cable.	can we provide Single card with 4x10G ports	Bidders to comply with RFP/GeM bid terms and conditions
8	89, 95, 101, 107, 114 & 121	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 19 System Management Solution	The system management solution is required. The system management solution should collect system information (including impending component failure) from the device that generated the alert and sends the information securely to OEM to Support to troubleshoot the issue and provide an appropriate solution. - NA Currently	Bidders to comply with RFP/GeM bid terms and conditions
9	87, 93, 99, 105, 111 & 118	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 9 SAN & Network FC HBA CARD- Two FC Card with minimum 1 number of 32 Gbps FC ports in each card with Supported SFP+ transceivers (With NVME Capable)	Single card with 2x32G FC Ports, and we Need to know what is nvme capability in FC card.	Bidders to comply with RFP/GeM bid terms and conditions



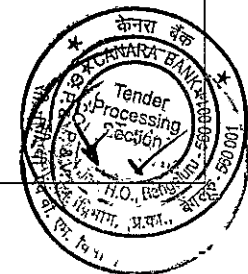
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
10	93, 99, 105, 111 & 119	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 9 SAN & Network Network cards 1 Gbps 2*1Gbps (Four Port of 1Gbase-T On-Board or separate NIC with supported minimum 5 meter of compatible Cat6/Cat7 UTP Cable)	Can we provide Single card with 4x1G ports	Bidders to comply with RFP/GeM bid terms and conditions
11	87,93, 99, 105, 111 & 119	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 9 SAN & Network Network cards 10 Gbps 2*10Gbps -Two Network Cards, each equipped with at least two 10-gigabit network ports (Four Port BaseT NIC LOM or separate NIC with minimum 5 meter Cat6A/Cat7 UTP Cable.	can we provide Single card with 4x10G ports	Bidders to comply with RFP/GeM bid terms and conditions
12	89, 95, 101, 107, 114 & 121	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 19 System Management Solution	The system management solution is required. The system management solution should collect system information (including impending component failure) from the device that generated the alert and sends the information securely to OEM to Support to troubleshoot the issue and provide an appropriate solution. - NA Currently	Bidders to comply with RFP/GeM bid terms and conditions



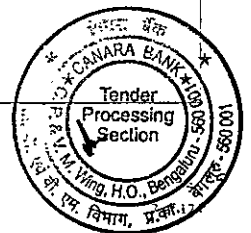
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
13	88, 94, 100, 106, 112 & 120	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 14 Port- 3 USB3.0 port and 1 VGA Port	Can we consider this as 2x USB 3.0 Ports	Bidder to refer corrigendum-5.
14	88, 94, 100, 107, 113 & 120	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 17 PCI Slots- Minimum 4 - x16 PCIe Gen4 or higher free slots(Peripheral Component Interconnect Express)	After populating all the asked cards, we can provide this using only 4U GPU Servers. Kindly help to remove this clause so this requirement can be fitted in 2U form factor	Bidders to comply with RFP/GeM bid terms and conditions
15	88, 94, 100, 106, 112 & 120	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 14 Port- 3 USB3.0 port and 1 VGA Port	Can we consider this as 2x USB 3.0 Ports..	Bidder to refer corrigendum-5.



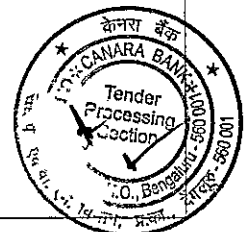
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
16	88, 94, 100, 107, 113 & 120	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 17 PCI Slots- Minimum 4 - x16 PCIe Gen4 or higher free slots(Peripheral Component Interconnect Express)	After populating all the asked cards, we can provide this using only 4U GPU Servers. Kindly help to remove this clause so this requirement can be fitted in 2U form factor	Bidders to comply with RFP/GeM bid terms and conditions
17	88, 94, 100, 106, 112 & 120	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 14 Port- 3 USB3.0 port and 1 VGA Port	Can we consider this as 2x USB 3.0 Ports-	Bidder to refer corrigendum-5.
18	88, 94, 100, 107, 113 & 120	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 17 PCI Slots- Minimum 4 - x16 PCIe Gen4 or higher free slots(Peripheral Component Interconnect Express)	After populating all the asked cards, we can provide this using only 4U GPU Servers. Kindly help to remove this clause so this requirement can be fitted in 2U form factor	Bidders to comply with RFP/GeM bid terms and conditions



Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
19	88, 94, 100, 106, 112 & 120	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 14 Port- 3 USB3.0 port and 1 VGA Port	Can we consider this as 2x USB 3.0 Ports	Bidder to refer corrigendum-5.
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21	88, 94, 100, 106, 112 & 120	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 14 Port- 3 USB3.0 port and 1 VGA Port	Can we consider this as 2x USB 3.0 Ports	Bidder to refer corrigendum-5.

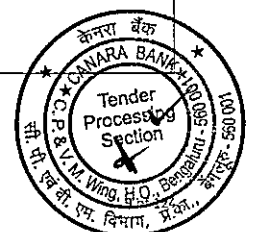


Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
22	88, 94, 100, 107, 113 & 120	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 17 PCI Slots- Minimum 4 - x16 PCIe Gen4 or higher free slots(Peripheral Component Interconnect Express)	After populating all the asked cards, we can provide this using only 4U GPU Servers. Kindly help to remove this clause so this requirement can be fitted in 2U form factor	Bidders to comply with RFP/GeM bid terms and conditions
23	116	Annexure-9 Technical Specifications	Table-F Custom Technical Specification - 12 servers	Sl. No: 5- Processor Socket Minimum 2 sockets i.e., 16*1 =16 core ( 1 Populated & 1 For future upgrade ) - Type 1 Minimum 2 sockets i.e., 32*1 =32 core ( 1 Populated & 1 For future upgrade ) - Type 2 Minimum 2 sockets i.e., 32*1 =32 core ( 1 Populated & 1 For future upgrade ) - Type 3	No OEM can provide you access to so many usable PCIe Slots and so many NVMe SSD's populated on a single CPU. Kindly modify this as Dual CPU's populated.	Bidder to refer corrigendum-5.
24	118	Annexure-9 Technical Specifications	Table-F Custom Technical Specification - 12 servers	Sl. No: 7- SSD Slot Count- 10 or higher, Minimum 4 free slots should be available for future upgrade - Type 1 12 or higher Minimum 4 free slots should be available for future upgrade - Type 2 38 or higher Minimum 4 free slots should be available for future upgrade - Type 2	You have asked for All flash NVMe SSD's and H/W RAID Card with 2 GB Battery Backed Cache for the same. This is available with few OEM's only. Request you to modify this to SATA/SAS SSD's.	Bidder to refer corrigendum-5.
25	88, 94, 100, 106, 112 & 120	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 14 Port- 3 USB3.0 port and 1 VGA Port	Can we consider this as 2x USB 3.0 Ports.	Bidder to refer corrigendum-5.

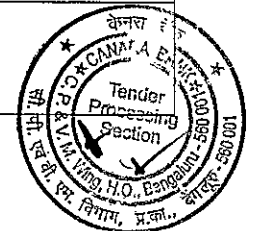




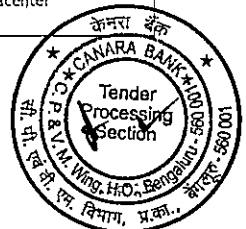
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
26	88, 94, 100, 107, 113 & 120	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 17 PCI Slots- Minimum 4 - x16 PCIe Gen4 or higher free slots(Peripheral Component Interconnect Express)	After populating all the asked cards, we can provide this using only 4U GPU Servers. Kindly help to remove this clause so this requirement can be fitted in 2U form factor.	Bidders to comply with RFP/GeM bid terms and conditions
27	139	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches A. Type 1 Switch - 14 numbers (07 numbers in DC and 07 numbers in DRC) - Mgmt.	Sl. No: 27 Proposed Switches must integrate seamlessly with active - active ports for redundancy and high availability from two core/distributed switches from day one with our existing infrastructure of Cisco/Juniper Datacenter router/switches.	Kindly relax this point	Bidders to comply with RFP/GeM bid terms and conditions
28	138	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	A. Type 1 Switch - 14 numbers (07 numbers in DC and 07 numbers in DRC) - Mgmt.  Additional Clause: The Switch shall integrate with centralized network management software.	Kindly relax this point	Bidders to comply with RFP/GeM bid terms and conditions
29	140	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches B. Type 2 Switch - 24 numbers (12 DC+ 12 DRC) for Data	Sl. No: 27 Proposed Switches must integrate seamlessly with active - active ports for redundancy and high availability from two core/distributed switches from day one with our existing infrastructure of Cisco/Juniper Datacenter router/switches.	Kindly relax this point	Bidders to comply with RFP/GeM bid terms and conditions
30	138	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	A. Type 1 Switch - 14 numbers (07 numbers in DC and 07 numbers in DRC) - Mgmt.  Additional Clause: The Switch shall integrate with centralized network management software.	Kindly relax this point	Bidders to comply with RFP/GeM bid terms and conditions
31	142	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches C. Type 4 Switch - 4 numbers (2 DC+ 2 DRC) - Storage	Sl. No: 27 Proposed Switches must integrate seamlessly with active - active ports for redundancy and high availability from two core/distributed switches from day one with our existing infrastructure of Cisco/Juniper Datacenter router/switches.	Kindly relax this point	Bidders to comply with RFP/GeM bid terms and conditions



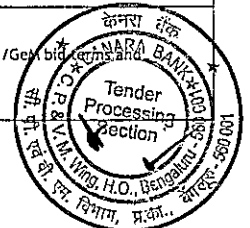
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
32	138	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	A. Type 1 Switch - 14 numbers (07 numbers in DC and 07 numbers in DRC) - Mgmt.  Additional Clause: The Switch shall integrate with centralized network management software.	Kindly relax this point	Bidders to comply with RFP/GeM bid terms and conditions
33	124	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.OPB Usable Space: DC -1, DRC -1)	Sl. No. 5 Architecture (Point a) :- a. Multi-tenant, Support for S3 IAM - Identity and Access Management.	Need clarity on this. What do you mean by Multi - Tenant ?	Bidders to comply with RFP/GeM bid terms and conditions
34	128	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.OPB Usable Space: DC -1, DRC -1)	Sl. No: 29 Controller & Availability- Minimum four controllers are required to provide 2.OPB usable space, hot swappable controllers for high availability, load balancing and redundant modes. Minimum 20 core should be available per controller Offered Storage array should be an enterprise class storage system with 99 % Data Availability guarantee.	Do you mean 4 active - active controllers ?	Bidders to comply with RFP/GeM bid terms and conditions
35	12	SECTION B - INTRODUCTION	6. Participation methodology:	6.3. If any product of Principal/OEM/OSD is being quoted in this RFP, the Principal/OEM/OSD cannot bid for any other Principal's/OEM's/OSD's product. If participated, the bids of Principal/OEM/OSD and the authorized bidder/s are liable for rejection.	Request you to remove this point	Bidders to comply with RFP/GeM bid terms and conditions
36	64	Annexure-2 Pre-Qualification Criteria	Sl. No. 6	Pre-Qualification Criteria: The bidder should have yearly average turnover of 300 Crores in India for the last three financial years 2020-2021, 2021-2022, 2022-2023 from their Indian operation as per the audited Financial Statements. This must be the individual company turnover and not of any group of companies.	Please add financial year 2023-24 in this criteria	Bidders to comply with RFP/GeM bid terms and conditions
37	14	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	1. Project Timelines	1.3. The timelines for the delivery and installation of all Hardware and Software should be completed within 24 weeks from the date of acceptance of the Purchase Order or 25 weeks from the date of Purchase Order for all the locations. It will be the sole responsibility of the vendor to submit any form required for release of shipment from the check post.	Kindly confirm delivery timeline at one place written 25 weeks and below that written 12 weeks	Bidder to refer corrigendum-5.
38	64	Annexure-2 Pre-Qualification Criteria	Sl. No. 5	Pre-Qualification Criteria: The Bidder should have an active and premium partnership with Hardware OEM to offer their Hardware and Software as a service to Bank.		Query not clear



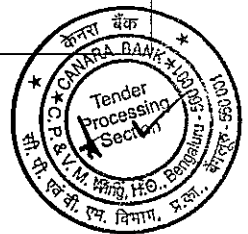
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
39	21 & 22	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	8. Payment Terms	8.1. The payment schedule for Hardware will be as under and will release after execution of contract agreement:  Sl. No: 4 & 8	(Do we have to quote for 3 years Warranty+2 Years AMC) or (Only for 3 years warranty and then user will decide for AMC of 2 years to enter or not)	Bidders to comply with RFP/GeM bid terms and conditions
40	25	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	12. Annual Maintenance Contract (AMC) / Annual Technical Support (ATS) (if contracted):	12.1. At the time of submission of bids, the Bidder has to quote AMC/ATS for Hardware (including OS), software, License Items for two (2) years after completion of three (3) year warranty period, in the commercial Bid separately for comprehensive maintenance contract	We are given provision to submit single/unit price on GEM portal. There is no provision of separate price submission of AMC. Kindly guide on same	Bidders to comply with RFP/GeM bid terms and conditions
41	25	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	12. Annual Maintenance Contract (AMC) / Annual Technical Support (ATS) (if contracted):	12.2. The Bank, at its discretion may enter into Annual Maintenance Contract (AMC)/ Annual Technical Support (ATS) of hardware, software, License supplied with the bidder after completion of respective warranty periods.	will the AMC price will be considered for L1 evaluation?	Bidders to comply with RFP/GeM bid terms and conditions
42	161	Annexure-11 Undertaking of Authenticity	Undertaking of Authenticity	Should you require, we hereby undertake to produce the certificate from our OEM/OSD/OSO supplier in support of above undertaking at the time of delivery/installation. It will be our responsibility to produce such letters from our OEM/OSD/OSO supplier's at the time of delivery or within a reasonable time.	What exact letter you want from OEM?	Bidder to submit Annexure-15 Manufacturer Authorization Form from the OEMs.
43	139	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	A. Type 1 Switch - 14 numbers (07 numbers in DC and 07 numbers in DRC) - Mgmt. Sl. No. 27 :- Proposed Switches must integrate seamlessly with active - active ports for redundancy and high availability from two core/distributed switches from day one with our existing infrastructure of Cisco/Juniper Datacenter router/switches.	What will be our scope of work. Kindly confirm in detail	1. Bidder should provide devices such that redundancy and high availability is achieved while connecting to Core /Distributed Switches. 2. Necessary configuration should be done by bidder in their provided switches to integrate with our existing infrastructure of Cisco/Juniper Datacenter router/switches.
44	140	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	B. Type 2 Switch - 24 numbers (12 DC+ 12 DRC) for Data Sl. No: 31 Proposed Switches must integrate seamlessly with active - active ports for redundancy and high availability from two core/distributed switches from day one with our existing infrastructure of Cisco/Juniper Datacenter router/switches.	What will be our scope of work. Kindly confirm in detail.	1. Bidder should provide devices such that redundancy and high availability is achieved while connecting to Core /Distributed Switches. 2. Necessary configuration should be done by bidder in their provided switches to integrate with our existing infrastructure of Cisco/Juniper Datacenter router/switches.
45	142	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches C. Type 4 Switch - 4 numbers (2 DC+ 2 DRC) - Storage	Sl. No: 27 Proposed Switches must integrate seamlessly with active - active ports for redundancy and high availability from two core/distributed switches from day one with our existing infrastructure of Cisco/Juniper Datacenter router/switches.	What will be our scope of work. Kindly confirm in detail.	1. Bidder should provide devices such that redundancy and high availability is achieved while connecting to Core /Distributed Switches. 2. Necessary configuration should be done by bidder in their provided switches to integrate with our existing infrastructure of Cisco/Juniper Datacenter router/switches.



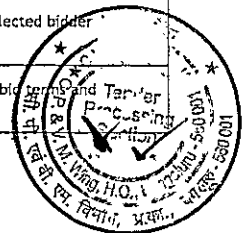
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
46	136	Annexure-9 Technical Specifications	Table-I Technical Specification of 27 server racks (19 Nos at DC - Single Phase, 8 Three Phase)	Sl. No: 3- Power Factor  PDU Single Phase with 63A Server rack mount power distribution unit (Ph,230V,63A 50/60Hz with redundancy. PDU Three Phase with 32A Server rack mount power distribution unit 3Ph,440V,63A 50/60Hz with redundancy.	Customer to specify as whether the PDU required is a dumb PDU or intelligent PDU single phase & three phase	Normal PDU is required
47	136	Annexure-9 Technical Specifications	Table-I Technical Specification of 27 server racks (19 Nos at DC - Single Phase, 8 Three Phase)	Sl. No: 4- Form Factor 42 U Rack Frame with all necessary side panels	It is important for customer to specify that the load carrying capacity of the server racks frames to comply to 1500kgs & Also it is recommended to specify that the product to be UL certified .	Bidders to comply with RFP/GeM bid terms and conditions
48	136	Annexure-9 Technical Specifications	Table-I Technical Specification of 27 server racks (19 Nos at DC - Single Phase, 8 Three Phase)	Sl. No: 6 Wheels- Rack wheels for rack movement	As such we learn that these server racks are deployed in Internet data centres hence wheels are not recommended . Recommended to use base plinth for load distribution ( L X B ) and if required wheels can be fitted for free movement of server racks .	Bidders to comply with RFP/GeM bid terms and conditions
49	136	Annexure-9 Technical Specifications	Table-I Technical Specification of 27 server racks (19 Nos at DC - Single Phase, 8 Three Phase)	Sl. No. 7 (Rack Size) 600 mm*1200mm *2100mm ( 600mm - Width , 1200mm Depth , 2100mm Height)	It is recommended for customer to specify that the racks to be supplied with air sealing kit to prevent cold air getting mixed with hot air , also these should not any vents on the top , bottom and side panels which will change the direction of the air flow. Customer to mention on brush panels cable glands on top and bottom so that there is no loose gaps even after pulling the cables to the rack .	Bidder to refer corrigendum-5.
50	136	Annexure-9 Technical Specifications	Table-I Technical Specification of 27 server racks (19 Nos at DC - Single Phase, 8 Three Phase)	Sl. No. 9 PDU Socket details Zero U standard with minimum 20 x C13 (20 power sockets with C13 type) and minimum 4 x C19 ( 4 power socket with C19 type) Per PDU Dual PDU should be made available for each rack	As a standard IEC sockets comes with bank of 1 , 3 , 6 etc . Requesting customer to use 6soc bank instead of 5 sockets which is an odd size .	Bidders to comply with RFP/GeM bid terms and conditions
51	136	Annexure-9 Technical Specifications	Table-I Technical Specification of 27 server racks (19 Nos at DC - Single Phase, 8 Three Phase)	Sl. No: 10- Over load protection MCB PDU rating approximate 14KVA per PDU for single phase with 63A (4 MCB) PDU rating approximate 22KVA per PDU for Three phase with 32A (6 MCB)	Recommended customer to use 24 sockets of C13 & 4 nos of C19 which will be each for branch wise distribution.	Bidders to comply with RFP/GeM bid terms and conditions
52	136	Annexure-9 Technical Specifications	Table-I Technical Specification of 27 server racks (19 Nos at DC - Single Phase, 8 Three Phase)	Sl. No: 13- Fan fans on the top side of rack ( desirable )	Since it is DC environment and cooling will be contained it is recommended not to use cooling fans inside the racks which will mix cold with hot air	Bidder to refer corrigendum-5.
53	137	Annexure-9 Technical Specifications	Table-J Technical Specification of server racks (23 Nos with three phase at DR)	Sl. No: 4- Form Factor 45 U Rack Frame with all necessary side panels	instead of 45u customer ca choose 48u or 52u height racks for large usable area & depending on the usable height available at data centre	Bidders to comply with RFP/GeM bid terms and conditions
54	137	Annexure-9 Technical Specifications	Table-J Technical Specification of server racks (23 Nos with three phase at DR)	Sl. No: 6 Wheels- Rack wheels for rack movement	As such we learn that these server racks are deployed in Internet data centres hence wheels are not recommended . Recommended to use base plinth for load distribution ( L X B ) and if required wheels can be fitted for free movement of server racks .	Bidders to comply with RFP/GeM bid terms and conditions



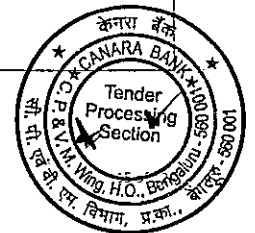
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
55	137	Annexure-9 Technical Specifications	Table-J Technical Specification of server racks (23 Nos with three phase at DR)	Sl. No. 7 (Rack Size) 600 mm*1200mm ( 600mm - Width , 1200mm Depth )	It is recommended for customer to specify that the racks to be supplied with air sealing kit to prevent cold air getting mixed with hot air , also these should not any vents on the top , bottom and side panels which will change the direction of the air flow. Customer to mention on brush panels cable glands on top and bottom so that there is no loose gaps even after pulling the cables to the rack .	Bidder to refer corrigendum-5.
56	137	Annexure-9 Technical Specifications	Table-J Technical Specification of server racks (23 Nos with three phase at DR)	Sl. No. 9 PDU Socket details Zero U standard with minimum 20 x C13 (20 power sockets with C13 type) and minimum 4 x C19 ( 4 power socket with C19 type ) Per PDU. Dual PDU should be available for each rack.	As such the height of the racks are 45u & above , it is recommended to use higher no of sockets in the PDU which is available till 42u sockets .	Bidders to comply with RFP/GeM bid terms and conditions
57	137	Annexure-9 Technical Specifications	Table-J Technical Specification of server racks (23 Nos with three phase at DR)	Sl. No: 13- Fan fans on the top side of rack ( desirable )	Since it is DC environment and cooling will be contained it is recommended not to use cooling fans inside the racks which will mix cold with hot air	Bidder to refer corrigendum-5.
58	NA	Annexure-9 Technical Specifications	Table-K - Technical Specification of PDU (166 Nos - (120DC, 46DR)  Network Port	Dual network port to access and monitor the PDU remotely	In page no 37 & 38 it is specified as DUMB pdu's to be supplied along with the racks as per technical specifications for DC & DR racks which sums upto 100 PDU'S for a total of 50 racks . However customer to specify about remote PDU qty 166nos which will be a separate BOQ in addition to 100 nos of DUMB PDU'S . Customer to clarify this POINT.	This table pertaining to Technical Specification of PDU stands deleted. Bidder to refer corrigendum-5.
59	73	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 11 All necessary cables and other accessories required for successful installation of the hardware items as per the scope of work to be supplied by the Bidder and the cost of the same to be added along with the respective Hardware items while quoting.	Qty, type of cable and length has be mention.	Bidder to refer corrigendum-5.
60	74	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 12 Bidder should follow a standard development process to ensure that proposed servers meets functional, security performance and regulatory requirements of the bank.	Regulatory requirement needs to mention for the batter clarity.	Details will be shared with the selected bidder
61	74	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 13 Bidder should comply as per the IT related policies of the bank.	Bank IT policy need to mention for the clarity.	Details will be shared with the selected bidder
62	74	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 14 Bidder is responsible in installing the Hardware, Software and other items as per Technical Specifications and Scope of work in the bank environment. And as per the bank secure configuration documents	Need more clarity on bank secure configuration documents for the clarity.	Details will be shared with the selected bidder
63	74	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 23 Bidder shall conduct preventive maintenance as may be necessary from time to time to ensure that equipment is in efficient running condition so as to ensure trouble free functioning.	Need more clarity on Preventive maintenance expectation for more clarity.	Preventive maintenance referres to health check of devices once in three month including firmware upgade and activity report to be submitted



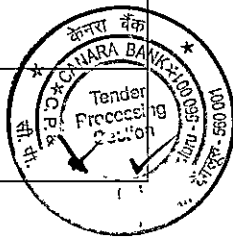
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
64	74	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 25 All proposed equipment's are required to connect existing SAN infrastructure.	Existing SAN switch should have free licensed ports.	Yes. Same is available in existing SAN switch. Bidders to comply with RFP/GeM bid terms and conditions
65	NA	Generic	Generic	Bidder must also provide the necessary power cables, LAN cables, FC cables from source to their provided rack as per the guideline of the Bank.	Length and type of the cable should be specify for batter planning.	Bidder to refer corrigendum-5.
66	74	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 29 The Selected Bidder has to coordinate with existing vendor for the SAN cable lay, connectivity and Zoning of the SAN ports as required connecting the Proposed Hardware and Software.	Getting delay by existing vendor in provisioning the SAN configuration will considered under the bidder scope.	LD is not applicable for the reasons attributable to the Bank and Force Majeure
67	75	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 32 The Bidder should note that Servers & Other Items being procured shall be delivered at locations as per requirements of bank and the Bidder will be required to support all such installations. The Bank reserves the right to change location by giving prior notice.	Location should be informed well in advance and post dispatch, Bank has to manage the delivery.	Bidders to comply with RFP/GeM bid terms and conditions
68	75	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 38 The proposed server network interfaces ports should be compatible for connecting bank CISCO switches.	Need CISCO switches SFP details. CISCO SFPs are completable with CISCO SFP.	Details will be shared with the selected bidder
69	75	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 39 The proposed server FC HBA interface ports should be compatible for existing SAN Switch.	SAN switch and SFP details are required to check compatibility.	Details will be shared with the selected bidder
70	75	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 42. The Bidder will responsible for the following; k. SAN connectivity to bank existing SAN Switch	Required Canara Bank team help for the successful integration	Bidders to comply with RFP/GeM bid terms and conditions
71	75	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 42 The Bidder will responsible for the following: l. LAN connectivity to bank existing network switch	Required Canara Bank team help for the successful integration.	Bidders to comply with RFP/GeM bid terms and conditions
72	76	Annexure-8 Scope of Work	Evaluation for Scope of Work for Servers	Sl. No: 4 The proposed hardware should be compatible with red hat Linux 8/9 or later and Windows 2016/2019/2022 and VMware hypervisor 7.X/8.x or later and Microsoft Hypervisor 2019 or later	KVM has to incorporate in this list.	Bidders to comply with RFP/GeM bid terms and conditions
73	76	Annexure-8 Scope of Work	Evaluation for Scope of Work for Servers	Sl. No: 5 Hardening of the servers as per the bank secure configuration document based on the OS, Hypervisor and hardware flavours	Hardening points should be discussed and mutually agree with both the parties before implemented.	Details will be shared with the selected bidder
74	76	Annexure-8 Scope of Work	Evaluation for Scope of Work for Storages	Sl. No: 12 performing code upgrade on quarterly basis.	It depends on code availability and requirement of the infrastructure.	Bidders to comply with RFP/GeM bid terms and conditions



Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
75	77	Annexure-8 Scope of Work	Evaluation for Scope of Work for Hyper-V - Microsoft	Sl. No:16 Implementation of security best practices for Hyper-V environments.	Need more clarity or require pointers from the CB to implement the same.	Details will be shared with the selected bidder
76	80	Annexure-8 Scope of Work	Evaluation for Scope of Work for Backup Solution	Sl. No: 1 proposed backup solution installation, configuration, and deployment of an application in a cluster or load balancer configuration	Backup should be installed in single instance. Its configuration has to be backed-up to support during the disaster with backup software itself so it can be easy reinstalled. Ideally backup server kept outside of the virtual environment for its effectiveness.	Bidders to comply with RFP/GeM bid terms and conditions
77	80	Annexure-8 Scope of Work	Evaluation for Scope of Work for Backup Solution	Sl. No: 10 Configure the cluster or load balancer to distribute incoming traffic evenly across the backup application servers	Backup should be installed in single instance. Its configuration has to be backed-up to support during the disaster with backup software itself so it can be easy reinstalled. Ideally backup server kept outside of the virtual environment for its effectiveness.	Bidders to comply with RFP/GeM bid terms and conditions
78	82	Annexure-8 Scope of Work	Evaluation for Scope of Work for TOR Switches	Sl. No: 18 Bidder to submit Migration plan, implementation document, solution architecture, traffic flow, cabling diagram etc.	Canara Bank team has to share the migration VMs count and data size.	Query not relevant
79	85	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC)	Sl. No: 5- Processor Processor- 2.7 GHz (gigahertz) or above	The overall performance of the processor is determined by a combination of factors, including core count, instructions per clock, cache size, memory bandwidth, PCIe , UPI, and the ability to boost frequencies on demand. A newer generation Xeon processor with a lower base frequency might still outperform an older generation processor with a higher base frequency in many scenarios . Hence request Canara Bank to modify the clause as - " Latest generation with base frequency to 2.1 Ghz or above"	Bidders to comply with RFP/GeM bid terms and conditions
80	86	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC)	Sl. No: 6- Memory RAM Type- DDR4 DIMM or Higher	DDR5 is the newest/ latest standard for memory modules and brings no. of key performances and improvement gains over DDR4 in terms of higher data transfer rates, increased bandwidth, and enhanced power efficiency. The latest generation of processors support only DDR5. In order to maintain uniformity across the solution, request customer to modify the clause with "DDR5 DIMM or Higher".	Bidder to refer corrigendum-5.
81	86	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC)	Sl. No: 6- Memory Slot Count- Minimum 24 or higher, Minimum 8 free memory slots should be available.	As per industry best practices, memory should be evenly populated in fully balanced configuration for optimal performance. Hence the card should be populated with 1 DIMM per channel and the other DIMM slot should be left free for future scalability.	Bidder to refer corrigendum-5.
82	86	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC)	Sl. No: 6- Memory Slot Count- Minimum 24 or higher, Minimum 8 free memory slots should be available.	DDR5 is the next-generation RAM offering faster performance, higher memory bandwidth and higher densities. Also the latest generation of server processor supports DDR5. To get the best performance of the server request to modify the clause as follows- "Minimum 4400 MT/s or higher ( memory speed should be compatible with processor speed to provide better performance)"	Bidder to refer corrigendum-5.
83	88	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC)	Sl. No: 16 Security- Silicon root of trust, authenticated BIOS, signed firmware updates and BIOS Live Scanning for malicious firmware Secure Boot, Disk encryption, TPM 2.0 (Trusted Platform Module), Hardware root of trust, malicious code free design.	Customer to add support for security features like confidential computing and mechanism to partition code and data (stored in server memory) into hardened trusted execution environment.	Bidders to comply with RFP/GeM bid terms and conditions

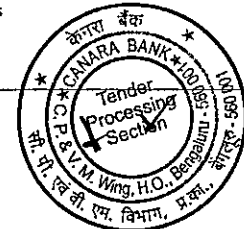


Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
84	92	Annexure-9 Technical Specifications	Table-B Technical Specification - 28 servers (17 DC and 11 DRC)	Sl. No: 5- Processor Processor- 2.7 GHz (gigahertz) or above	The overall performance of the processor is determined by a combination of factors, including core count, instructions per clock, cache size, memory bandwidth, and the ability to boost frequencies on demand. A newer generation Xeon processor with a lower base frequency might still outperform an older generation processor with a higher base frequency in many scenarios. Hence request Canara Bank to modify the clause as - " Latest generation with base frequency to 2.1 GHz or above"	Bidders to comply with RFP/GeM bid terms and conditions
85	92	Annexure-9 Technical Specifications	Table-B Technical Specification - 28 servers (17 DC and 11 DRC)	Sl. No: 6- Memory RAM Type- DDR4 DIMM or Higher	DDR5 is the newest/ latest standard for memory modules and brings no. of key performances and improvement gains over DDR4 in terms of higher data transfer rates, increased bandwidth, and enhanced power efficiency. The latest generation of processors support only DDR5. In order to maintain uniformity across the solution, request customer to modify the clause with "DDR5 DIMM or Higher".	Bidder to refer corrigendum-5.
86	92	Annexure-9 Technical Specifications	Table-B Technical Specification - 28 servers (17 DC and 11 DRC)	Sl. No. 6. Memory - RAM Size 64GB*8 = 512 TB	Request customer to modify this to 32GB*16 = 512 GB to get optimal memory performance	Bidders to comply with RFP/GeM bid terms and conditions
87	92	Annexure-9 Technical Specifications	Table-B Technical Specification - 28 servers (17 DC and 11 DRC)	Sl. No: 6- Memory Slot Count- Minimum 24 or higher, Minimum 8 free memory slots should be available.	As per industry best practices, memory should be evenly populated in fully balanced configuration for optimal performance. Hence the card should be populated with 1 DIMM per channel and the other DIMM slot should be left free for future scalability.	Bidder to refer corrigendum-5.
88	92	Annexure-9 Technical Specifications	Table-B Technical Specification - 28 servers (17 DC and 11 DRC)	Sl. No: 6- Memory Speed- Minimum 2933 MHz or higher ( memory speed should be compatible with process speed to provide better performance )	DDR5 is the next-generation RAM offering faster performance, higher memory bandwidth and higher densities. Also the latest generation of server processor supports DDR5. To get the best performance of the server, request to modify the clause as follows- "Minimum 4400 MT/s or higher ( memory speed should be compatible with processor speed to provide better performance)"	Bidders to comply with RFP/GeM bid terms and conditions
89	94	Annexure-9 Technical Specifications	Table-B Technical Specification - 28 servers (17 DC and 11 DRC)	Sl. No: 16 Security- Secure Boot, Disk encryption, TPM 2.0 (Trusted Platform Module), Hardware root of trust, malicious code free design.	Customer to add support for security features like confidential computing and mechanism to partition code and data (stored in server memory) into hardened trusted execution environment.	Bidders to comply with RFP/GeM bid terms and conditions
90	97	Annexure-9 Technical Specifications	Table-C Technical Specification - 100 servers (60 DC and 40 DRC)	Sl. No: 5- Processor Processor- 2.7 GHz (gigahertz) or above	The overall performance of the processor is determined by a combination of factors, including core count, instructions per clock, cache size, memory bandwidth, and the ability to boost frequencies on demand. A newer generation Xeon processor with a lower base frequency might still outperform an older generation processor with a higher base frequency in many scenarios. Hence request Canara Bank to modify the clause as - " Latest generation with base frequency to 2.1 GHz or above"	Bidders to comply with RFP/GeM bid terms and conditions
91	98	Annexure-9 Technical Specifications	Table-C Technical Specification - 100 servers (60 DC and 40 DRC)	Sl. No: 6- Memory RAM Type- DDR4 DIMM or Higher	DDR5 is the newest/ latest standard for memory modules and brings no. of key performances and improvement gains over DDR4 in terms of higher data transfer rates, increased bandwidth, and enhanced power efficiency. The latest generation of processors support only DDR5. In order to maintain uniformity across the solution, request customer to modify the clause with "DDR5 DIMM or Higher".	Bidder to refer corrigendum-5.
92	98	Annexure-9 Technical Specifications	Table-C Technical Specification - 100 servers (60 DC and 40 DRC)	Sl. No: 6- Memory Slot Count- Minimum 24 or higher, Minimum 8 free memory slots should be available.	As per industry best practices, memory should be evenly populated in fully balanced configuration for optimal performance. Hence the card should be populated with 1 DIMM per channel and the other DIMM slot should be left free for future scalability.	Bidder to refer corrigendum-5.

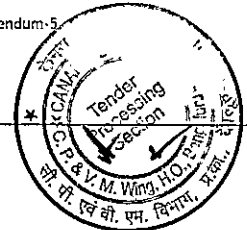




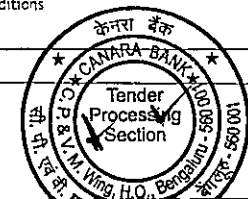
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
93	98	Annexure-9 Technical Specifications	Table-C Technical Specification - 100 servers (60 DC and 40 DRC)	Sl. No: 6- Memory Speed- Minimum 2933 MHz or higher ( memory speed should be compatible with process speed to provide better performance )	DDR5 is the next-generation RAM offering faster performance, higher memory bandwidth and higher densities. Also the latest generation of server processor supports DDR5. To get the best performance of the server request to modify the clause as follows- "Minimum 4400 MT/s or higher ( memory speed should be compatible with processor speed to provide better performance)"	Bidders to comply with RFP/GeM bid terms and conditions
94	100	Annexure-9 Technical Specifications	Table-C Technical Specification - 100 servers (60 DC and 40 DRC)	Sl. No: 16 Security- Secure Boot, Disk encryption, TPM 2.0 (Trusted Platform Module), Hardware root of trust, malicious code free design.	Customer to add support for security features like confidential computing and mechanism to partition code and data (stored in server memory) into hardened trusted execution envimmnt.	Bidders to comply with RFP/GeM bid terms and conditions
95	104	Annexure-9 Technical Specifications	Table-D Technical Specification - 54 servers (28 DC and 26 DRC)	Sl. No: 5- Processor  Processor- 2.7 GHz (gigahertz) or above	The overall performance of the processor is determined by a combination of factors, including core count, instructions per clock, cache size, memory bandwidth, and the ability to boost frequencies on demand. A newer generation Xeon processor with a lower base frequency might still outperform an older generation processor with a higher base frequency in many scenarios . Hence request Canara Bank to modify the clause as - " Latest generation with base frequency to 2.2 GHz or above"	Bidders to comply with RFP/GeM bid terms and conditions
96	104	Annexure-9 Technical Specifications	Table-D Technical Specification - 54 servers (28 DC and 26 DRC)	Sl. No: 6- Memory RAM Type- DDR4 DIMM or Higher	DDR5 is the newest/ latest standard for memory modules and brings no. of key performances and improvement gains over DDR4 in terms of higher data transfer rates, increased bandwidth, and enhanced power efficiency. The latest generation of processors support only DDR5. In order to maintain uniformity across the solution, request customer to modify the clause with "DDR5 DIMM or Higher".	Bidder to refer corrigendum-5.
97	104	Annexure-9 Technical Specifications	Table-D Technical Specification - 54 servers (28 DC and 26 DRC)	Sl. No. 6. Memory - RAM Size 64GB*4 = 256 GB	Request customer to modify this to 32GB*8 = 256 GB to get optimal performance	Bidders to comply with RFP/GeM bid terms and conditions
98	104	Annexure-9 Technical Specifications	Table-D Technical Specification - 54 servers (28 DC and 26 DRC)	Sl. No: 6- Memory Slot Count- Minimum 24 or higher, Minimum 20 free memory slots should be available.	As per industry best practices, memory should be evenly populated in fully balanced configuration for optimal performance. Hence the card should be populated with 1 DIMM per channel and the other DIMM slot should be left free for future scalability.	Bidders to comply with RFP/GeM bid terms and conditions
99	104	Annexure-9 Technical Specifications	Table-D Technical Specification - 54 servers (28 DC and 26 DRC)	Sl. No: 6- Memory Speed- Minimum 2933 MHz or higher ( memory speed should be compatible with process speed to provide better performance )	DDR5 is the next-generation RAM offering faster performance, higher memory bandwidth and higher densities. Also the latest generation of server processor supports DDR5. To get the best performance of the server request to modify the clause as follows- "Minimum 4400 MT/s or higher ( memory speed should be compatible with processor speed to provide better performance)"	Bidders to comply with RFP/GeM bid terms and conditions.
100	106	Annexure-9 Technical Specifications	Table-D Technical Specification - 54 servers (28 DC and 26 DRC)	Sl. No: 16 Security- Secure Boot, Disk encryption, TPM 2.0 (Trusted Platform Module), Hardware root of trust, malicious code free design.	Customer to add support for security features like confidential computing and mechanism to partition code and data (stored in server memory) into hardened trusted execution envimmnt.	Bidders to comply with RFP/GeM bid terms and conditions
101	110	Annexure-9 Technical Specifications	Table-E Technical Specification - 226 servers (135 DC and 91 DRC)	Sl. No: 5- Processor  Processor- 2.7 GHz (gigahertz) or above	The overall performance of the processor is determined by a combination of factors, including core count, instructions per clock, cache size, memory bandwidth, and the ability to boost frequencies on demand. A newer generation Xeon processor with a lower base frequency might still outperform an older generation processor with a higher base frequency in many scenarios . Hence request Canara Bank to modify the clause as - " Latest generation with base frequency to 2.0 GHz or above"	Bidders to comply with RFP/GeM bid terms and conditions



Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
102	110	Annexure-9 Technical Specifications	Table-E Technical Specification - 226 servers (135 DC and 91 DRC)	Sl. No: 6- Memory RAM Type- DDR4 DIMM or Higher	DDR5 is the newest/ latest standard for memory modules and brings no. of key performances and improvement gains over DDR4 in terms of higher data transfer rates, increased bandwidth, and enhanced power efficiency. The latest generation of processors support only DDR5. In order to maintain uniformity across the solution, request customer to modify the clause with "DDR5 DIMM or Higher".	Bidder to refer corrigendum-5.
103	110	Annexure-9 Technical Specifications	Table-E Technical Specification - 226 servers (135 DC and 91 DRC)	Sl. No: 6- Memory Slot Count- Minimum 24 or higher, Minimum 16 free memory slots should be available.	As per industry best practices, memory should be evenly populated in fully balanced configuration for optimal performance. Hence the card should be populated with 1 DIMM per channel and the other DIMM slot should be left free for future scalability.	Bidders to comply with RFP/GeM bid terms and conditions
104	110	Annexure-9 Technical Specifications	Table-E Technical Specification - 226 servers (135 DC and 91 DRC)	Sl. No: 6- Memory Speed- Minimum 2933 MHz or higher ( memory speed should be compatible with process speed to provide better performance )	DDR5 is the next-generation RAM offering faster performance, higher memory bandwidth and higher densities. Also the latest generation of server processor supports DDR5. To get the best performance of the server request to modify the clause as follows- "Minimum 4400 MT/s or higher ( memory speed should be compatible with processor speed to provide better performance)"	Bidders to comply with RFP/GeM bid terms and conditions
105	113	Annexure-9 Technical Specifications	Table-E Technical Specification - 226 servers (135 DC and 91 DRC)	Sl. No: 16 Security- Secure Boot, Disk encryption, TPM 2.0 (Trusted Platform Module), Hardware root of trust, malicious code free design.	Customer to add support for security features like confidential computing and mechanism to partition code and data (stored in server memory) into hardened trusted execution environment.	Bidders to comply with RFP/GeM bid terms and conditions
106	116	Annexure-9 Technical Specifications	Table-F Custom Technical Specification - 12 servers	Sl. No: 5- Processor Processor- 2.7 GHz (gigahertz) or above	The overall performance of the processor is determined by a combination of factors, including core count, instructions per clock, cache size, memory bandwidth, and the ability to boost frequencies on demand. A newer generation Xeon processor with a lower base frequency might still outperform an older generation processor with a higher base frequency in many scenarios . Hence request Canara Bank to modify the clause as - " Latest generation with base frequency to 2.0 GHz or above"	Bidders to comply with RFP/GeM bid terms and conditions
107	116	Annexure-9 Technical Specifications	Table-F Custom Technical Specification - 12 servers	Sl. No. 5 Processor Cores per socket: 24	This is not line with the socket requirement mentioned a row above. Kindly clarify.	Bidder to refer corrigendum-5.
108	117	Annexure-9 Technical Specifications	Table-F Custom Technical Specification - 12 servers	Sl. No: 6- Memory RAM Type- DDR4 DIMM or Higher	DDR5 is the newest/ latest standard for memory modules and brings no. of key performances and improvement gains over DDR4 in terms of higher data transfer rates, increased bandwidth, and enhanced power efficiency. The latest generation of processors support only DDR5. In order to maintain uniformity across the solution, request customer to modify the clause with "DDR5 DIMM or Higher".	Bidder to refer corrigendum-5.
109	117	Annexure-9 Technical Specifications	Table-F Custom Technical Specification - 12 servers	Sl. No. 6. Memory - RAM Size 64GB*4 = 256 GB - Type 1 64GB*16 = 1024 GB - Type 2 64GB*16 = 1024 GB - Type 3	Request customer to modify this to 32GB*8 = 256 GB - Type 1 128GB*8 = 1024 GB - Type 2 128GB*8 = 1024 GB - Type 3 to get optimal performance	Bidder to refer corrigendum-5.



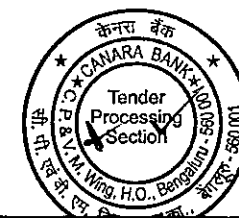
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
110	117	Annexure-9 Technical Specifications	Table-F Custom Technical Specification - 12 servers	Sl. No: 6- Memory Slot Count- Minimum 24 or higher, Minimum 20 free memory slots should be available. - Type 1 Minimum 24 or higher, Minimum 8 free memory slots should be available. - Type 2 Minimum 24 or higher, Minimum 8 free memory slots should be available. - Type 3	As per industry best practices, memory should be evenly populated in fully balanced configuration for optimal performance. Hence the card should be populated with 1 DIMM per channel and the other DIMM slot should be left free for future scalability.	Bidders to comply with RFP/GeM bid terms and conditions
111	117	Annexure-9 Technical Specifications	Table-F Custom Technical Specification - 12 servers	Sl. No: 6- Memory Speed- Minimum 2933 MHz or higher ( memory speed should be compatible with process speed to provide better performance )	DDR5 is the next-generation RAM offering faster performance, higher memory bandwidth and higher densities. Also the latest generation of server processor supports DDR5. To get the best performance of the server request to modify the clause as follows- "Minimum 4400 MT/s or higher ( memory speed should be compatible with processor speed to provide better performance)"	Bidders to comply with RFP/GeM bid terms and conditions
112	120	Annexure-9 Technical Specifications	Table-F Custom Technical Specification - 12 servers	Sl. No: 16 Security- Secure Boot, Disk encryption, TPM 2.0 (Trusted Platform Module), Hardware root of trust, malicious code free design.	Customer to add support for security features like confidential computing and mechanism to partition code and data (stored in server memory) into hardened trusted execution environment.	Bidders to comply with RFP/GeM bid terms and conditions
113	86	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC)	Sl. No: 6- Memory Speed- Minimum 2933 MHz or higher ( memory speed should be compatible with process speed to provide better performance )	We recommend memory Speed should be minimum 3200 MHz	Bidders to comply with RFP/GeM bid terms and conditions
114	88	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC)	Sl. No: 17 PCI Slots- Minimum 4 - x16 PCIe Gen4 or higher free slots(Peripheral Component Interconnect Express)	Considering the PCIe I/O Population which is been asked 2* Dual Port 1G , 2 * Dual Port 10G , 2 * Single Port 32G FC HBA , 1 * Raid controller - This I/O Population will consume min 6 PCIe Slots consumption. Typical PCIe Slots available across all major OEM's will be 6-7.So considering this 4 PCIe Slots Free/Available is not looking possible. We request to dilute this expectations.	Bidder to refer corrigendum-5.
115	92	Annexure-9 Technical Specifications	Table-B Technical Specification - 28 servers (17 DC and 11 DRC)	Sl. No: 6- Memory Speed- Minimum 2933 MHz or higher ( memory speed should be compatible with process speed to provide better performance )	We recommend memory Speed should be minimum 3200 MHz	Bidders to comply with RFP/GeM bid terms and conditions
116	94	Annexure-9 Technical Specifications	Table-B Technical Specification - 28 servers (17 DC and 11 DRC)	Sl. No: 17 PCI Slots- Minimum 4 - x16 PCIe Gen4 or higher free slots(Peripheral Component Interconnect Express)	Considering the PCIe I/O Population which is been asked 2* Dual Port 1G , 2 * Dual Port 10G , 2 * Single Port 32G FC HBA , 1 * Raid controller - This I/O Population will consume min 6 PCIe Slots consumption. Typical PCIe Slots available across all major OEM's will be 6-7.So considering this 4 PCIe Slots Free/Available is not looking possible. We request to dilute this expectations.	Bidder to refer corrigendum-5.
117	98	Annexure-9 Technical Specifications	Table-C Technical Specification - 100 servers (60 DC and 40 DRC)	Sl. No: 6- Memory Ram Size- 64GB*16 = 1024 GB Slot Count- Minimum 24 or higher, Minimum 8 free memory slots should be available.	In Point 5 Processor the Specs demand 1 CPU population and 2nd Socket should be free for Future. Now in Ram segment 24 Dimm Slots are been asked with 64 GB * 16 DIMM Population. As per technology mapping 24 DIMM Slots will be mapped as 12 DIMM Slots per CPU. So in case of a One CPU population only 12 DIMM Slots will be available. So this would demand 2nd CPU Population Hence we request the amendment for 2 CPU Population.	Bidder to refer corrigendum-5.
118	98	Annexure-9 Technical Specifications	Table-C Technical Specification - 100 servers (60 DC and 40 DRC)	Sl. No: 6- Memory Speed- Minimum 2933 MHz or higher ( memory speed should be compatible with process speed to provide better performance )	We recommend memory Speed should be minimum 3200 MHz	Bidders to comply with RFP/GeM bid terms and conditions



Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
119	100	Annexure-9 Technical Specifications	Table-C Technical Specification - 100 servers (60 DC and 40 DRC)	Sl. No: 17 PCI Slots- Minimum 4 - x16 PCIe Gen4 or higher free slots(Peripheral Component Interconnect Express)	Considering the PCIe I/O Population which is been asked 2* Dual Port 1G , 2 * Dual Port 10G , 2 * Single Port 32G FC HBA , 1 * Raid controller - This I/O Population will consume min 6 Pcie Slots consumption. Typical PCIe Slots available across all major OEM's will be 6-7.So considering this 4 PCIe Slots Free/Available is not looking possible. We request to dilute this expectations.	Bidder to refer corrigendum-5.
120	104	Annexure-9 Technical Specifications	Table-D Technical Specification - 54 servers (28 DC and 26 DRC)	Sl. No: 5- Processor Socket Minimum 2 sockets i.e., 24*1 =24 core ( 1 Populated & 1 For future upgrade )	Considering the PCIe I/O Population which is been asked 2* Dual Port 1G , 2 * Dual Port 10G , 2 * Single Port 32G FC HBA , 1 * Raid controller - This I/O Population will consume min 6 Pcie Slots consumption. So with single CPU population only Half of the PCIe slots will get activated. So for this I/O population it will demand Second CPU population. So we request the 2 CPU population on day 1	Bidder to refer corrigendum-5.
121	104	Annexure-9 Technical Specifications	Table-D Technical Specification - 54 servers (28 DC and 26 DRC)	Sl. No: 6- Memory Speed- Minimum 2933 MHz or higher ( memory speed should be compatible with process speed to provide better performance )	We recommend memory Speed should be minimum 3200 MHz	Bidders to comply with RFP/GeM bid terms and conditions
122	107	Annexure-9 Technical Specifications	Table-D Technical Specification - 54 servers (28 DC and 26 DRC)	Sl. No: 17 PCI Slots- Minimum 4 - x16 PCIe Gen4 or higher free slots(Peripheral Component Interconnect Express)	Considering the PCIe I/O Population which is been asked 2* Dual Port 1G , 2 * Dual Port 10G , 2 * Single Port 32G FC HBA , 1 * Raid controller - This I/O Population will consume min 6 Pcie Slots consumption. Typical PCIe Slots available across all major OEM's will be 6-7.So considering this 4 PCIe Slots Free/Available is not looking possible. We request to dilute this expectations.	Bidder to refer corrigendum-5.
123	110	Annexure-9 Technical Specifications	Table-E Technical Specification - 226 servers (135 DC and 91 DRC)	Sl. No: 6- Memory Speed- Minimum 2933 MHz or higher ( memory speed should be compatible with process speed to provide better performance )	We recommend memory Speed should be minimum 3200 MHz	Bidders to comply with RFP/GeM bid terms and conditions
124	110	Annexure-9 Technical Specifications	Table-E Technical Specification - 226 servers (135 DC and 91 DRC)	Sl. No: 5- Processor Socket Minimum 2 sockets i.e., 16*1 =16 core ( 1 Populated & 1 For future upgrade )	Considering the PCIe I/O Population which is been asked 2* Dual Port 1G , 2 * Dual Port 10G , 2 * Single Port 32G FC HBA , 1 * Raid controller - This I/O Population will consume min 6 Pcie Slots consumption. So with single CPU population only Half of the PCIe slots will get activated. So for this I/O population it will demand Second CPU population. So we request the 2 CPU population on day 1	Bidder to refer corrigendum-5.
125	113	Annexure-9 Technical Specifications	Table-E Technical Specification - 226 servers (135 DC and 91 DRC)	Sl. No: 17 PCI Slots- Minimum 4 - x16 PCIe Gen4 or higher free slots(Peripheral Component Interconnect Express)	Considering the PCIe I/O Population which is been asked 2* Dual Port 1G , 2 * Dual Port 10G , 2 * Single Port 32G FC HBA , 1 * Raid controller - This I/O Population will consume min 6 Pcie Slots consumption. Typical PCIe Slots available across all major OEM's will be 6-7.So considering this 4 PCIe Slots Free/Available is not looking possible. We request to dilute this expectations.	Bidder to refer corrigendum-5.
126	116	Annexure-9 Technical Specifications	Table-F Custom Technical Specification - 12 servers	Sl. No: 5- Processor Socket Minimum 2 sockets i.e., 16*1 =16 core ( 1 Populated & 1 For future upgrade ) - Type 1 Minimum 2 sockets i.e., 32*1 =32 core ( 1 Populated & 1 For future upgrade ) - Type 2 Minimum 2 sockets i.e., 32*1 =32 core ( 1 Populated & 1 For future upgrade ) - Type 3	Considering the PCIe I/O Population which is been asked 2* Dual Port 1G , 2 * Dual Port 10G , 2 * Single Port 32G FC HBA , 1 * Raid controller - This I/O Population will consume min 6 Pcie Slots consumption. So with single CPU population only Half of the PCIe slots will get activated. So for this I/O population it will demand Second CPU population. So we request the 2 CPU population on day 1	Bidder to refer corrigendum-5.



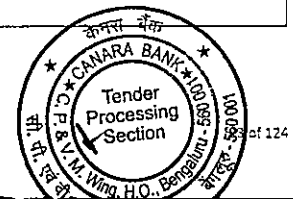
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
127	117	Annexure-9 Technical Specifications	Table-F Custom Technical Specification - 12 servers	Sl. No: 6- Memory Slot Count- Minimum 24 or higher, Minimum 8 free memory slots should be available. - Type 2 Minimum 24 or higher, Minimum 8 free memory slots should be available. - Type 3	In Point 5 Processor the Specs demand 1 CPU population and 2nd Socket should be free for Future. Now in Ram segment 24 Dimm Slots are been asked with 64 GB * 16 DIMM Population. As per technology mapping 24 DIMM Slots will be mapped as 12 DIMM Slots per CPU. So in case of a One CPU population only 12 DIMM Slots will be available. So this would demand 2nd CPU Population Hence we request the amendment for 2 CPU Population.	Bidder to refer corrigendum-5.
128	118	Annexure-9 Technical Specifications	Table-F Custom Technical Specification - 12 servers	Sl. No: 7- SSD Slot Count- 38 or higher Minimum 4 free slots should be available for future upgrade - Type 2	Firstly Type2 mentioned here looks Typo-- It should be Type 3 -- We request clarity.	Bidder to refer corrigendum-5.
129	NA	Generic	Generic	Generic	In this Category of servers 38 NVme Slots are been asked -- As per Industry standard max Nvme Support on server class systems will be 32. So we request a slot count dilution. For type 3 bank can ask for more than 1.92TB Nvme SSD.	Bidder to refer corrigendum-5.
130	120	Annexure-9 Technical Specifications	Table-F Custom Technical Specification - 12 servers	Sl. No: 17 PCI Slots- Minimum 4 - x16 PCIe Gen4 or higher free slots(Peripheral Component Interconnect Express)	Considering the PCIe I/O Population which is been asked 2* Dual Port 1G , 2 * Dual Port 10G , 2 * Single Port 32G FC HBA , 1 * Raid controller - This I/O Population will consume min 6 PCIe Slots consumption. Typical PCIe Slots available across all major OEM's will be 6-7. So considering this 4 PCIe Slots Free/Available is not looking possible. We request to dilute this expectations.	Bidder to refer corrigendum-5.
131	64	Annexure-2 Pre-Qualification Criteria	Sl. No: 8	Pre-Qualification Criteria The Bidder/OEM should have successfully supplied minimum cumulative 500 Nos. of Servers in India in the last three years out of which the bidder should have successfully supplied Hardware and software as a service model at least 100 servers deployed at Customer's DC and DR in Indian Market in any 1 Scheduled Commercial Bank/ NBFC/ Insurance Company/ PSU/ Central Government Organization in India in the last three years as on the date of submission of bid for this RFP.	We kindly request the bank to consider relaxing the cumulative supply of servers to 40% (200 units). Additionally, we request relaxation for bidders offering Hardware or Software as a Service (SaaS) model to provide a minimum of 100 servers at Customer's DC and DR in Indian Market in any 1 Scheduled Commercial Bank/ NBFC/ Insurance Company/ PSU/ Central Government Organization in India in the last three years as on the date of submission of bid for this RFP.	Bidder to refer corrigendum-5.
132	64	Annexure-2 Pre-Qualification Criteria	Sl. No. 10	Pre-Qualification Criteria: The bidder should have support office and Service Center at Bangalore and Mumbai.	The bidder should have support office and Service Center at Bangalore OR Mumbai.	Bidders to comply with RFP/GeM bid terms and conditions
133	NA	Generic	Generic	Generic	In this Category of servers 38 NVme Slots are been asked -- As per Industry standard max Nvme Support on server class systems will be 32. So we request a slot count dilution. For type 3 bank can ask for more than 1.92TB Nvme SSD.	Bidder to refer corrigendum-5.
134	138	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	A. Type 1 Switch - 14 numbers (07 numbers in DC and 07 numbers in DR) - Mgmt.	1) Is this Switch for 'Out of Band' (OOB) management switches ? 2) Is there separate distribution switches to be proposed for connecting the OOB Management ToR switches together - if YES, pls share specificationsof the same. If NO, are you expecting to connect these 'Mgmt' switches as well to the distribution switches mentioned in page 142 of the RFP ?	No separate OOB switches required. All switch uplink to be connected to distributed switches.



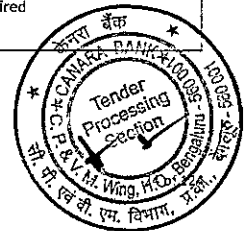
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
135	140	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	B. Type 2 Switch - 24 numbers (12 DC+ 12 DRC) for Data Sl. No. 33 High Mean Time Between Failure values (>3.5 lakh hours) should be available to ensure long life of switch hardware.	Request you to change this to "High Mean Time Between Failure values (>2.7 lakh hours) should be available to ensure long life of switch hardware.  Request Bank to change this value, as this is single OEM specific point . Higher MTBF values always donot provide the product reliability measurements	Bidder to refer corrigendum-5.
136	140	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	C. Type 4 Switch - 4 numbers (2 DC+ 2 DRC) - Storage Sl. No: 5 Switch throughput should be more than equal to 2 bpps.	Request you to change this to "Switch throughput should be more than equal to 1.2 Bpps"  All switching OEMs testing standards are different and hence this number of pps also vary , hence the ask to change this number to accommodate	Bidders to comply with RFP/GeM bid terms and conditions
137	142	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	C. Type 4 Switch - 4 numbers (2 DC+ 2 DRC) - Storage Sl. No. 33 High Mean Time Between Failure values (>3.5 lakh hours) should be available to ensure long life of switch hardware.	Request you to change this to "High Mean Time Between Failure values (>2.7 lakh hours) should be available to ensure long life of switch hardware.  Request Bank to change this value, as this is single OEM specific point . Higher MTBF values always donot provide the product reliability measurements	Bidder to refer corrigendum-5.
138	142	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	In addition to the above access switches Bidder to supply Distribution Switches in High availability with required capacity to connect all supplied access switches with dual uplink of 10/40/100 Gbps in active-active mode for redundancy and load sharing ( DC - 2, DRC - 2 )	1) Which all switches need to be connected to this distribution switch (Type 1 & Type 2 & Type 4 OR is there separate OOB Distribution switch required for Type 1 & Distribution for Data + Storage switches would be separate ?	No separate OOB switches required.All switch uplink to be connected to distributed switches.
139	85	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC)	Sl. No: 5- Processor Processor Make- Latest generation x86_64 bit architecture-based CPU's	Please mention the Class of CPU type required Platinum /Gold/Silver etc.  CPU vendors have different Class of CPU and given the general ask , both CPU type like high range platinum 8500 and Mid range Gold 6500 aslo qualify hence this ask.	Bidders to comply with RFP/GeM bid terms and conditions
140	91	Annexure-9 Technical Specifications	Table-B Technical Specification - 28 servers (17 DC and 11 DRC)	Sl. No: 5- Processor Processor Make- Latest generation x86_64 bit architecture-based CPU's	Please mention the Class of CPU type required Platinum /Gold/Silver etc  CPU vendors have different Class of CPU and given the general ask , both CPU type like high range platinum 8500 and Mid range Gold 6500 aslo qualify hence this ask.	Bidders to comply with RFP/GeM bid terms and conditions
141	150	Annexure-9 Technical Specifications	Table-N Technical Specifications of 4 SAN Director (2 Nos at DC and 2 Nos at DR)	Sl. No: 9 The switch should support 512 Gbps BW for ISL Trunking connectivity and Cut Thru Switching. Necessary Licenses to be provided by the bidder.	9. The switch should support 512 Gbps BW for ISL Trunking connectivity and Cut Thru/Store -Forward Switching. Necessary Licenses to be provided by the bidder.  There are only 2 OEM in SAN switching market . Cut Thru SAN switching is single OEM specific mechansim and hence request bank to change this Clause for more participation	Bidder to refer corrigendum-5.
142	154	Annexure-9 Technical Specifications	Table-N Technical Specifications of 4 SAN Director (2 Nos at DC and 2 Nos at DR)	Sl. No: 21 Other Features The director class switch should provide Inter Chassis Link (ICL) for connecting multiple Chassis	The director class switch should provide Inter Chassis Link (ICL) or Inter Switch Link (ISL) for connecting multiple Chassis  ICL is Single OEM specification , we provide the same capability using more open industry standard ISL/Trunking . Request bank to change this remove or change this clause	Bidder to refer corrigendum-5.



Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
143	156	Annexure-9 Technical Specifications	Table-O Technical Specifications of 8 SAN Switch (4 Nos at DC and 4 Nos at DR)	Sl. No. 5 ISL Trunking connectivity and Cut Thru Switching. Necessary Licenses to be provided by the bidder.	5. ISL Trunking connectivity and Cut Thru/Store Forward Switching. Necessary Licenses to be provided by the bidder.  There are only 2 OEM in SAN switching market . Cut Thru SAN switching is single OEM specific mechanism and hence request bank to change this Clause for more participation	Bidder to refer corrigendum-5.
144	88	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC)	Sl. No: 13- Warranty and Support 3 Years onsite warranty+ 2 years AMC, On-Site Support Warranty including part replacement/repairs within 4 hours of reporting, and Software support for updates, upgrades, patches, and bug fixes for supplied s/w from OEM 24 x 7 x 365 days. SSD drives should be covered for irrespective of read/writes on them. In case of Disk failure, the faulty disk will be maintained /destroyed / Degauss by Canara Bank. Proactive storage monitoring & support from OEM should be enabled. The proposed bidder will need to ensure support of product & change of components @ zero cost in case of any part becoming obsolete/EOL & EOS. Faulty Disks would not be returned back to OEM/Vendor or faulty disks will be destroyed before returning.	Software (Subscription based License) Bank has requested for "standard" subscription for OpenShift & JBoss license along with premium. Only "premium subscription" meet the criteria "OEM 24 x 7 x 365 days. " The "standard" version	Bidder to refer corrigendum-5.
145	23	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	9. Warranty	9.2. The selected bidder has to provide comprehensive On-site warranty for Three (3) years for proposed Hardware from the date of installation of the Hardware, System Software, OS, licenses etc., supplied.	Bank will require L1- L4 Enterprise support from the respective OS OEM and the selected bidder has to ensure the respective OEM support portal is made available.	Respective softwares OEM with the support level mention in the RFP to be provided and supplied licenses to be reflected under respective OEM portal used by Bank where ever applicable
146	79	Annexure-8 Scope of Work	Evaluation for Scope of Work for Apache Tomcat	Entire Clause	Software Subscription for JBoss Web Server is not mentioned for implementing Apache Tomcat, Bank to confirm on the sizing and the required subscriptions for JBoss Web Server, what kind of support is expected for Prod and Non Prod Environment.	Bidder to refer corrigendum-5.
147	80	Annexure-8 Scope of Work	Evaluation for Scope of Work for Apache Tomcat	Sl. No: 9 testing procedures to ensure the cluster and load balancer configurations are functioning correctly	Bank has to define the testing process and testing scenarios?	Details will be shared with the selected bidder
148	77	Annexure-8 Scope of Work	Evaluation for Scope of Work For Open shift	Entire Clause	What is the Hardware configuration for OpenShift hosting?	Details will be shared with the selected bidder
149	77	Annexure-8 Scope of Work	Evaluation for Scope of Work For Open shift	Entire Clause	What storage bank has present, does bank have Object, Block and File with certified OpenShift CSI Driver? can same be used for OpenShift Cluster?	Details will be shared with the selected bidder
150	172	Annexure-16 Bill of Material	Table - C Price details of Software/License Items (Subscription based Licenses)	Sl. No: 4 RedHat OpenShift - RHCOS latest version subscription with premium support	The Scope mentions implementation of Advanced Cluster Management and Cluster Security that is available only with Red Hat OpenShift Container Platform Plus, Bank to update the SKU with Red Hat OpenShift Container Platform Plus in the Bill of material and Scope of Work.	Bidder to refer corrigendum-5.
151	77	Annexure-8 Scope of Work	Evaluation for Scope of Work For Open shift	Entire Clause	For Control Plane and Infrastructure Nodes (EFK, registry, Quay, ACS,ACM, Grafana, Prometheus) can you share the infra configuration bank is expecting to provide	Details will be shared with the selected bidder

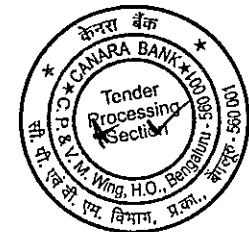


Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
152	77	Annexure-8 Scope of Work	Evaluation for Scope of Work For Open shift	Entire Clause	Bank to confirm if they intend the OEM to implement the solution for the mentioned scope of work	Bidders to comply with RFP/GeM bid terms and conditions
153	172	Annexure-16 Bill of Material	Table - C Price details of Software/License Items (Subscription based Licenses)	Sl. No: 2 RHEL 9 with premium support	Is this for Physical host of virtual host?	Bidders to comply with RFP/GeM bid terms and conditions
154	172	Annexure-16 Bill of Material	Table - C Price details of Software/License Items (Subscription based Licenses)	Sl. No: 3 RHEL 9 High Availability with premium support for CISC - X86 machines	Can you please clarify on CISC? Specific what support is needed here?	Bidder to refer corrigendum-5.
155	NA	Generic	Generic	Generic	Please clarify on number of clusters considered to be delivered within 12 weeks.	Query not clear
156	172	Annexure-16 Bill of Material	Table - C Price details of Software/License Items (Subscription based Licenses)	Sl. No: 2 RHEL 9 with premium support	Do we need to propose RHEL with Satellite?	No
157	172	Annexure-16 Bill of Material	Table - C Price details of Software/License Items (Subscription based Licenses)	Sl. No: 1 RHEL 9 Virtual DataCentre with premium support	Do we need to propose RHEL with Satellite?	No
158	172	Annexure-16 Bill of Material	Table - C Price details of Software/License Items (Subscription based Licenses)	Sl. No: 4 RedHat OpenShift - RHCOS latest version subscription with premium support	The Scope mentions implementation of Advanced Cluster Management and Cluster Security that is available only with Red Hat OpenShift Container Platform Plus, Bank to update the SKU with Red Hat OpenShift Container Platform Plus in the Bill of material and Scope of Work.	Bidder to refer corrigendum-5.
159	24	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	10. Scope involved during Contract period	10.7. The selected Bidder shall provide centralized complaint booking/lodging facility to the bank and the dash board shall be provided to the Bank. The method of booking complaints shall be E-mail, Toll-free no, on line portal, web, etc. 10.8. Escalation matrix as per Annexure-14 should be provided for post-delivery operational support, technical support, project related issues, etc.	Kindly provide the specifications for centralized complaint booking/lodging facility to the bank and the dash board.	Bidders to comply with RFP/GeM bid terms and conditions
160	142	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	In addition to the above access switches Bidder to supply Distribution Switches in High availability with required capacity to connect all supplied access switches with dual uplink of 10/40/100 Gbps in active-active mode for redundancy and load sharing ( DC - 2, DRC - 2 )	Kindly provide the specifications with required number of 10 / 40 / 100 Gbps ports with required SFP's.	Bidders to comply with RFP/GeM bid terms and conditions
161	172	Annexure-16 Bill of Material	Table - C Price details of Software/License Items (Subscription based Licenses)	Sl. No: 8 File Sync Software instance base with support	Kindly provide the specifications for the same	Bidder to refer corrigendum-5. Details provided in Annexure-8 Scope of Work.
162	24	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	10. Scope Involved during Contract period	10.5. The support shall be given on site.	Kindly confirm the number of resources required on-site with type of resources • System • Network • Storage • Helpdesk Others	Selected Bidder has to provide enough resource for smooth completion of the project.  Also during the contract if any issues arises bidder has to come onsite to resolve the issues as per the RFP scope.
163	171	Annexure-16 Bill of Material	Table - B Price details of Software/License Items (Perpetual)	Sl. No: 1 Windows 2022 Data Centre Edition 16 Corepack with Enterprise support	What coverage do you need under Enterprise support. Do you need a Premier support contract from Microsoft for supporting these perpetual licenses or need just Software assurance(which now don't cover support only give Upgrade right)	Software Assurance not required

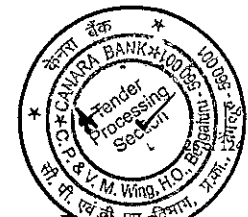




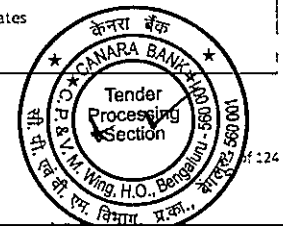
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
164	20	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	8. Payment Terms	8.1. 50% - On Supply/delivery of all the of Hardware as per RFP 20% - Installation of all Hardware 20% - Configuration, implementation and completion of all scope of work 10% - After Completion of Warranty Period (i.e., three years). Warranty period.	Request you to change the payment terms as - On Supply/delivery of all the of Hardware as per RFP - 70% Installation of all Hardware - 20% Configuration, implementation and completion of all scope of work - 10% After Completion of Warranty Period (i.e., three years). Warranty period. - 10%	Bidders to comply with RFP/GeM bid terms and conditions
165	181	Annexure-16 Bill of Material	Table - H Total Cost of the Hardware, Software and optional items for 5 Years	Total Cost of the Hardware, Software and optional items for 5 Years (Incl. of Taxes)	Request you to exclude the Total cost of Table-G (Price details of optional items for 5 years) from Total cost of Ownership for 5 years.	Bidder to refer corrigendum-5.
166	181	Annexure-16 Bill of Material	Table - G (Optional) Price details of Optional Items for 5 Years	The cost mentioned in column "a" of Table-F will be the fixed price for 5 years (i.e., Unit Price mentioned will be fixed for the entire contract period). Bank may procure the above items mentioned in Table-F with the same cost for the entire contract period. The items brought during the contract period should be co-terminus with the base hardware. Bank may issue Purchase order(s) to procure items mention in Table-F as per the necessary quantities as and when required by the Bank during the initial purchase or during the entire Contract Period. However, the bidder has to provide the optional items at the same cost mentioned in the Table-F.	The details mentioned referring the Table-F which is for Implementation services. However, the details should be for Table-G. Please change the same with Table-G (Refer Optional items).	Bidder to refer corrigendum-5.
167	NA	Generic	Generic	In the GeM Portal - We need to select only one Catalog (with specification and price). However the items asked in the Annexure 16 - Commercial bid are different & multiple items.	In the GeM Portal - We need to select only one specification and price). However the items asked in the Annexure 16 - Commercial bid are different & multiple items. Kindly allow the bid without the Catalog category and allow the submission of TCO with commercial bid upload.	Bidder to comply with RFP terms and Conditions
168	38	SECTION F - OWNERSHIP &AWARDING OF CONTRACT	1. Bid Validity Period	The Offer submitted and the prices quoted therein shall be valid for 180 days from the date of opening of Commercial Bid. Bid valid for any shorter period shall be rejected by the Bank.	Since most of the OEM's pricing policy for their quote is maximum 90 days. Hence request to Bank to change the clause as - The Offer submitted and the prices quoted therein shall be valid for 180 90 days from the date of Bid submission opening of Commercial Bid.	Bidders to comply with RFP/GeM bid terms and conditions
169	14-15	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	1. Project Timelines	Entire Clause	Please confirm the total project duration is 5 years including (Delivery, Installation, Implementation + Warranty + AMC).	Bidders to comply with RFP/GeM bid terms and conditions



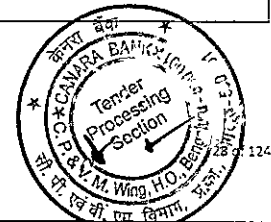
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
170	14	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	1. Project Timelines	1.3. The timelines for the delivery and installation of all Hardware and Software should be completed within 24 weeks from the date of acceptance of the Purchase Order or 25 weeks from the date of Purchase Order for all the locations. It will be the sole responsibility of the vendor to submit any form required for release of shipment from the check post.	The RFP states delivery and installation within 24/25 weeks. Please clarify if this is the total timeline for all locations combined or for each individual location	Bidder to refer corrigendum-5.
171	14	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	1. Project Timelines	1.4. The Bidder shall ensure that the Renewal of Licenses/ Subscriptions/ Fees /AMC/ATS/ Support contracts as applicable, during the period of Contract is completed before expiry date of respective components and the renewal process should be initiated at least 6 months prior to the date of expiry.	License/subscription renewals to be initiated 6 months prior to expiry. Will the Bank provide a consolidated list of all expiry dates well in advance?	Selected Bidder has to submit the details of AMC/ATS along with project signoff documents
172	14	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	1. Project Timelines	1.5. Bank reserves the right to change/modify locations for supply of the items. In the event of any change/modification in the locations where the hardware items are to be delivered, the bidder in such cases shall Supply, Installation, Configuration, Implementation and Maintenance at the modified locations at no extra cost to the Bank. However, if the hardware items are already delivered, and if the modifications in locations are made after delivery, the bidder shall carry out Installation, Configuration, Implementation and Maintenance at the modified locations and the Bank in such cases shall bear the shifting charges/arrange shifting as mutually agreed. The Warranty/ATS/AMC and all RFP terms should be applicable to the altered locations also as per the Bank's requirement without any extra cost to the Bank during the full contract period.	Bank reserves the right to change locations. Will the Bank bear any potential cost increase due to significant distance changes or unforeseen logistical challenges?	Bidders to comply with RFP/GeM bid terms and conditions
173	15	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	2. Integration & interfaces	2.1. The selected bidder has to work with different application vendors in order to integrate new solution to the existing workload or new workloads during contract period. 2.2. The selected bidder has to work with different teams of Bank & application OEMs to understand the policies requirement and configurations of respective applications for the offered service.	Will the Bank provide detailed documentation of existing applications and their APIs/interfaces to facilitate smooth integration?	Details will be shared with the selected bidder
174	NA	Generic	Generic	Generic	Is there a designated point of contact within the Bank and each application vendor to coordinate integration efforts?	Details will be shared with the selected bidder



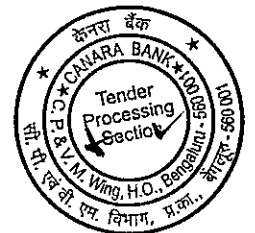
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
175	15	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	3. Training:	The selected vendor has to give demo and explain operational guidelines of the product at the site of the installation to Bank's Officials.	Besides the on-site demo, will the Bank require any formal training sessions (e.g., classroom-based, online)? If so, please specify the duration and number of participants.	No separate training session is required, other than the training mentioned in the RFP document.
176	NA	Generic	Generic	Generic	Will the training be conducted during the implementation phase or after project completion?	No separate training session is required, other than the training mentioned in the RFP document.
177	16	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	4. Security	4.5. The selected bidder has to do necessary changes in the configuration directed by security team of the bank after security audits like VAPT, Code Audit etc., without disturbing the production and existing backed up copies and at no additional cost to the Bank.	Please elaborate on the scope of "necessary changes" post-audit. Will these changes be limited to configuration adjustments or could they involve significant software modifications?	Details will be shared with the selected bidder
178	16	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	4. Security	4.7. Any kind of change like update, upgrades etc. in the system after complete installation will not lead into any commercial during contract period.	Does "any kind of change" include major version upgrades that might normally be chargeable? If so, please clarify the Bank's expectation on cost coverage.	Bidders to comply with RFP/GeM bid terms and conditions
179	16	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	5. Acceptance	Entire Clause	What are the specific criteria and performance benchmarks the Bank will use to determine project acceptance?	Bidders to comply with RFP/GeM bid terms and conditions
180	NA	Generic	Generic	Generic	Will the Bank provide a detailed acceptance testing plan outlining the test scenarios, expected results, and duration of the testing phase?	Details will be shared with the selected bidder
181	16-17	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	6. Uptime	Entire Clause	How will the Bank measure and verify the uptime? Will there be a third-party monitoring tool or is the Bank's internal monitoring sufficient?	Bidder to refer corrigendum-5.
182	NA	Generic	Generic	Generic	Does the "planned downtime" mentioned in 6.5 refer to scheduled maintenance windows? If so, please specify their frequency and duration.	Details will be shared with the selected bidder
183	17-18	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	7. Penalties/Liquidated Damages	Entire Clause	Clauses 7.1.1 to 7.1.5: Please clarify if these penalties are cumulative or if the maximum 10% cap applies to the sum of all potential penalties.	Bidders to comply with RFP/GeM bid terms and conditions
184	NA	Generic	Generic	Generic	Clause 7.2: Will the Bank provide detailed downtime reports as a basis for calculating penalties? If so, what format and level of detail will be included in these reports?	Details will be shared with the selected bidder
185	21 & 22	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	8. Payment Terms	Entire Clause	Clause 8.1: The payment schedule is tied to specific deliverables. Will these payment milestones be adjusted if there are changes to the project timeline as per clause 1.5?	Bidders to comply with RFP/GeM bid terms and conditions
186	NA	Generic	Generic	Generic	Clause 8.2: What specific documents (besides invoices and delivery proof) will the Bank require for each payment stage?	Details will be shared with the selected bidder
187	23	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	9. Warranty	Entire Clause	Does the 3-year warranty period start from the date of installation at each individual location or from the date of the final project acceptance?	From the date of installation at each individual location. Bidders to comply with RFP/GeM bid terms and conditions
188	NA	Generic	Generic	Generic	Does the warranty cover parts and labor for all repairs/replacements, or are there any exclusions?	There is no exclusion in Comprehensive warranty and AMC.
189	23-25	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	10. Scope involved during Contract period 11. Scope involved during Contract period including Warranty and AMC/ATS:	Entire Clause	Clause 10.2 & 11.2: Please clarify if "free of cost" updates include major version upgrades or only minor patches and security fixes.	It includes all updates



Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
190	NA	Generic	Generic	Generic	Clause 11.5: What is the Bank's definition of "equivalent or higher capacity"? Will the replacement components need to match the exact specifications or just meet the functional requirements?	Bidders to comply with RFP/GeM bid terms and conditions
191	26	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	13. Local support	Entire Clause	Will the Bank require any on-site presence beyond the response and repair timelines mentioned in 13.3? If so, please specify the level of on-site support needed.	Bidders to comply with RFP/GeM bid terms and conditions
192	25-26	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	12. Annual Maintenance Contract (AMC) / Annual Technical Support (ATS) (if contracted):	Entire Clause	Will the Bank's decision to enter into AMC/ATS be based solely on the quoted price, or will other factors like service quality and response times also be considered?	Bidders to comply with RFP/GeM bid terms and conditions
193	47	Annexure-9 Technical Specifications	Table-M Technical Specification of Managed file transfer Solution:	Sl. No: 35 The proposed solution should support high available architecture/deployments link Active-Active, Active-Passive.	Is there any passive site? Do you expect bidder to factor license for passive site as well? If yes how many cores?	16 core license is required per site ( DC-Active & DRC-Passive )
194	149	Annexure-9 Technical Specifications	Table-M Technical Specification of Managed file transfer Solution:	Sl. No: 47 Users should have the ability to securely send files to recipients by generating a link and then emailing the link to the intended receiver.	Is the requirement is to upload the file on the MFT solution and then share a webpage link and credentials over an email to download the file ?	Yes. Weblink to be shared to end-user for file upload/download from mft
195	149	Annexure-9 Technical Specifications	Table-M Technical Specification of Managed file transfer Solution:	Sl. No: 52 The solution should offer command-line support, enabling seamless integration with external workflows and automation processes.	Could you explain about this requirement in detail? What all external workflows application integration is required?	Workflow for Automation of file movement to othe location based on some criteria like date, time, range, filetypes, etc.
196	145	Annexure-9 Technical Specifications	Table-M Technical Specification of Managed file transfer Solution:	Sl. No: 41 The solution should provide option to integrate with existing antivirus to scan file before it enters internal/ green zone.	Can you specify name of the antivirus to be integrated?	Details will be shared with the selected bidder
197	149	Annexure-9 Technical Specifications	Table-M Technical Specification of Managed file transfer Solution:	Sl. No: 49 The solution should support automated data cleanup based on specified criteria such as number of days.	Do you wish to cleanup user or only user data or both?	Bidders to comply with RFP/GeM bid terms and conditions
198	149	Annexure-9 Technical Specifications	Table-M Technical Specification of Managed file transfer Solution:	Sl. No: 50 The solution should include comprehensive audit logging capabilities, capturing all activities such as data upload, share, download, cut, copy, paste, and rename. These logs must be stored in a non-tamperable format to ensure the integrity and	The cut, copy, paste, rename happens outside the MFT application could you specify in more details about this requirement?	Bidders to comply with RFP/GeM bid terms and conditions
199	148	Annexure-9 Technical Specifications	Table-M Technical Specification of Managed file transfer Solution:	Sl. No: 38 The solution should support deploying HA at DR and DC-DR architecture	Are you planning to deploy DR? If yes, is it going to be Active or passive? Do you expect bidder to provide licenses for DR from day 1?	DR is required in passive mode
200	149	Annexure-9 Technical Specifications	Table-M Technical Specification of Managed file transfer Solution:	Sl. No: 48 The solution should be capable of supporting both on-premises and cloud storage repositories, offering flexibility and compatibility with various storage environments. The solution should support any brand and models of storage and hardware.	Do you expect MFT solution to have support for container deployments as well?	Bidders to comply with RFP/GeM bid terms and conditions



Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
201	47	Annexure-9 Technical Specifications	Table-M Technical Specification of Managed file transfer Solution;	Sl. No: 33 The proposed solution should be support MFA (Multi Factor Authentication) solution.	What MFA mechanisms are expected here?	MFA - Email and SMS
202	149	Annexure-9 Technical Specifications	Table-M Technical Specification of Managed file transfer Solution;	Sl. No: 46 The solution should possess the capability to create shared folders for each group, department, or team, with customizable access levels and storage size restrictions.	Could you explain about this requirement in detail?	Bidders to comply with RFP/GeM bid terms and conditions
203	172	Annexure-16 Bill of Material	Table - C Price details of Software/License Items (Subscription based Licenses)	Sl. No: 8 File Sync Software instance base with support	Can specify what do you mean by instances here? Servers or concurrent file syncs?	Yes. Instance are referred to servers
204	85-159	Annexure-9 Technical Specifications	Entire Clause	Entire Clause	Requesting Bank to clarify if the SSD capacity mentioned in the RFP include boot drive capacity or it needs to be added seperately.	Bidder to refer corrigendum-5.
205	86	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC)	Sl. No: 6- Memory Slot Count- Minimum 24 or higher, Minimum 8 free memory slots should be available.	Requesting bank to change it to minimum 16 memory slots per processor and minimum 50% free memory slots should be available so that bank has a better option for future expandability	Bidders to comply with RFP/GeM bid terms and conditions
206	87	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC)	Sl. No: 9- SAN & Network Network cards 1 Gbps- 2*1Gbps - Two Network Cards, each equipped with at least two 1-gigabit network ports ( Four Port of 1Gbase-T On-Board or separate NIC with supported minimum 5 meter of compatible Cat6/Cat7 UTP Cable )	Request bank to clarify on the number of actual 1GB network card required. We understand that the requirement is for 4 ports of 1 GB ethernet. We would request bank to look at 4 -port (embedded/PCIe) card instead of dual port card inorder to maintain empty PCI slot for future expandability	Bidders to comply with RFP/GeM bid terms and conditions
207	87,93, 99, 105, 111 & 119	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 9 SAN & Network Network cards 10 Gbps 2*10Gbps -Two Network Cards, each equipped with at least two 10-gigabit network ports (Four Port BaseT NIC LOM or separate NIC with minimum 5 meter Cat6A/Cat7 UTP Cable.	Request bank to clarify on the number of actual 10 GB network card. We understand that the requirement is for 4 ports of 10 GB. We would request bank to look at 4 -port (embedded/PCIe) card instead of dual port card inorder to maintain empty PCI slot for future expandability	Bidders to comply with RFP/GeM bid terms and conditions



Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
208	87, 93, 99, 105, 112, 119	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No. 10. OS & Hypervisor Compatibility  Windows Compatibility- 2016/2019/2022	Request Bank to kindly remove Windows 2016 since it is EoL, also latest generation of servers supports Windows 2019 and above.	Bidder to refer corrigendum-5.
209	87, 93, 99, 106, 112 & 119	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 10- OS & Hypervisor Compatibility Other Latest Linux Flavours- Latest server operating versions of Centos, SUSE Linux, Oracle Linux, Ubuntu ,RHCOS	Request bank to remove CentOS since open source and community support is only available	Bidder to refer corrigendum-5.
210	87, 93, 99, 106, 112 & 119	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 10- OS & Hypervisor Compatibility Other Latest Linux Flavours- Latest server operating versions of Centos, SUSE Linux, Oracle Linux, Ubuntu ,RHCOS	Requesting bank to make it RHCOS/ Redhat Openshift container platform. As there is no separate certification for RHCOS. RHCOS is a part of Redhat Openshift container platform	Bidder to refer corrigendum-5.



Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
211	87	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC)	Sl. No: 10- OS & Hypervisor Compatibility Virtualization compatibility- All latest version of Microsoft-HyperV, VMware, Red Hat virtualization, oracle virtualization, Open shift virtualization and other industry standard hypervisors, Open Shift, Kubernetes	Requesting bank to remove oracle virtualization for wider participation of OEM	Bidder to refer corrigendum-5.
212	88, 94, 100, 106, 112 & 120	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 14- Port 3 USB3.0 port and 1 VGA Port	Requesting bank to change it to USB 3.0 or higher and 1 VGA Port	Bidder to refer corrigendum-5.
213	89, 95, 101, 107, 113 & 121	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 18 Remote Management- Telemetry Streaming, Idle Server Detection, Real-time power meter, temperature monitoring, customized administration and management of System Temperature and Cooling Sub-system.	Requesting bank to remove customized administration of System Temperature and Cooling Sub-system for wider participation of OEM	Bidder to refer corrigendum-5.

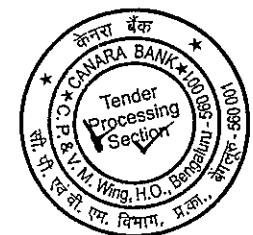


Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
214	90, 96, 102, 108, 115 & 122	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 19- System Management Solution 3. The system management solution should be provided: c. Bare-metal server deployment and cloning	Please clarify cloning functionality desired	Bidder to refer corrigendum-5.
215	NA	Generic	Generic	Security - Secure Recovery - recover critical firmware to known good state on detection of compromised firmware	Requesting bank to consider this clause the RFP to have a better data security for any cyber attack.	Bidders to comply with RFP/GeM bid terms and conditions
216	97	Annexure-9 Technical Specifications	Table-C Technical Specification - 100 servers (60 DC and 40 DRC)	Sl. No: 5- Processor Socket Minimum 2 sockets i.e., 32*1 =32 core ( 1 Populated & 1 For future upgrade )	Requesting bank to modify the requirement to accommodate two processors of 32 core; in order to meet network interface card & the memory requirement as per RFP. For a single processor only 3 Nos of PCIe slots & 16 nos of DIMM slots will be available. Now as per the RFP the total nos of PCIe slot required is 6 Nos & 24 nos DIMM slot required which can only be complied by adding another processor	Bidder to refer corrigendum-5.
217	104	Annexure-9 Technical Specifications	Table-D Technical Specification - 54 servers (28 DC and 26 DRC)	Sl. No: 5- Processor Socket Minimum 2 sockets i.e., 24*1 =24 core ( 1 Populated & 1 For future upgrade )	Requesting bank to modify the requirement to accommodate two processors of 24 core; in order to meet network interface card requirement. For a single processor only 3 Nos of PCIe slots & 16 nos of DIMM slots will be available. Now as per the RFP the total nos of PCIe slot required is 6 Nos & 24 nos DIMM slot required which can only be complied by adding another processor	Bidder to refer corrigendum-5.
218	104	Annexure-9 Technical Specifications	Table-D Technical Specification - 54 servers (28 DC and 26 DRC)	Sl. No: 7- SSD Usable Space- Minimum 1.5 TB approx. After RAID 10	Requesting bank to change it to 3 TB or higher. The bank has requested minimum drive capacity to be 1.92TB. For applying Raid10 we require minimum 4 drives (1.92*4). Hence the minimum capacity which can be configured according to the RFP would be 3.84TB	Bidder to refer corrigendum-5.
219	110	Annexure-9 Technical Specifications	Table-E Technical Specification - 226 servers (135 DC and 91 DRC)	Sl. No: 5- Processor Socket Minimum 2 sockets i.e., 16*1 =16 core ( 1 Populated & 1 For future upgrade )	Requesting bank to modify the requirement to accommodate two processors of 16 core; in order to meet network interface card requirement. For a single processor only 3 Nos of PCIe slots & 16 nos of DIMM slots will be available. Now as per the RFP the total nos of PCIe slot required is 6 Nos & 24 nos DIMM slot required which can only be complied by adding another processor	Bidder to refer corrigendum-5.
220	116	Annexure-9 Technical Specifications	Table-F Custom Technical Specification - 12 servers	Sl. No: 5- Processor Socket Minimum 2 sockets i.e., 16*1 =16 core ( 1 Populated & 1 For future upgrade ) - Type 1	Requesting bank to modify the requirement to accommodate two processors of 16 core; in order to meet network interface card requirement For a single processor only 3 Nos of PCIe slots & 16 nos of DIMM slots will be available. Now as per the RFP the total nos of PCIe slot required is 6 Nos & 24 nos DIMM slot required which can only be complied by adding another processor	Bidder to refer corrigendum-5.

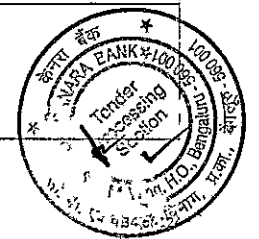




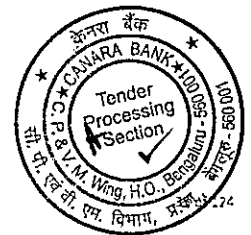
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
221	116	Annexure-9 Technical Specifications	Table-F Custom Technical Specification - 12 servers	Sl. No: 5- Processor Socket Minimum 2 sockets i.e., 16*1 =16 core ( 1 Populated & 1 For future upgrade ) - Type 1 Minimum 2 sockets i.e., 32*1 =32 core ( 1 Populated & 1 For future upgrade ) - Type 2 Minimum 2 sockets i.e., 32*1 =32 core ( 1 Populated & 1 For future upgrade ) - Type 3	Requesting bank to modify the requirement to accommodate two processors of 32 core; in order to meet network interface card requirement For a single processor only 3 Nos of PCIE slots & 16 nos of DIMM slots will be available. Now as per the RFP the total nos of PCIE slot required is 6 Nos & 24 nos DIMM slot required which can only be complied by adding another processor	Bidder to refer corrigendum-5.
222	116	Annexure-9 Technical Specifications	Table-F Custom Technical Specification - 12 servers	Sl. No: 5- Processor Socket Minimum 2 sockets i.e., 16*1 =16 core ( 1 Populated & 1 For future upgrade ) - Type 1 Minimum 2 sockets i.e., 32*1 =32 core ( 1 Populated & 1 For future upgrade ) - Type 2 Minimum 2 sockets i.e., 32*1 =32 core ( 1 Populated & 1 For future upgrade ) - Type 3	Requesting bank to modify the requirement to accommodate two processors of 32 core; in order to meet network interface card requirement. For a single processor only 3 Nos of PCIE slots & 16 nos of DIMM slots will be available. Now as per the RFP the total nos of PCIE slot required is 6 Nos & 24 nos DIMM slot required which can only be complied by adding another processor	Bidder to refer corrigendum-5.
223	116	Annexure-9 Technical Specifications	Table-F Custom Technical Specification - 12 servers	Sl. No: 5- Processor Cores per socket- 24	Request bank to clarify whether 24 Core needs to be considered for any configuration since socket information mentioned in the table talks about 16 & 32 cores only.	Bidder to refer corrigendum-5.
224	117	Annexure-9 Technical Specifications	Table-F Custom Technical Specification - 12 servers	Sl. No: 7- SSD Total Capacity for SATA SSD- 1.92 TB SSD disks or Higher ( to support RAID 1,5,6,10)	Since the type of interface for SSD is mentioned as NVMe requesting bank to clarify on the drives to be considered as SATA or NVME.	Bidders to comply with RFP/GeM bid terms and conditions
225	118	Annexure-9 Technical Specifications	Table-F Custom Technical Specification - 12 servers	Sl. No: 7- SSD Slot Count- 38 or higher Minimum 4 free slots should be available for future upgrade - Type 2	Slot count 38 has been mentioned with minimum 4 free slots in the RFP. As per our calculation 12 slots are occupied with 4 free slots, as a result of which the slot count should be 16. Requesting bank to clarify on the same	Bidder to refer corrigendum-5.
226	124-125	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.OPB Usable Space: DC -1, DRC - 1)	Sl. No: 8 Capacity- Minimum usable storage 2 PB after RAID6/ Dual RAID6 Configuration. ( Without considering any data reduction features such as compression, deduplication etc .,)	Request bank to change the same as below Minimum usable storage 2 PB after erasure coding ( Without considering any data reduction features such as compression, deduplication etc .,)	Bidder to refer corrigendum-5.
227	125	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.OPB Usable Space: DC -1, DRC - 1)	Sl. No: 13 RAID Support- RAID array supporting 10, 0, 1, 5 and 6 or better levels. It should support a mix and match of RAID levels behind a pair of controllers. The storage array should allow online expansion of existing RAID Groups / Storage Disk Pools.	Not applicable for Object storage. It uses erasure coding, Request bank to Remove this clause	Bidder to refer corrigendum-5.



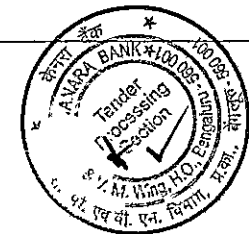
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
228	126	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.OPB Usable Space: DC -1, DRC 1)	Sl. No: 16 Services- Proposed storage array should include storage based compression, inline Deduplication, storage to storage replication, Snapshot for the entire supported capacity of the storage array from day one. All the required or necessary licenses must be perpetual and provided for the Full capacity of each storage from Day one. This should include licenses for Management and monitoring module and all the storage features such as Snapshot, Cloning, Replication etc. Upgrade in capacity should not incur any additional license cost. Offered storage system have online and historical performance reporting capability.	These are applicable for NVMe storage, which are not applicable for Object storage, Request bank to remove this clause	Bidder to refer corrigendum-5.
229	132	Annexure-9 Technical Specifications	Table-H Storage Technical Specifications: (Enterprise Block Storage 2.OPB Usable Space: DC -2, DRC -2)	Sl. No: 9 Drives- 2.5" to 3.5" drives	NVMe disk comes only in 2.5" Form Factor, so please remove 3.5"	Bidder to refer corrigendum-5.
230	132	Annexure-9 Technical Specifications	Table-H Storage Technical Specifications: (Enterprise Block Storage 2.OPB Usable Space: DC -2, DRC -2)	Sl. No: 11 Scalability- Each storage up to 5PB ( Scale UP) and 8 controller ( Scale Out ) DIP( data in-place) upgrade capability	All the RFP specification w.r.t. performance, Capacity, Scalability, Features can be met with 4 Controller Storages, hence request to make changes to have wider participation. Please change as "Each storage up to 5PB ( Scale UP) and 4 controller or more ( Scale Out ) DIP( data in-place) upgrade capability." for wider participation of OEM.	Bidder to refer corrigendum-5.
231	132	Annexure-9 Technical Specifications	Table-H Storage Technical Specifications: (Enterprise Block Storage 2.OPB Usable Space: DC -2, DRC -2)	Sl. No: 12 Performance- Capable of delivering sustained minimum 10GB/s throughput and 5,00,000 IOPS in (read: write) (70:30) ratio with microsecond response time.	Please specify the block size also as it is critical performance metrics, and with all data compaction enabled, Please modify it as "Capable of delivering sustained minimum 10GB/s throughput and 5,00,000 IOPS in (read: write) (70:30) ratio, 16KB Block size with microsecond response time after enabling all data reduction features "	Bidder to refer corrigendum-5.
232	132	Annexure-9 Technical Specifications	Table-H Storage Technical Specifications: (Enterprise Block Storage 2.OPB Usable Space: DC -2, DRC -2)	Sl. No: 13 RAID Support- RAID array supporting 10, 0, 1, 5 and 6 or better levels. It should support a mix and match of RAID levels behind a pair of controllers. The storage array should allow online expansion of existing RAID Groups / Storage Disk Pools.	All NVMe storage comes only with dual disk failure protection ( RAID 6 ), so please remove RAID 10,0,1,5, Please modify as "RAID array supporting 6 or better levels. The storage array should allow online expansion of existing RAID Groups / Storage Disk Pools."	Bidder to refer corrigendum-5.
233	133	Annexure-9 Technical Specifications	Table-H Storage Technical Specifications: (Enterprise Block Storage 2.OPB Usable Space: DC -2, DRC -2)	Sl. No: 18 Operating System Support Support for multiple Operating Systems versions connecting to it, including but not restricted to Windows 2016,2019,2022 or later, UNIX (AIX & Solaris & HP Unix), Linux (Red hat, SUSE & OEL), Hypervisor (vSphere, Hyper V, Red hat Virtualization, Oracle virtualization & Nutanix)	Support for multiple Operating Systems versions connecting to it, including but not restricted to Windows 2016,2019,2022 or later, UNIX (AIX & Solaris & HP Unix), Linux (Red hat, SUSE & Ubuntu), Hypervisor (vSphere, Hyper V, Red hat Virtualization, Oracle virtualization)	Bidder to refer corrigendum-5.
234	135	Annexure-9 Technical Specifications	Table-H Storage Technical Specifications: (Enterprise Block Storage 2.OPB Usable Space: DC -2, DRC -2)	Sl. No: 29 Controller & Availability- Offered Storage array should be an enterprise class storage system with 99.90 % Data Availability guarantee.	To ensure the maximum data availability, suggest to have 100% instead of 99.90% as this is primary storage availability has to be at max possible. Please modify as "Offered Storage array should be an enterprise class NVMe based storage system with 100% % Data Availability guarantee supports only NVMe drives."	Bidder to refer corrigendum-5.



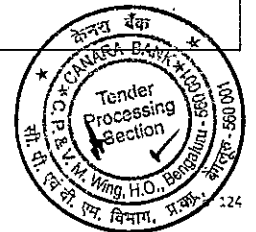
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
235	134	Annexure-9 Technical Specifications	Table-H Storage Technical Specifications: (Enterprise Block Storage 2.OPB Usable Space: DC -2, DRC -2)	Sl. No: 22- Uptime The storage should be able to provide availability parameter of 99.90 % from the date of acceptance of the Storage by Bank	To ensure the maximum Up Time, suggest to have 99.9999% instead of 99.90% as this is primary storage availability has to be at max possibleThe storage should be able to provide availability parameter of 99.9999 % from the date of acceptance of the Storage by Bank	Bidder to refer corrigendum-5.
236	132	Annexure-9 Technical Specifications	Table-H Storage Technical Specifications: (Enterprise Block Storage 2.OPB Usable Space: DC -2, DRC -2)	Sl. No: 10- Hard Disk Capacity Each hard disk Capacity should not be less than 15 TB and not more than 20 TB	Each TLC NVMe SSD Capacity should not be more than 16 TB	Bidder to refer corrigendum-5.
237	133	Annexure-9 Technical Specifications	Table-H Storage Technical Specifications: (Enterprise Block Storage 2.OPB Usable Space: DC -2, DRC -2)	Sl. No: 20- Warranty and Support 3 Years, Comprehensive, On-Site Support Warranty and 2 years AMC including part replacement /repairs within 4 hours of reporting, and Software support for updates, upgrades, patches, and bug fixes for supplied s/w from OEM 24 x 7 x 365 days. In case of Disk failure, the faulty disk will be destroyed/ degaussed on replacement. Proactive storage monitoring & support from OEM should be enabled. The proposed bidder will need to ensure support of product & change of components @ zero cost in case of any part becoming obsolete/EOL & EOS during the warranty and AMC period.	3 Years, Comprehensive, On-Site Support Warranty and 2 years AMC including part replacement /repairs within 6 hours of reporting, and Software support for updates, upgrades, patches, and bug fixes for supplied s/w from OEM 24 x 7 x 365 days. In case of Disk failure, the faulty disk will be destroyed/ degaussed on replacement. Proactive storage monitoring & support from OEM should be enabled. The proposed bidder will need to ensure support of product & change of components @ zero cost in case of any part becoming obsolete/EOL & EOS during the warranty and AMC period.	Bidder to refer corrigendum-5.
238	138	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	A. Type 1 Switch - 14 numbers (07 numbers in DC and 07 numbers in DRC) - Mgmt.	Table H	Query not clear
239	138	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	A. Type 1 Switch - 14 numbers (07 numbers in DC and 07 numbers in DRC) - Mgmt. Sl. No: 3 Mac address table size should be equal to greater than 16000.	Request to increase the MAC capacity to 32000 instead of 16000. Since it's DC environment we request to maintain the Min 32K MAC capacity to handle the Maximum host.	Bidders to comply with RFP/GeM bid terms and conditions
240	138	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	A. Type 1 Switch - 14 numbers (07 numbers in DC and 07 numbers in DRC) - Mgmt. Sl. No: 4 Switch must be supplied with compatible Trans ceiver for Fiber ports.	Request to change the clause "Switch must be supplied with compatible Transceiver for Fiber ports and should be from same OEM"  most of the Transceivers will be compatible with the switches. When it comes to operational OEM engineering will not support with third-party Transceivers which may led to the issue.	Bidder to refer corrigendum-5.
241	138	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	A. Type 1 Switch - 14 numbers (07 numbers in DC and 07 numbers in DRC) - Mgmt. Sl. No: 5 Switch must have redundant Power Supply.	Request to change the clause "Switch must have hot-swappable redundant FAN tray & Power Supply day 1"  Since it's DC switches, Proposed switches must support hot-swappable which will not impact the DC operational" RFS stand for Internal/external, hence request to modify the clause.	Bidders to comply with RFP/GeM bid terms and conditions



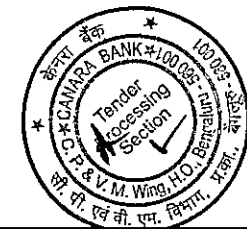
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242	138	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	A. Type 1 Switch - 14 numbers (07 numbers in DC and 07 numbers in DRC) - Mgmt. Sl. No: 14 Switch should support Simple Network Management Protocol (SNMPv2 and SNMPv3).	Request to change the clause" Switch should support Simple Network Management Protocol (SNMPv2c and SNMPv3).	Bidders to comply with RFP/GeM bid terms and conditions
243	139	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	A. Type 1 Switch - 14 numbers (07 numbers in DC and 07 numbers in DRC) - Mgmt. Sl. No: 28 24*7*365 days Technical support with response time of 30 minutes.	Request to change the clause: Switch OEM must provide direct support to Bank proposed switches 24*7*365 days Technical support.	Bidders to comply with RFP/GeM bid terms and conditions
244	138	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	A. Type 1 Switch - 14 numbers (07 numbers in DC and 07 numbers in DRC) - Mgmt.  Additional Clause: The Switch should support integrated trusted platform module (TPM) for platform integrity. This ensure the boot process started from a trusted combination of switches.	This will secure the switches hardware and software of the proposed components	Bidders to comply with RFP/GeM bid terms and conditions
245	138	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	A. Type 1 Switch - 14 numbers (07 numbers in DC and 07 numbers in DRC) - Mgmt.  Additional Clause: The Switch should support Control Plane Policing sets rate limit on control protocols to protect CPU overload from DOS attacks	Since it's DC switches request to add the security clause to prevent the DC	Bidders to comply with RFP/GeM bid terms and conditions
246	138	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	A. Type 1 Switch - 14 numbers (07 numbers in DC and 07 numbers in DRC) - Mgmt.  Additional Clause: The Switch should support VXLAN encapsulation (tunnelling) protocol for overlay network that enables a more scalable virtual network deployment	If Bank need to create the L2/L3 fabric proposed DC clause switch must participate in the DC fabric day 1	Bidders to comply with RFP/GeM bid terms and conditions
247	138	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	A. Type 1 Switch - 14 numbers (07 numbers in DC and 07 numbers in DRC) - Mgmt.  Additional clause: The switch should support front plane stacking on uplink port or Backplane stacking. The switch should support minimum 4 switch in stack/cluster	Request add the Stack/Cluster points, if servers iLO ports will be connected to 1G Switches or 1G Servers ports can be used to connect, which can be provide single IP management.	Bidders to comply with RFP/GeM bid terms and conditions



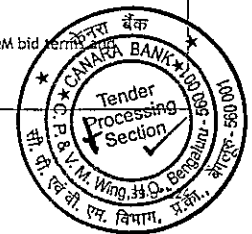
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
248	138	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	A. Type 1 Switch - 14 numbers (07 numbers in DC and 07 numbers in DRC) - Mgmt.  Additional Clause: The Switch should support Built-in programmable and easy to use REST API interface	New a days all are going with Modern automated DC solution, if proposed switches are not supporting the script language which will lead to integrate with API based automated solution in future.	Bidders to comply with RFP/GeM bid terms and conditions
249	139	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	B. Type 2 Switch - 24 numbers (12 DC+ 12 DRC) for Data  Sl. No: 1 Switch must be Data Center grade switch. Switch should be configurable/deployable with other switches to utilize all available links through multi-path forwarding.	Change the clause to: Switch must be Data Center grade switch. Switch should be configurable/deployable and Open Standards implementation with other switches to utilize all available links through multi-path forwarding  Request to add the Open standard clause to avoid the vendor lock in	Bidders to comply with RFP/GeM bid terms and conditions
250	139	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	B. Type 2 Switch - 24 numbers (12 DC+ 12 DRC) for Data  Sl. No: 3 6 fixed 40/100-Gbps QSFP+ ports for uplink connectivity with fully populated trans receivers on single chassis.	Request to Amend this clause: 4 fixed 40/100-Gbps QSFP+ ports for uplink connectivity with fully populated trans receivers on single chassis. Technically 4 Ports are sufficient in the chassis to form the cluster and uplink to core/spine, hence request to amend this clause to qualify all the standard OEMs	Bidders to comply with RFP/GeM bid terms and conditions
251	139	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	B. Type 2 Switch - 24 numbers (12 DC+ 12 DRC) for Data  Sl. No: 5 Switch should support EVPN and Virtual Extensible LAN (VXLAN) to create Fabric. Fabric should be capable to integrate with SDDC like Open stack, VMWare etc. Switch should support In Service Software Upgrade.	Please clarify what is the Fabric is used by Bank? Should we include the Fabric Manager to manage all the proposed DC switches?	Details will be shared with the selected bidder
252	139	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	B. Type 2 Switch - 24 numbers (12 DC+ 12 DRC) for Data Sl. No: 7 Latency should be less than 2 microsecond.	Request to change the clause to "Latency should be less than 4 microsecond to comply all the OEMs	Bidders to comply with RFP/GeM bid terms and conditions
253	139	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	B. Type 2 Switch - 24 numbers (12 DC+ 12 DRC) for Data  Sl. No: 10 Switch must be supplied with compatible Trans receiver for all Optical/Fiber ports.	Request to change the clause "Switch must be supplied with compatible Trans receiver for Fiber ports and should from same OEM"  most of the Transceivers will be compatible in the switches. When it comes to operational OEM engineering will not support with third-party Transceivers which may lead to the Issue. Please clarify what is speed and transceivers type to be populated in the switches.	Bidder to refer corrigendum-5.
254	139	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	B. Type 2 Switch - 24 numbers (12 DC+ 12 DRC) for Data  Sl. No: 11 Switch must have redundant Fan and Power Supply.	Request to change the clause "Switch must have hot-swappable redundant FAN tray & Power Supply day1" Since it's DC switches, proposed switches must support hot swappable which will not impact the DC operational" hence request to modify the clause.	Bidders to comply with RFP/GeM bid terms and conditions



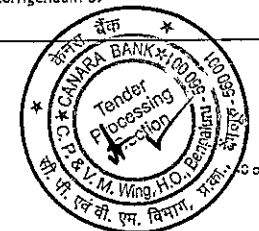
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255	140	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	B. Type 2 Switch - 24 numbers (12 DC+ 12 DRC) for Data Sl. No. 33 High Mean Time Between Failure values (>3.5 lakh hours) should be available to ensure long life of switch hardware.	Request to change the clause to Min 2L Hours or above to qualify all the standard OEMs	Bidder to refer corrigendum-5.
256	140	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	B. Type 2 Switch - 24 numbers (12 DC+ 12 DRC) for Data Sl. No: 34 24*7*365 days Technical support with response time of 30 minutes.	Request to change the clause: 24*Switch OEM must provide direct support to Bank proposed switches 24*7*365 days Technical support.	Bidders to comply with RFP/GeM bid terms and conditions
257	140	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches B. Type 2 Switch - 24 numbers (12 DC+ 12 DRC) for Data	Additional Clause Switch Solution must be incorporate the Fabric Manager. The overall System network design & operations must be based on Open Standards' implementation for Networking, with the minimum of eBGP/OSPF underlay, eBGP/MP-BGP/EVPN overlay and VXLAN H/W VTEP where required.	Technically DC switches should support Advance layer 3 to form the CLOS architecture in the DC fabric environment.	Bidders to comply with RFP/GeM bid terms and conditions
258	139	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	B. Type 2 Switch - 24 numbers (12 DC+ 12 DRC) for Data  Additional Clause: The system must provide open APIs to enable an automated system wide build of the DC	Now a days all are going with Modern automated DC solution, if proposed switches are not supporting the script language which will led to integrate with API based automated solution in future.	Bidders to comply with RFP/GeM bid terms and conditions
259	140	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches B. Type 2 Switch - 24 numbers (12 DC+ 12 DRC) for Data	Additional Clause The solution should provide realtime monitoring of various parameter of the network using realtime state streaming telemetry or better technology.	Switches must support real-time monitor and telemetry to manage the DC fabric solution.	Bidders to comply with RFP/GeM bid terms and conditions
260	140	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches B. Type 2 Switch - 24 numbers (12 DC+ 12 DRC) for Data	Additional Clause	is there any existing Spine switches? Can you please let us know the Spine details to understand, also please confirm the leaf to spine connectivity type and speed?	Details will be shared with the selected bidder
261	140	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	C. Type 4 Switch - 4 numbers (2 DC+ 2 DRC) - Storage  Sl. No: 4 Switch should support EVPN and Virtual Extensible LAN (VXLAN) to create Fabric. Fabric should be capable to integrate with SDDC like Open stack, VMWare etc. Switch should support In Service Software Upgrade.	Please include static routing, OSPF, VRRP, PBR, IP SLA or equivalent MP-BGP, MPLS -L3  Please clarify what is the Fabric is used by Bank? Should we include the Fabric Manager to manage all the proposed DC switches?	Bidders to comply with RFP/GeM bid terms and conditions
262	141	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	C. Type 4 Switch - 4 numbers (2 DC+ 2 DRC) - Storage Sl. No: 6 Latency should be less than 1 microsecond.	Request to change the clause to "Latency should be less than 3 microsecond to comply all the OEMs	Bidders to comply with RFP/GeM bid terms and conditions



Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
263	142	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	C. Type 4 Switch - 4 numbers (2 DC+ 2 DRC) - Storage Sl. No. 33 High Mean Time Between Failure values (>3.5 lakh hours) should be available to ensure long life of switch hardware.	Request to change the clause to Min 2L Hours or above to qualify all the standard OEMs	Bidder to refer corrigendum-5.
264	142	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	C. Type 4 Switch - 4 numbers (2 DC+ 2 DRC) - Storage Sl. No: 34 24*7*365 days Technical support with response time of 30 minutes.	Request to change the clause: 24*Switch OEM must provide direct support to Bank proposed switches 24*7*365 days Technical support.	Bidders to comply with RFP/GeM bid terms and conditions
265	141	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches C. Type 4 Switch - 4 numbers (2 DC+ 2 DRC) - Storage	Additional Clause Switch Solution must be incorporate the Fabric Manager. The overall System network design & operations must be based on Open Standards' implementation for Networking, with the minimum of eBGP/OSPF underlay, eBGP/MP-BGP/EVPN overlay and VXLAN H/W VTEP where required.	Technically DC switches should support Advance layer 3 to form the CLOS architecture in the DC fabric environment.	Bidders to comply with RFP/GeM bid terms and conditions
266	140	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	C. Type 4 Switch - 4 numbers (2 DC+ 2 DRC) - Storage Additional Clause: The system must provide open APIs to enable an automated system wide build of the DC	Now a days all are going with Modern automated DC solution, if proposed switches are not supporting the script language which will led to integrate with API based automated solution in future.	Bidders to comply with RFP/GeM bid terms and conditions
267	141	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches C. Type 4 Switch - 4 numbers (2 DC+ 2 DRC) - Storage	Additional Clause The solution should provide realtime monitoring of various parameter of the network using realtime state streaming telemetry or better technology.	Switches must support real-time monitor and telemetry to manage the DC fabric solution.	Bidders to comply with RFP/GeM bid terms and conditions
268	140	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches C. Type 4 Switch - 4 numbers (2 DC+ 2 DRC) Storage	Additional Clause- Proposed switches must support - iSCSI, Lossless iSCSI, RDMA over Converged Ethernet version 2 (RoCE v1 and v2) and Non-Volatile Memory Express (NVMe over Fabrics)	DC Storage switches, hence please consider the this storage related protocol.	Bidders to comply with RFP/GeM bid terms and conditions
269	142	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	In addition to the above access switches Bidder to supply Distribution Switches in High availability with required capacity to connect all supplied access switches with dual uplink of 10/40/100 Gbps in active-active mode for redundancy and load sharing ( DC - 2, DRC - 2 )	Please clarify the Points.. What is the predominant Port speed ?	Bidders to comply with RFP/GeM bid terms and conditions
270	136	Annexure-9 Technical Specifications	Table-I Technical Specification of 27 server racks (19 Nos at DC - Single Phase, 8 Three Phase)	Sl. No: 6 Wheels- Rack wheels for rack movement	As such we learn that these server racks are deployed in Internet data centres hence wheels are not recommended . Recommended to use base plinth for load distribution ( L X B ) and if required wheels can be fitted for free movement of server racks .	Bidders to comply with RFP/GeM bid terms and conditions
271	137	Annexure-9 Technical Specifications	Table-J Technical Specification of server racks (23 Nos with three phase at DR)	Sl. No: 6 Wheels- Rack wheels for rack movement	As such we learn that these server racks are deployed in Internet data centres hence wheels are not recommended . Recommended to use base plinth for load distribution ( L X B ) and if required wheels can be fitted for free movement of server racks .	Bidders to comply with RFP/GeM bid terms and conditions

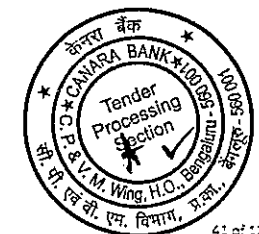


Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
272	77	Annexure-8 Scope of Work	Evaluation for Scope of Work For Open shift	Entire Clause	What is the Hardware configuration for Openshift hosting?	Details will be shared with the selected bidder
273	77	Annexure-8 Scope of Work	Evaluation for Scope of Work For Open shift	Entire Clause	What storage bank has present, does bank have Object, Block and File with certified Openshift CSI Driver? can same be used for Openshift Cluster?	Details will be shared with the selected bidder
274	172	Annexure-16 Bill of Material	Table - C Price details of Software/License Items (Subscription based Licenses)	Sl. No: 4 RedHat OpenShift - RHCOS latest version subscription with premium support	The Scope mentions implementation of Advanced Cluster Management and Cluster Security that is available only with Red Hat OpenShift Container Platform Plus, Bank to update the SKU with Red Hat OpenShift Container Platform Plus in the Bill of material and Scope of Work.	Bidder to refer corrigendum-5.
275	172	Annexure-16 Bill of Material	Table - C Price details of Software/License Items (Subscription based Licenses)	Sl. No: 2 RHEL 9 with premium support	Is this for Physical host of virtual host?	Physical Host
276	NA	Generic	Generic	Query -For Rack		Query not clear
277	NA	Generic	Generic	Query for Tape Lib		Query not clear
278	159	Annexure-9 Technical Specifications	Table-Q Technical Specifications of 2 LTO9 standalone Tape Drive (1 DC and 1 DRC)	Sl. No: 5 Tape Drive- One LTO-9 Drive with FC Connectivity to support 8Gbps or more.	STAND ALONE DRIVES are Not available in FC , all major brands provide Standalone drive in SAS model only. ELSE 8 Slots Autoloader with LTO9 FC driv can be provided if Required .	Bidder to refer corrigendum-5.
279	NA	Generic	Generic	Query for server		Query not clear
280	118	Annexure-9 Technical Specifications	Table-F Custom Technical Specification - 12 servers	Sl. No: 9 SAN & Network	With Single CPU populated there is a limitation to get enough PCIe slots hence make the CPU installed as 2 nos	Bidder to refer corrigendum-5.
281	64	Annexure-2 Pre-Qualification Criteria	Entire Clause	Entire Clause		Bidders to comply with RFP/GeM bid terms and conditions
282	64	Annexure-2 Pre-Qualification Criteria	Sl. No. 6	Pre-Qualification Criteria: The bidder should have yearly average turnover of 300 Crores in India for the last three financial years 2020-2021, 2021-2022, 2022-2023 from their Indian operation as per the audited Financial Statements. This must be the Individual company turnover and not of any group of companies.	Few bidder have 300 croes turnover so we are requesting you change as 100 crores atleast.	Bidders to comply with RFP/GeM bid terms and conditions
283	64	Annexure-2 Pre-Qualification Criteria	Sl. No: 8	Pre-Qualification Criteria The Bidder/OEM should have successfully supplied minimum cumulative 500 Nos. of Servers in India in the last three years out of which the bidder should have successfully supplied Hardware and software as a service model at least 100 servers deployed at Customer's DC and DR in Indian Market in any 1 Scheduled Commercial Bank/ NBFC/ Insurance Company/ PSU/ Central Government Organization in India in the last three years as on the date of submission of bid for this RFP.	We are requesting for ammendment.	Bidder to refer corrigendum-5.
284	159	Annexure-9 Technical Specifications	Table-Q Technical Specifications of 2 LTO9 standalone Tape Drive (1 DC and 1 DRC)	Sl. No: 5 Tape Drive- One LTO-9 Drive with FC Connectivity to support 8Gbps or more.	STAND ALONE DRIVES are Not available in FC , all major brands provide Standalone drive in SAS model only. ELSE, Bank can ask bidders to provide 1U, 8 Slots Autoloader with LTO9 FC drive , each site can be provided if FC is Mandatory Required .	Bidder to refer corrigendum-5.

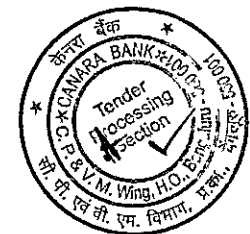




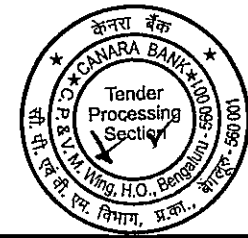
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
285	159	Annexure-9 Technical Specifications	Table-Q Technical Specifications of 2 LTO9 standalone Tape Drive (1 DC and 1 DRC)	Sl. No: 6 Cables- Necessary OM3/OM4 FC cables of length 15 meters	STAND ALONE DRIVES are Not available in FC , all major brands provide Standalone drive in SAS model only.	Bidder to refer corrigendum-5.
286	64	Annexure-2 Pre-Qualification Criteria	Sl. No. 6	Pre-Qualification Criteria: The bidder should have yearly average turnover of 300 Crores in India for the last three financial years 2020-2021, 2021-2022, 2022- 2023 from their Indian operation as per the audited Financial Statements. This must be the individual company turnover and not of any group of companies.	Servers & Storage are the backbone for any Data Centre, and your organization being one of the top PSU Banks in India, this requirement and support extended is very critical. Bank should ensure that participating bidders should have enough resources to be able to align L1, L2 and L3 onsite resources immediately as and when required. This can be guaranteed only by bidders who have been performing consistently well through the years. Hence, we request bank to modify this clause as below: "The bidder should have yearly average turnover of 1000 Crores in India for the last three financial years 2020-2021, 2021-2022, 2022-2023 from their Indian operation as per the audited Financial Statements. This must be the individual company turnover and not of any group of companies."	Bidders to comply with RFP/GeM bid terms and conditions
287	64	Annexure-2 Pre-Qualification Criteria	Sl. No: 8	Pre-Qualification Criteria The Bidder/OEM should have successfully supplied minimum cumulative 500 Nos. of Servers in India in the last three years out of which the bidder should have successfully supplied Hardware and software as a service model at least 100 servers deployed at Customer's DC and DR in Indian Market in any 1 Scheduled Commercial Bank/ NBFC/ Insurance Company/ PSU/ Central Government Organization in India in the last three years as on the date of submission of bid for this RFP.	Please elaborate the term "Hardware and software as a service model"	Bidder to refer corrigendum-5.
288	64	Annexure-2 Pre-Qualification Criteria	Sl. No: 8	Pre-Qualification Criteria The Bidder/OEM should have successfully supplied minimum cumulative 500 Nos. of Servers in India in the last three years out of which the bidder should have successfully supplied Hardware and software as a service model at least 100 servers deployed at Customer's DC and DR in Indian Market in any 1 Scheduled Commercial Bank/ NBFC/ Insurance Company/ PSU/ Central Government Organization in India in the last three years as on the date of submission of bid for this RFP.	Bank will be entering into a direct contract with the bidders, with OEMs only lined back-to-back for support and AMC. The bidder may not have enough experience and manpower resources to cover the day-to- day service and support requirements of this scale at both DC and DR locations. Hence, we request you to modify this clause as below:  "The Bidder should have successfully supplied minimum cumulative 500 Nos. of Servers in India at Customer's DC and DR in Indian Market in any 1 Scheduled Commercial Bank/ NBFC/ Insurance Company/ PSU/ Central Government Organization in India in the last three years as on the date of submission of bid for this RFP."	Bidder to refer corrigendum-5.



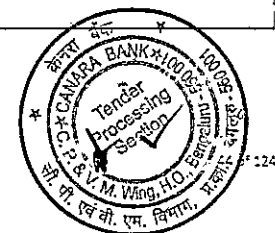
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
289	64	Annexure-2 Pre-Qualification Criteria	Sl. No: 8	Pre-Qualification Criteria The Bidder/OEM should have successfully supplied minimum cumulative 500 Nos. of Servers in India in the last three years out of which the bidder should have successfully supplied Hardware and software as a service model at least 100 servers deployed at Customer's DC and DR in Indian Market in any 1 Scheduled Commercial Bank/ NBFC/ Insurance Company/ PSU/ Central Government Organization in India in the last three years as on the date of submission of bid for this RFP.	For Work Orders from government entities, not all organizations share a work completion certificate or letter specifying period and nature of services provided. We hence request you to accept "Invoices raised against the PO" along with copy of purchase order as document required to justify this qualification criteria.	Bidder to refer corrigendum-5.
290	14	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	1. Project Timelines	1.3. The timelines for the delivery and installation of all Hardware and Software should be completed within 24 weeks from the date of acceptance of the Purchase Order or 25 weeks from the date of Purchase Order for all the locations. It will be the sole responsibility of the vendor to submit any form required for release of shipment from the check post.	Please considering the relaxation for the Project timeline as - "The timelines for the delivery and installation of all Hardware and Software should be completed within 30 weeks from the date of acceptance of the Purchase Order or 31 weeks from the date of Purchase Order for all the locations. It will be the sole responsibility of the vendor to submit any form required for release of shipment from the check post."	Bidders to comply with RFP/GeM bid terms and conditions
291	14	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	1. Project Timelines	1.3. Delivery of all Hardware and software: Within 12 weeks from date of Acceptance of PO	Kindly revise the timelines to "Within 18 weeks from date of Acceptance of PO"	Bidders to comply with RFP/GeM bid terms and conditions
292	14	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	1. Project Timelines	1.3. Installation of all Hardware: Within 6 weeks from the date of delivery of hardware	Considering the quantity of hardware covered under this RFP, Kindly revise the timelines to "Within 12 weeks from the date of delivery of hardware"	Bidders to comply with RFP/GeM bid terms and conditions
293	14	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	1. Project Timelines	1.3. Delivery of all Hardware and software: Within 12 weeks from date of Acceptance of PO	Considering the quantity of hardware covered under this RFP, Kindly revise the timelines to "Within 16 weeks from the date of delivery of hardware/Software"	Bidders to comply with RFP/GeM bid terms and conditions
294	124	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.0PB Usable Space: DC -1, DRC -1)	Sl. No: 5- Architecture *Security model S3-Vault: Security service for Accounts a. Multi-tenant, Support for S3 IAM - Identity and Access Management.	This is vendor specific terminology, please clarify the requirement with respective security.	Bidder to refer corrigendum-5.
295	124	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.0PB Usable Space: DC -1, DRC -1)	Sl. No: 5 Architecture- Connectivity -File Interface o Capability to write simultaneously to the same folder from different file connectors (folder scale out). o Seamless load balancing and failover among the file connectors. o Quota for file	Connectivity -S3/File Interface o Capability to write simultaneously to the same object/folder from different S3/file connectors (Object scale out). o Seamless load balancing and failover among the S3/ file connectors, o Quota for S3/file Folder structure is not applicable to purpose build object storage solutions as object storage works on buckets, please clarify.	Bidder to refer corrigendum-5.



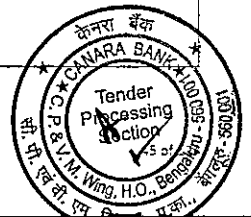
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
296	126	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.OPB Usable Space: DC -1, DRC -1)	Sl. No: 16 Services- Proposed storage array should include storage based compression, inline Deduplication, storage to storage replication, Snapshot for the entire supported capacity of the storage array from day one. All the required or necessary licenses must be perpetual and provided for the Full capacity of each storage from Day one. This should include licenses for Management and monitoring module and all the storage features such as Snapshot, Cloning, Replication etc. Upgrade in capacity should not incur any additional license cost. Offered storage system have online and historical performance reporting capability.	Proposed storage array should include storage based compression/inline Deduplication, storage to storage replication, Snapshot for the entire supported capacity of the storage array from day one. All the required or necessary licenses must be perpetual and provided for the Full capacity of each storage from Day one. This should include licenses for Management and monitoring module and all the storage features such as Snapshot, Cloning, Replication etc. Upgrade in capacity should not incur any additional license cost. Offered storage system have online and historical performance reporting capability.  Offered storage system have online and historical performance reporting capability. At least 1 year of historical performance information should be available online for capacity and performance forecasting, trend analysis etc. In case this capability is not available natively, then necessary software subscription shall be provided for the entire duration of the contract.  As asked capacity is on NL SAS drives, enabling inline duplication is not recommended. And this is vendor specific and also they support dedup for NAS but not for object. So request you to amend the clause.	Bidder to refer corrigendum-5.
297	126	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.OPB Usable Space: DC -1, DRC -1)	Sl. No: 17 Protocol Support- CIFS, SMB, NFSV3&V4, HTTPS, HTTP, REST APIs, FTP, Linux FS (FUSE), S3 Protocol, SWIFT & all kinds of rest full APIs. Vendor shall configure the licenses all interfaces All above protocol shall be native to cluster and shall not require any additional gateway. Vendor can provision additional gateway if required from performance perspective but capability shall be native to main nodes only.	S3/CIFS/SMB/NFSV/HTTPS/HTTP/REST APIs/FTP/Linux FS (FUSE)/S3 Protocol/SWIFT & all kinds of rest full APIs. Vendor shall configure the licenses all interfaces The purpose build object storage systems does support S3 protocol only, so we request you to please segregate the file and object requirement. There are solutions which can support NAS and object but it lacks critical object capabilities.	Bidder to refer corrigendum-5.
298	133	Annexure-9 Technical Specifications	Table-H Storage Technical Specifications: (Enterprise Block Storage 2.OPB Usable Space: DC -2, DRC -2)	Sl. No: 18 Operating System Support Support for multiple Operating Systems versions connecting to it, including but not restricted to Windows 2016,2019,2022 or later, UNIX (AIX & Solaris & HP Unix), Linux (Red hat, SUSE & OEL), Hypervisor (vSphere, Hyper V, Red hat Virtualization, Oracle virtualization & Nutanix)	This is not relevant to object storage as S3 access is OS agnostic.	Bidder to refer corrigendum-5.



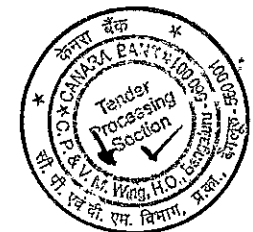
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
299	127	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.0PB Usable Space: DC -1, DRC -1)	Sl. No: 21- Other Features Entire Clause	The proposed storage system should support SNMP, Address resolution protocol, Network Time Protocol, LDAP/Network Lock Manager. The Storage array should be licensed with Performance monitoring tools should be offered with the storage array. The proposed storage system shall support a browser based GUI built in management. All objects stored in Object Storage have a URL. All objects have their own metadata. Developers interact with the object storage system through a RESTful HTTP API. Object data can be located anywhere in the cluster. Backup & Recovery: Data backup and recovery rely on accessible and reliable storage. Object-based storage provides the infrastructure for secure data backup and efficient recovery procedures. There shall be no separate and dedicated control node or metadata node in the cluster. In case, nodes are separate then vendor shall over Metadata / control nodes in HA using active / active approach. Offered solution shall be completely redundant and there shall be no single point of failure. Offered solution shall have file integrity checking when reading the file and automatic rebuilt if an error is detected. Please segregate the requirement for object and file as NLM is NFS specific feature. Request you to modify the clause	Bidder to refer corrigendum-5.
300	140	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	B. Type 2 Switch - 24 numbers (12 DC+ 12 DRC) for Data Sl. No. 33 High Mean Time Between Failure values (>3.5 lakh hours) should be available to ensure long life of switch hardware.	Request you to change this to "High Mean Time Between Failure values (>2.7 lakh hours) should be available to ensure long life of switch hardware. Request Bank to change this value, as this is single OEM specific point . Higher MTBF values always donot provide the product reliability measurements	Bidder to refer corrigendum-5.
301	142	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	C. Type 4 Switch - 4 numbers (2 DC+ 2 DRC) - Storage Sl. No. 33 High Mean Time Between Failure values (>3.5 lakh hours) should be available to ensure long life of switch hardware.	Request you to change this to "High Mean Time Between Failure values (>2.7 lakh hours) should be available to ensure long life of switch hardware. Request Bank to change this value, as this is single OEM specific point . Higher MTBF values always donot provide the product reliability measurements	Bidder to refer corrigendum-5.
302	150	Annexure-9 Technical Specifications	Table-N Technical Specifications of 4 SAN Director (2 Nos at DC and 2 Nos at DR)	Sl. No: 9 The switch should support 512 Gbps BW for ISL Trunking connectivity and Cut Thru Switching. Necessary Licenses to be provided by the bidder.	9. The switch should support 512 Gbps BW for ISL Trunking connectivity and Cut Thru/Store -Forward Switching. Necessary Licenses to be provided by the bidder. There are only 2 OEM in SAN switching market . Cut Thru SAN switching is single OEM specific mechansim and hence request bank to change this Clause for more participation	Bidder to refer corrigendum-5.
303	154	Annexure-9 Technical Specifications	Table-N Technical Specifications of 4 SAN Director (2 Nos at DC and 2 Nos at DR)	Sl. No: 21 Other Features The director class switch should provide Inter Chassis Link (ICL) for connecting multiple Chassis	The director class switch should provide Inter Chassis Link (ICL) or Inter Switch Link (ISL) for connecting multiple Chassis ICL is Single OEM specification , we provide the same capability using more open Industry standard ISL/Trunking . Request bank to change this remove or change this clause	Bidder to refer corrigendum-5.
304	155	Annexure-9 Technical Specifications	Table-O Technical Specifications of 8 SAN Switch (4 Nos at DC and 4 Nos at DR)	Sl. No. 5 ISL Trunking connectivity and Cut Thru Switching. Necessary Licenses to be provided by the bidder.	5. ISL Trunking connectivity and Cut Thru/Store Forward Switching. Necessary Licenses to be provided by the bidder. There are only 2 OEM in SAN switching market . Cut Thru SAN switching is single OEM specific mechansim and hence request bank to change this Clause for more participation	Bidder to refer corrigendum-5.



Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
305	75	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 42. The Bidder will responsible for the following: k. SAN connectivity to bank existing SAN Switch	Request Bank to remove this point, with this ask only one OEM qualifies here. This leads to price disadvantage and donot provide chance for Cisco to bid this requirement	Bidder to refer corrigendum-5.
306	77	Annexure-8 Scope of Work	Evaluation for Scope of Work For Open shift	Entire Clause	What is the Hardware configuration for Openshift hosting?	Details will be shared with the selected bidder
307	77	Annexure-8 Scope of Work	Evaluation for Scope of Work For Open shift	Entire Clause	What storage bank has present, does bank have Object, Block and File with certified Openshift CSI Driver? can same be used for Openshift Cluster?	Details will be shared with the selected bidder
308	73-84	Annexure-8 Scope of Work	Entire Clause	Entire Clause	We are a well established System Integrator with many OEM certified technical resources on our payroll, who can take care of the entire scope of work. We request bank to allow Bidder to take care of the entire Scope of Work as per Annexure 8.	Bidders to comply with RFP/GeM bid terms and conditions
309	64	Annexure-2 Pre-Qualification Criteria	Sl. No. 6	Pre-Qualification Criteria: The bidder should have yearly average turnover of 300 Crores in India for the last three financial years 2020-2021, 2021-2022, 2022-2023 from their Indian operation as per the audited Financial Statements. This must be the individual company turnover and not of any group of companies.	Servers & Storage are the backbone for any Data Centre, and your organization being one of the top PSU Banks in India, this requirement and support extended is very critical. Bank should ensure that participating bidders should have enough resources to be able to align L1, L2 and L3 onsite resources immediately as and when required. This can be guaranteed only by bidders who have been performing consistently well through the years. Hence, we request bank to modify this clause as below: "The bidder should have yearly average turnover of 1000 Crores in India for the last three financial years 2020-2021, 2021-2022, 2022-2023 from their Indian operation as per the audited Financial Statements. This must be the individual company turnover and not of any group of companies."	Bidders to comply with RFP/GeM bid terms and conditions
310	64	Annexure-2 Pre-Qualification Criteria	Sl. No: 8	Pre-Qualification Criteria The Bidder/OEM should have successfully supplied minimum cumulative 500 Nos. of Servers in India in the last three years out of which the bidder should have successfully supplied Hardware and software as a service model at least 100 servers deployed at Customer's DC and DR in Indian Market in any 1 Scheduled Commercial Bank/ NBFC/ Insurance Company/ PSU/ Central Government Organization in India in the last three years as on the date of submission of bid for this RFP.	Please elaborate the term "Hardware and software as a service model"	Bidder to refer corrigendum-5.
311	20-22	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	B. Payment Terms	Entire Clause	We request bank to revise the payment terms as below:  70% - On Supply/delivery of all the of Hardware as per RFP 10% - Installation of all Hardware 10% - Configuration, implementation and completion of all scope of work 10% - After Completion of warranty period of 3 years and after deducting Or On submission of a bank guarantee for equivalent to 10% of the cost of Hardware/Software  AMC as mentioned in Table-F. - Quarterly in arrears on submission of Quarterly Preventive Maintenance activity report OR Yearly in advance On submission of a bank guarantee for equivalent amount	Bidders to comply with RFP/GeM bid terms and conditions



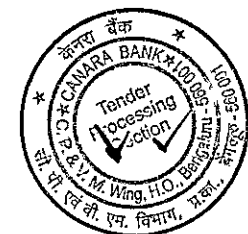
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
312	126	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.OPB Usable Space: DC -1, DRC -1)	Sl. No: 16 Services- Proposed storage array should include storage based compression, inline Deduplication, storage to storage replication, Snapshot for the entire supported capacity of the storage array from day one. All the required or necessary licenses must be perpetual and provided for the Full capacity of each storage from Day one. This should include licenses for Management and monitoring module and all the storage features such as Snapshot, Cloning, Replication etc. Upgrade in capacity should not incur any additional license cost. Offered storage system have online and historical performance reporting capability.	Proposed storage array should include storage based compression/inline Deduplication, storage to storage replication, Snapshot for the entire supported capacity of the storage array from day one. All the required or necessary licenses must be perpetual and provided for the Full capacity of each storage from Day one. This should include licenses for Management and monitoring module and all the storage features such as Snapshot, Cloning, Replication etc. Upgrade in capacity should not incur any additional license cost. Offered storage system have online and historical performance reporting capability.  Offered storage system have online and historical performance reporting capability. At least 1 year of historical performance information should be available online for capacity and performance forecasting, trend analysis etc. In case this capability is not available natively, then necessary software subscription shall be provided for the entire duration of the contract.  As asked capacity is on NL SAS drives, enabling inline duplication is not recommended. And this is vendor specific and also they support dedup for NAS but not for object. So request you to amend the clause.	Bidder to refer corrigendum-5.
313	126	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.OPB Usable Space: DC -1, DRC -1)	Sl. No: 17 Protocol Support- CIFS, SMB, NFSV3&V4, HTTP, REST APIs, FTP, Linux FS (FUSE), S3 Protocol, SWIFT & all kinds of rest full APIs. Vendor shall configure the licenses all interfaces All above protocol shall be native to cluster and shall not require any additional gateway. Vendor can provision additional gateway if required from performance perspective but capability shall be native to main nodes only.	S3/CIFS/SMB/NFSV/HTTPS/HTTP/REST APIs/FTP/Linux FS (FUSE)/S3 Protocol/SWIFT & all kinds of rest full APIs. Vendor shall configure the licenses all interfaces The purpose build object storage systems does support S3 protocol only, so we request you to please segregate the file and object requirement. There are solutions which can support NAS and object but it lacks critical object capabilities.	Bidder to refer corrigendum-5.



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314	127	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.0PB Usable Space: DC -1, DRC -1)	Sl. No: 21- Other Features Entire Clause	The proposed storage system should support SNMP, Address resolution protocol, Network Time Protocol, LDAP/Network Lock Manager. The Storage array should be licensed with Performance monitoring tools should be offered with the storage array. The proposed storage system shall support a browser based GUI built in management. All objects stored in Object Storage have a URL. All objects have their own metadata. Developers interact with the object storage system through a RESTful HTTP API. Object data can be located anywhere in the cluster. Backup & Recovery: Data backup and recovery rely on accessible and reliable storage. Object-based storage provides the infrastructure for secure data backup and efficient recovery procedures. There shall be no separate and dedicated control node or metadata node in the cluster. In case, nodes are separate then vendor shall over Metadata / control nodes in HA using active / active approach. Offered solution shall be completely redundant and there shall be no single point of failure. Offered solution shall have file integrity checking when reading the file and automatic rebuild if an error is detected. Please segregate the requirement for object and file as NLM is NFS specific feature. Request you to modify the clause	Bidder to refer corrigendum-5.
315	140	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	B. Type 2 Switch - 24 numbers (12 DC+ 12 DRC) for Data Sl. No. 33 High Mean Time Between Failure values (>3.5 lakh hours) should be available to ensure long life of switch hardware.	Request you to change this to "High Mean Time Between Failure values (>2.7 lakh hours) should be available to ensure long life of switch hardware. Request Bank to change this value, as this is single OEM specific point . Higher MTBF values always donot provide the product reliability measurements	Bidder to refer corrigendum-5.
316	142	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	C. Type 4 Switch - 4 numbers (2 DC+ 2 DRC) - Storage Sl. No. 33 High Mean Time Between Failure values (>3.5 lakh hours) should be available to ensure long life of switch hardware.	Request you to change this to "High Mean Time Between Failure values (>2.7 lakh hours) should be available to ensure long life of switch hardware. Request Bank to change this value, as this is single OEM specific point . Higher MTBF values always donot provide the product reliability measurements	Bidder to refer corrigendum-5.
317	154	Annexure-9 Technical Specifications	Table-N Technical Specifications of 4 SAN Director (2 Nos at DC and 2 Nos at DR)	Sl. No: 21 Other Features The director class switch should provide Inter Chassis Link (ICL) for connecting multiple Chassis	The director class switch should provide Inter Chassis Link (ICL) or Inter Switch Link (ISL) for connecting multiple Chassis ICL is Single OEM specification , we provide the same capability using more open Industry standard ISL/Trunking . Request bank to change this remove or change this clause	Bidder to refer corrigendum-5.
318	77	Annexure-8 Scope of Work	Evaluation for Scope of Work For Open shift	Entire Clause	What is the Hardware configuration for Openshift hosting?	Details will be shared with the selected bidder
319	77	Annexure-8 Scope of Work	Evaluation for Scope of Work For Open shift	Entire Clause	What is the Hardware configuration for Openshift hosting?	Details will be shared with the selected bidder
320	77	Annexure-8 Scope of Work	Evaluation for Scope of Work For Open shift	Entire Clause	What storage bank has present, does bank have Object, Block and File with certified Openshift CSI Driver? can same be used for Openshift Cluster?	Details will be shared with the selected bidder
321	77	Annexure-8 Scope of Work	Evaluation for Scope of Work For Open shift	Entire Clause	Bank to confirm if they intend the OEM to Implement the solution for the mentioned scope of work	Details will be shared with the selected bidder
322	NA	Generic	Generic	Generic	Please clarify on number of clusters considered to be delivered within 12 weeks.	Bidders to comply with RFP/GeM bid terms and conditions

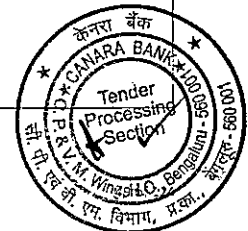


Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
323	172	Annexure-16 Bill of Material	Table - C Price details of Software/License Items (Subscription based Licenses)	Sl. No: 2 RHEL 9 with premium support	Do we need to propose RHEL with Satellite?	Bidders to comply with RFP/GeM bid terms and conditions
324	172	Annexure-16 Bill of Material	Table - C Price details of Software/License Items (Subscription based Licenses)	Sl. No: 3 RHEL 9 High Availability with premium support for CISC - X86 machines	Do we need to propose RHEL with Satellite?	Bidders to comply with RFP/GeM bid terms and conditions
325	73-84	Annexure-8 Scope of Work	Entire Clause	Entire Clause	We are a well established System Integrator with many OEM certified technical resources on our payroll, who can take care of the entire scope of work. We request bank to allow Bidder to take care of the entire Scope of Work as per Annexure 8.	Bidders to comply with RFP/GeM bid terms and conditions
326	17	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	7. Penalties/Liquidated Damages	7.1. Penalties/Liquidated damages for delay in Supply, Installation, Configuration, Implementation Other related items would be as under:  7.1.6. However, the total Penalty/LD to be recovered under above clauses 7.1.1 to 7.1.5 shall be restricted to 10% of the total Contract Value as mention in Table-H.	Request you to change the total Penalty/LD to be recovered under above clauses 7.1.1 to 7.1.5 shall be restricted to 5 %	Bidders to comply with RFP/GeM bid terms and conditions
327	21	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	8. Payment Terms	8.1. The payment schedule for Hardware will be as under and will release after execution of contract agreement:  Sl. No: 5 100%- On Supply and installation of all the of Software/ Licenses as per RFP	100% On Supply (As for Software deployment has a dependency - Planning, Design & Configuration)	Bidders to comply with RFP/GeM bid terms and conditions
328	22	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	8. Payment Terms	8.1. The payment schedule for Hardware will be as under and will release after execution of contract agreement: Sl. No: 8 AMC as mentioned in Table-F- Quarterly in arrears on submission of Quarterly Preventive Maintenance activity report and acceptance duly signed by Bank officials of the respective officials of the respective Branch/Office.	Please remove Preventive Maintenance activity Requirements as the DataCenter Hardware doesnot require Physical Preventive Maintenance as they are designed to run 24 x 7 without any disruption and for health check of this equipments, we recommend to be done by DCO team	Preventive maintenance refers to health check of devices once in three month including firmware upgrade and activity report to be submitted
329	149	Annexure-9 Technical Specifications	Table-M Technical Specification of Managed file transfer Solution:	Sl. No: 46 The solution should possess the capability to create shared folders for each group, department, or team, with customizable access levels and storage size restrictions.	Could you explain about this requirement in detail?	Bidders to comply with RFP/GeM bid terms and conditions

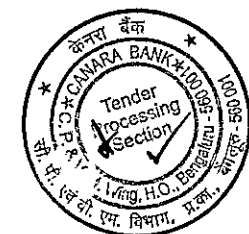




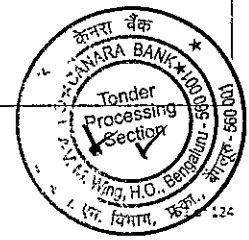
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
330	64	Annexure-2 Pre-Qualification Criteria	Sl. No: 8	Pre-Qualification Criteria The Bidder/OEM should have successfully supplied minimum cumulative 500 Nos. of Servers in India in the last three years out of which the bidder should have successfully supplied Hardware and software as a service model at least 100 servers deployed at Customer's DC and DR in Indian Market in any 1 Scheduled Commercial Bank/ NBFC/ Insurance Company/ PSU/ Central Government Organization in India in the last three years as on the date of submission of bid for this RFP.	Please remove below clause line As current requirement is CAPEX On Premises & not as a service "out of which the bidder should have successfully supplied Hardware and software as a service model at least 100 servers deployed at Customer's DC and DR in Indian Market/Scheduled Commercial Bank/ NBFC/ Insurance Company/ PSU/ Central Government Organization in India in the last three years as on the date of submission of bid for this RFP.	Bidder to refer corrigendum-5.
331	76	Annexure-8 Scope of Work	Evaluation for Scope of Work for MSSQL - Microsoft SQL	Sl. No: 1 Installation and Configuration: Set up SQL Server databases and configure settings to ensure optimal performance and security.	Require more details on number of SQL Clusters and Databases need to be configured	Details will be shared with the selected bidder
332	77	Annexure-8 Scope of Work	Evaluation for Scope of Work for Hyper-V - Microsoft	Entire Clause	Require more details on number of windows Clusters and Databases need to be configured	Details will be shared with the selected bidder
333	77	Annexure-8 Scope of Work	Evaluation for Scope of Work For Open shift	Entire Clause	Require More Details Like number of cluster, Worker Node & application landscape .	Details will be shared with the selected bidder
334	79	Annexure-8 Scope of Work	Evaluation for Scope of Work for Apache Tomcat	Entire Clause	Require More Details Like nos of server /Clusters need to be deployed and configured	Details will be shared with the selected bidder
335	81	Annexure-8 Scope of Work	Evaluation for Scope of Work for Jboss solution	Entire Clause	Require More Details	Bidders to comply with RFP/GeM bid terms and conditions
336	-	-	-	-	Bidder's Query	Query not clear
337	NA	Generic	Generic	Generic	-	Query not clear
338	-	-	-	-	Bidder's Query	Query not clear
339	140	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	B. Type 2 Switch - 24 numbers (12 DC+ 12 DRC) for Data Sl. No. 33 High Mean Time Between Failure values (>3.5 lakh hours) should be available to ensure long life of switch hardware.	Request Bank to change this value, as this is single OEM specific point . Higher MTBF values always donot provide the product reliability measurements	Bidder to refer corrigendum-5.
340	142	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	C. Type 4 Switch - 4 numbers (2 DC+ 2 DRC) - Storage Sl. No. 33 High Mean Time Between Failure values (>3.5 lakh hours) should be available to ensure long life of switch hardware.	Request Bank to change this value, as this is single OEM specific point . Higher MTBF values always donot provide the product reliability measurements	Bidder to refer corrigendum-5.
341	85	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC)	Sl. No: 5- Processor Processor Make- Latest generation x86_64 bit architecture-based CPU's	CPU vendors have different Class of CPU and given the general ask , both CPU type like high range platinum 8500 and Mid range Gold 6500 aslo qualify hence this ask.	Bidders to comply with RFP/GeM bid terms and conditions
342	91	Annexure-9 Technical Specifications	Table-B Technical Specification - 28 servers (17 DC and 11 DRC)	Sl. No: 5- Processor Processor Make- Latest generation x86_64 bit architecture-based CPU's	CPU vendors have different Class of CPU and given the general ask , both CPU type like high range platinum 8500 and Mid range Gold 6500 aslo qualify hence this ask.	Bidders to comply with RFP/GeM bid terms and conditions
343	150	Annexure-9 Technical Specifications	Table-N Technical Specifications of 4 SAN Director (2 Nos at DC and 2 Nos at DR)	Sl. No: 9 The switch should support 512 Gbps BW for ISL Trunking connectivity and Cut Thru Switching. Necessary Licenses to be provided by the bidder.	There are only 2 OEM in SAN switching market . Cut Thru SAN switching is single OEM specific mechansim and hence request bank to change this Clause for more participation	Bidder to refer corrigendum-5.



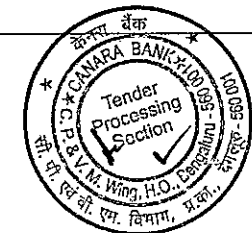
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
344	154	Annexure-9 Technical Specifications	Table-N Technical Specifications of 4 SAN Director (2 Nos at DC and 2 Nos at DR)	Sl. No: 21 Other Features The director class switch should provide Inter Chassis Link (ICL) for connecting multiple Chassis	ICL is Single OEM specification . we provide the same capability using more open Industry standard ISL /Trunking . Request bank to change. this remove or change this clause	Bidder to refer corrigendum-5.
345	155	Annexure-9 Technical Specifications	Table-O Technical Specifications of 8 SAN Switch (4 Nos at DC and 4 Nos at DR)	Sl. No. 5 ISL Trunking connectivity and Cut Thru Switching. Necessary Licenses to be provided by the bidder.	There are only 2 OEM in SAN switching market . Cut Thru SAN switching is single OEM specific mechansim and hence request bank to change this Clause for more participation	Bidder to refer corrigendum-5.
346	NA	Generic	Generic	Generic	-	Query not clear
347	NA	Generic	Generic	Generic	-	Query not clear
348	NA	Generic	Generic	Generic	Sub-Clause/Technical Specification	Query not clear
349	144	Annexure-9 Technical Specifications	Table-L Backup Solution for 500 Servers at DC and DRC	Sl. No: 13 The proposed backup software should have object storage backup.	Request to change this to " The proposed backup solution should have object storage backup"	Bidders to comply with RFP/GeM bid terms and conditions
350	144	Annexure-9 Technical Specifications	Table-L Backup Solution for 500 Servers at DC and DRC	Sl. No. 15 Backup software should support instant file share recovery in NAS storages to allow users to access files fast after disaster	Request to change this to " Backup solution should support instant file share recovery in NAS storages to allow users to access files fast after disaster"	Bidders to comply with RFP/GeM bid terms and conditions
351	144	Annexure-9 Technical Specifications	Table-L Backup Solution for 500 Servers at DC and DRC	Sl. No: 17 Software should be able to extend the backup repository to a public cloud service provider by moving older files to any S3 Compatible Object storage or Azure BLOB repositories.	Request to change this to "Backup Solution should be able to extend the backup repository to a public cloud service provider by moving older files to any S3 Compatible Object storage or Azure BLOB repositories."	Bidders to comply with RFP/GeM bid terms and conditions
352	144	Annexure-9 Technical Specifications	Table-L Backup Solution for 500 Servers at DC and DRC	Sl. No: 18 The software must has the functionality to back up on-prem data directly into cloud repositories such as AWS S3 or Microsoft Blob	Request to change this to " The solution must has the functionality to back up on-prem data directly into cloud repositories such as AWS S3 or Microsoft Blob"	Bidders to comply with RFP/GeM bid terms and conditions
353	145	Annexure-9 Technical Specifications	Table-L Backup Solution for 500 Servers at DC and DRC	Sl. No. 39 Backup software should support immutable backups for protecting backups from ransomware and malicious attacks. The immutability should be controllable from the backup management specification itself.	Request to change this to " Backup solution should support immutable backups for protecting backups from ransomware and malicious attacks. The immutability should be controllable from the backup management specification itself"	Bidders to comply with RFP/GeM bid terms and conditions
354	145	Annexure-9 Technical Specifications	Table-L Backup Solution for 500 Servers at DC and DRC	Sl. No: 41 The backup software should support multiple types of backup repositories including Purpose built backup alliances, S3 Object Storage, Hardened NFS repositories etc. Compatibility list to be provided	Request to change this to "The backup solution should support multiple types of backup repositories including Purpose built backup alliances, S3 Object Storage, Hardened NFS repositories etc. Compatibility list to be provided"	Bidders to comply with RFP/GeM bid terms and conditions
355	85	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC)	Sl. No: 5- Processor Processor Make- Latest generation x86_64 bit architecture-based CPU's	We request Canara bank to Change this to 3rd generation or higher x86_64 bit architecture based CPU's	Bidders to comply with RFP/GeM bid terms and conditions



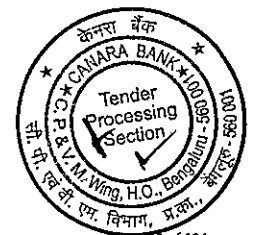
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
356	86, 92, 98, 104, 110 & 117	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 6- Memory Ram Size- 128GB*16 = 2 TB	We request Canara Bank to change this to 2TB of Total Memory for better memory bandwidth, MII percentage and price / performance.	Bidder to refer corrigendum-5.
357	86, 92, 98, 104, 110 & 117	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 6- Memory Slot Count- Minimum 24 or higher, Minimum 8 free memory slots should be available.	Minimum 24 or higher, Minimum 8 free memory slots should be available.	Bidder to refer corrigendum-5.
358	88, 94, 100, 107, 113 & 120	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 17 PCI Slots- Minimum 4 - x16 PCIe Gen4 or higher free slots(Peripheral Component Interconnect Express)	We request this to be changed to Minimum 4 - PCIe Gen4 or higher free slots(Peripheral Component Interconnect Express)	Bidder to refer corrigendum-5.



Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
359	92	Annexure-9 Technical Specifications	Table-B Technical Specification - 28 servers (17 DC and 11 DRC)	Sl. No: 5- Processor Processor Make- Latest generation x86_64 bit architecture-based CPU's	We request Canara bank to Change this to 3rd generation or higher x86_64 bit architecture based CPU's	Bidders to comply with RFP/GeM bid terms and conditions
360	88, 94, 100, 107, 113 & 120	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 17 PCI Slots- Minimum 4 - x16 PCIe Gen4 or higher free slots(Peripheral Component Interconnect Express)	We request this to be changed to Minimum 4 - PCIe Gen4 or higher free slots(Peripheral Component Interconnect Express)	Bidder to refer corrigendum-5.
361	97	Annexure-9 Technical Specifications	Table-C Technical Specification - 100 servers (60 DC and 40 DRC)	Sl. No: 5- Processor Processor Make- Latest generation x86_64 bit architecture-based CPU's	We request Canara bank to Change this to 3rd generation or higher x86_64 bit architecture based CPU's	Bidders to comply with RFP/GeM bid terms and conditions
362	104	Annexure-9 Technical Specifications	Table-D Technical Specification - 54 servers (28 DC and 26 DRC)	Sl. No: 5- Processor Socket Minimum 2 sockets i.e., 24*1 =24 core ( 1 Populated & 1 For future upgrade )	Since other requirements mentioned in the RFP for the server cannot be met via single socket configuration , namely - 1. PCI slot expansion ; PCI Cards required to be populated ; Memory required to be populated and free slots cannot be upgraded without additional CPU etc.. We request Canara Bank to go with dual socket CPU and Ammend this clause with 16 Core DUAL CPU	Bidder to refer corrigendum-5.
363	NA	Generic	Generic	Generic		Query not clear
364	87, 93, 99, 105, 111 & 118	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification 12 servers	Sl. No: 9 SAN & Network	Required SAN and Network cards cannot be populated in single socket system.. We request the server to be changed to dual socket to meet these criteria. (total of 6 cards are required -- 2 nos of 1G, 2Nos of 10G and 2 Nos of FC).	Bidder to refer corrigendum-5.



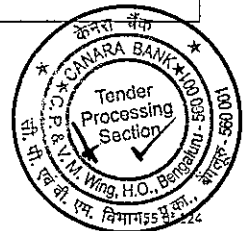
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
365	88, 94, 100, 107, 113 & 120	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 17 PCI Slots- Minimum 4 - x16 PCIe Gen4 or higher free slots(Peripheral Component Interconnect Express)	This clause cannot be met in single socket system. We request the server to be moved to dual socket to abide these clause.	Bidder to refer corrigendum-5.
366	103	Annexure-9 Technical Specifications	Table-D Technical Specification - 54 servers (28 DC and 26 DRC)	Sl. No: 5- Processor Processor Make- Latest generation x86_64 bit architecture-based CPU's	We request Canara bank to Change this to 3rd generation or higher x86_64 bit architecture based CPU's	Bidders to comply with RFP/GeM bid terms and conditions
367	110	Annexure-9 Technical Specifications	Table-E Technical Specification - 226 servers (135 DC and 91 DRC)	Sl. No: 5- Processor Socket Minimum 2 sockets i.e., 16*1 =16 core ( 1 Populated & 1 For future upgrade )	Since other requirements mentioned in the RFP for the server cannot be met via single socket configuration , namely - 1. PCI slot expansion ; PCI Cards required to be populated ; Memory required to be populated and free slots cannot be upgraded without additional CPU etc.. We request Canara Bank to go with dual socket CPU and Ammend this clause with 16Core Dual CPU	Bidder to refer corrigendum-5.
368	87, 93, 99, 105, 111 & 118	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 9 SAN & Network	Required SAN and Network cards cannot be populated in single socket system.. We request the server to be changed to dual socket to meet these criteria. (total of 6 cards are required -- 2 nos of 1G, 2Nos of 10G and 2 Nos of FC).	Bidder to refer corrigendum-5.



Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply.
369	88, 94, 100, 107, 113 & 120	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 17 PCI Slots- Minimum 4 - x16 PCIe Gen4 or higher free slots(Peripheral Component Interconnect Express)	This clause cannot be met in single socket system. We request the server to be moved to dual socket to abide these clause.	Bidder to refer corrigendum-5.
370	110	Annexure-9 Technical Specifications	Table-E Technical Specification - 226 servers (135 DC and 91 DRC)	Sl. No: 5- Processor Processor Make- Latest generation x86_64 bit architecture-based CPU's	We request Canara bank to Change this to 3rd generation or higher x86_64 bit architecture based CPU's	Bidders to comply with RFP/GeM bid terms and conditions
371	87, 93, 99, 105, 111 & 118	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 9 SAN & Network	Required SAN and Network cards cannot be populated in single socket system.. We request the server to be changed to dual socket to meet these criteria. (total of 6 cards are required -- 2 nos of 1G, 2Nos of 10G and 2 Nos. of FC).	Bidder to refer corrigendum-5.



Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
372	88, 94, 100, 107, 113 & 120	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 17 PCI Slots- Minimum 4 - x16 PCIe Gen4 or higher free slots(Peripheral Component Interconnect Express)	This clause cannot be met in single socket system. We request the server to be moved to dual socket to abide these clause.	Bidder to refer corrigendum-5.
373	116	Annexure-9 Technical Specifications	Table-F Custom Technical Specification - 12 servers	Sl. No: 5- Processor Processor Make- Latest generation x86_64 bit architecture-based CPU's	We request Canara bank to Change this to 3rd generation or higher x86_64 bit architecture based CPU's	Bidders to comply with RFP/GeM bid terms and conditions
374	116	Annexure-9 Technical Specifications	Table-F Custom Technical Specification - 12 servers	Sl. No: 5- Processor Socket Minimum 2 sockets i.e., 16*1 =16 core ( 1 Populated & 1 For future upgrade ) - Type 1 Minimum 2 sockets i.e., 32*1 =32 core ( 1 Populated & 1 For future upgrade ) - Type 2 Minimum 2 sockets i.e., 32*1 =32 core ( 1 Populated & 1 For future upgrade ) - Type 3	Since other requirements mentioned in the RFP for the server cannot be met via single socket configuraiton , namely - 1. PCI slot expansion ; PCI Cards required to be populated ; Memory required to be populated and free slots cannot be upgraded without additional CPU etc.. We request Canara Bank to go with dual socket CPU and Ammend this clause as : Minimum 2 sockets i.e., 16*2 =32 core - Type 1 Minimum 2 sockets i.e., 16*2 =32 core - Type 2 Minimum 2 sockets i.e., 16*2 =32 core - Type 3	Bidder to refer corrigendum-5.
375	86, 92, 98, 104, 110 & 117	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 6- Memory Ram Size- 128GB*16 = 2 TB	This clause cannot be met with one variant of x86 CPU with single socket populated. We request Canara Bank to change the server to dual socket to meet this criteria.	Bidder to refer corrigendum-5.

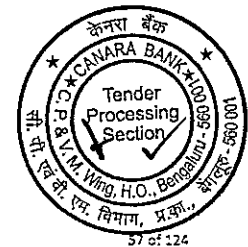


Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
376	86, 92, 98, 104, 110 & 117	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 6- Memory Slot Count- Minimum 24 or higher, Minimum 8 free memory slots should be available.	We request Canara bank to have all servers with min 12 or higher disk slots. Type 3 - 38 slots are asked which are not possible in standard server and a JBOD may have to be provisioned .	Bidder to refer corrigendum-5.
377	87, 93, 99, 105, 111 & 118	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 9 SAN & Network	Required SAN and Network cards cannot be populated in single socket system.. We request the server to be changed to dual socket to meet these criteria. (total of 6 cards are required -- 2 nos of 1G, 2Nos of 10G and 2 Nos of FC).	Bidder to refer corrigendum-5.
378	88, 94, 100, 107, 113 & 120	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 17 PCI Slots- Minimum 4 - x16 PCIe Gen4 or higher free slots(Peripheral Component Interconnect Express)	This clause cannot be met in single socket system. We request the server to be moved to dual socket to abide these clause.	Bidder to refer corrigendum-5.

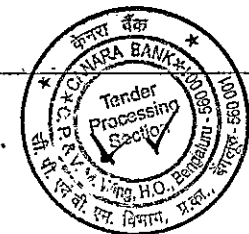




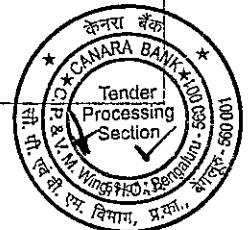
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379	124	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.0PB Usable Space: DC -1, DRC -1)	Sl. No: 5- Architecture Scale-Out "Any to Any" access? Security Model S3-Vault, Security services for accounts? S3-Metadata Distributed Metadata Engine. Interface, Capability to write simultaneously to the same folder from different file connectors (Folder Scale Out). Seamless load balancing and failover among the file connectors. Built in Load balancing.	Request Bank to provide more details on these points, folder scaleout, Security model S3 vault, built in load balancing etc.. Request bank to consider NAS and Object requirements as an overall solution.	Bidder to refer corrigendum-5.
380	125	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.0PB Usable Space: DC -1, DRC -1)	Sl. No: 13 RAID Support- RAID array supporting 10, 0, 1, 5 and 6 or better levels. It should support a mix and match of RAID levels behind a pair of controllers. The storage array should allow online expansion of existing RAID Groups / Storage Disk Pools.	Request the bank to consider erasure coding as well and not just traditional RAID.	Bidder to refer corrigendum-5.
381	126	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.0PB Usable Space: DC -1, DRC -1)	Sl. No: 16 Services- Proposed storage array should include storage based compression, inline Deduplication, storage to storage replication, Snapshot for the entire supported capacity of the storage array from day one. All the required or necessary licenses must be perpetual and provided for the Full capacity of each storage from Day one. This should include licenses for Management and monitoring module and all the storage features such as Snapshot, Cloning, Replication etc. Upgrade in capacity should not incur any additional license cost. Offered storage system have online and historical performance reporting capability.	Request Bank to consider Inline compression, Inline dedupe, Global Dedupe (cluster wide) on NAS and only compression on Object Storage.	Bidder to refer corrigendum-5.
382	126	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.0PB Usable Space: DC -1, DRC -1)	Sl. No: 17 Protocol Support- CIFS, SMB, NFSV3&V4, HTTPS, HTTP, REST APIs, FTP, Linux FS (FUSE), S3 Protocol, SWIFT & all kinds of rest full APIs. Vendor shall configure the licenses all interfaces All above protocol shall be native to cluster and shall not require any additional gateway. Vendor can provision additional gateway if required from performance perspective but capability shall be native to main nodes only.	Request Bank to remove Linux FS (FUSE). This is basically using mounted drive as block or file storage which in this case is not required because there is already block, file and Object storage requirement as per RFP.	Bidder to refer corrigendum-5.



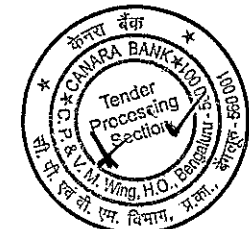
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
383	128-129	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.OPB Usable Space: DC -1, DRC -1)	Sl. No: 29 Controller E: Availability- Minimum four controllers are required to provide 2.OPB usable space, hot swappable controllers for high availability, load balancing and redundant modes. Minimum 20 core should be available per controller Offered Storage array should be an enterprise class storage system with 99 % Data Availability guarantee.	Request bank to consider minimum 16 Core per node and also to consider NAS and object requirement as dedicated storage solution.	Bidder to refer corrigendum-5.
384	129	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.OPB Usable Space: DC -1, DRC -1)	Sl. No. 30 Data Management Features  1. it shall be possible to tag and search S3 Metadata. 2. Lifecycle Management - It shall be possible to automatically transition and expiration of data based on criteria. 3. it shall be possible to asynchronously replicate bucket to several Cloud targets 4. Offered storage shall support multi-tenancy and data isolation	Request bank to provide more details on the asynch replication capability to multiple cloud targets.	Bidder to refer corrigendum-5.
385	129	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.OPB Usable Space: DC -1, DRC -1)	Sl. No. 32 Compliance  1. Offered storage shall ensure that Data must be tamper-proof. 2. Data must be kept for a specified period which means offered storage shall provide retention mechanism. 3. Offered storage shall have capability to migrate the data to an alternative media	Request bank to provide more clarity on point 3- What do we mean by alternative media?	Bidder to refer corrigendum-5.
386	130	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.OPB Usable Space: DC -1, DRC -1)	Sl. No. 34. Multi-cloud Controller	Request bank to provide more clarity on the built in multi cloud controller engine and support Local legacy NAS Storage.	Bidder to refer corrigendum-5.
387	131	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.OPB Usable Space: DC -1, DRC -1)	Sl. No. 38 Core technology - Object  1. Offered Object storage core technology shall be able to abstract the underlying servers, to create a uniformly scalable storage pool 2. There shall be No size limit for object or files which can be stored in the cluster. 3. Offered storage shall do automatic Rebalancing when adding a new server in the cluster 4. Offered storage shall allow capacity extensions done by adding disks to existing servers (scale-up) or adding additional servers to the system (scale-out).	Request bank to consider support for upto 16TB file size as optional on NAS Storage.	Bidder to refer corrigendum-5.



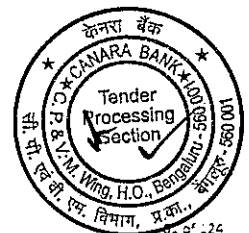
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
388	131	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.0PB Usable Space: DC -1, DRC -1)	Sl. No. 39 Peer to peer connectivity 1. Any change in the connecting topology, like adding the nodes, shall broadcast the change to few nodes instead of broadcasting to all nodes in the cluster. 2. Overall cluster shall provide the self-healing processes to monitor and automatically resolve component failures using re-build, proxy and rebalance aspects.	We request the bank to consider the following for point1 Proposed storage should not have any impact on performance while adding or removing nodes/controllers.	Bidder to refer corrigendum-5.
389	132	Annexure-9 Technical Specifications	Table-H Storage Technical Specifications: (Enterprise Block Storage 2.0PB Usable Space: DC -2, DRC -2)	Sl. No: 11 Scalability- Each storage up to 5PB ( Scale UP) and 8 controller ( Scale Out ) DIP( data in-place) upgrade capability	Request the bank to consider 5PB as the overall Storage capacity and not per Storage appliance.	Bidder to refer corrigendum-5.
390	134	Annexure-9 Technical Specifications	Table-H Storage Technical Specifications: (Enterprise Block Storage 2.0PB Usable Space: DC -2, DRC -2)	Sl. No: 27 Remote Replication Offered Storage array should provide both Synchronous and Asynchronous replication across 2 storage arrays natively. Offered Storage array shall support 3 Data Center solution natively where Primary site shall be able to replicate synchronously to nearby / Bunker location and at the same time shall be able to replicate to Far location asynchronously. Necessary replication licenses/ Infrastructure required for replication should be provided with the array	Request bank to consider Synhronous and Asynchronous replication since we are only considering for DC and DR locations.	Bidder to refer corrigendum-5.
391	135	Annexure-9 Technical Specifications	Table-H Storage Technical Specifications: (Enterprise Block Storage 2.0PB Usable Space: DC -2, DRC -2)	Sl. No: 31 Capacity Efficiency features- Offered storage array should support thin provisioning It should also support inline data reduction (deduplication & compression) for maximizing flash storage capacity The array should offer the flexibility to enable / disable the data reduction on a per-volume basis	Request bank to consider Deduplication and compression across the array and not on a per volume basis, since Data reduction when applied globally across the arrays, gives better data reduction, compared to setting this up individually on a per volume basis.	Bidder to refer corrigendum-5.
392	153	Annexure-9 Technical Specifications	Table-N Technical Specifications of 4 SAN Director (2 Nos at DC and 2 Nos at DR)	Sl. No: 21 Other Features- FCIP interface should have compression feature	Do we need to provide FCIP routers for Storage based replication between DC and DR. If yes, pls specify the WAN Bandwidth between DC and DR and RPO details.	FCIP router is not required
393	NA	Generic	Generic	Generic		Query not clear
394	-	-	-	-	Bidder's Query	Query not clear
395	124-125	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.0PB Usable Space: DC -1, DRC -1)	Sl. No: 8 Capacity- Minimum usable storage 2 PB after RAID6/ Dual RAID6 Configuration. ( Without considering any data reduction features such as compression, deduplication etc .,)	Since Object storage support Erasure coding mechanism and not traditional RAID protection. Request to remove this clause	Bidder to refer corrigendum-5.



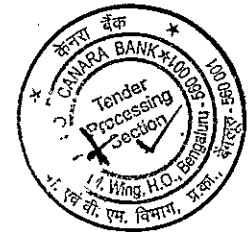
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
396	125	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.0PB Usable Space: DC -1, DRC -1)	Sl. No: 13 RAID Support- RAID array supporting 10, 0, 1, 5 and 6 or better levels. It should support a mix and match of RAID levels behind a pair of controllers. The storage array should allow online expansion of existing RAID Groups / Storage Disk Pools.	Since Object storage support Erasure coding mechanism and not traditional RAID protection. Request to change the clause to " Object storage to support erasure coding and allow online expansion of storage space "	Bidder to refer corrigendum-5.
397	126	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.0PB Usable Space: DC -1, DRC -1)	Sl. No: 17 Protocol Support- CIFS, SMB, NFSV3&V4, HTTP5, HTTP, REST APIs, FTP, Linux FS (FUSE), S3 Protocol, SWIFT & all kinds of rest full APIs. Vendor shall configure the licenses all interfaces All above protocol shall be native to cluster and shall not require any additional gateway. Vendor can provision additional gateway if required from performance perspective but capability shall be native to main nodes only.	CIFS, SMB, NFS are NAS storage protocols and NOT object storage protocols. Also FTP and Linux FS ( FUSE ) are not standard protocols supported by al Object storage. Request to change the clause to " HTTPS, HTTP, REST APIs, S3 Protocol, SWIFT & all kinds of rest full APIs. Vendor shall configure the licenses all interfaces. All Above protocols shall be native to cluster and shall not require additional gateway. CIFS, SMB, NFS can be supported using additional gateway"	Bidder to refer corrigendum-5.
398	128	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.0PB Usable Space: DC -1, DRC -1)	Sl. No: 27- Remote Replication 2-way replication with zero data loss	This is a typical SAN storage requirement which does sync replication to Near DR site. and not applicable to Object storage. Also since proposed solution does not involve near DR , Request to remove this clause as this is more applicable to SAN storage and NOT Object storage	Bidder to refer corrigendum-5.
399	130	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.0PB Usable Space: DC -1, DRC -1)	Sl. No. 34. Multi-cloud Controller	Need more understanding on what is meant by Multi Cloud controller, This looks to be a vendor specific and need more details .	Bidder to refer corrigendum-5.
400	132	Annexure-9 Technical Specifications	Table-H Storage Technical Specifications: (Enterprise Block Storage 2.0PB Usable Space: DC -2, DRC -2)	Sl. No: 11 Scalability- Each storage up to 5PB ( Scale UP) and 8 controller ( Scale Out ) DIP( data in-place) upgrade capability	5 PB scalability with 15 TB drive option looks single vendor specific. Since NVMe protocol supports max 96 drives as scale up, Request to change the clause to : Each storage up to 4 PB and 8 controller ( Scale Up/ Scale Out ) DIP( data in-place) upgrade capability" OR support effective capacity of 5 PB scalability ( using data reduction techniques like compression and deuplication )	Bidder to refer corrigendum-5.
401	132	Annexure-9 Technical Specifications	Table-H Storage Technical Specifications: (Enterprise Block Storage 2.0PB Usable Space: DC -2, DRC -2)	Sl. No: 13 RAID Support- RAID array supporting 10, 0, 1, 5 and 6 or better levels. It should support a mix and match of RAID levels behind a pair of controllers. The storage array should allow online expansion of existing RAID Groups / Storage Disk Pools.	Modern storages supports RAID5 and RAID 6 level protection and have discontinued support for RAID10 and 0, Hence Request to change the clause to : Storage should support single and double disk failure protection. The storage array should allow online expansion of existing RAID Groups / Storage Disk Pools	Bidder to refer corrigendum-5.
402	143	Annexure-9 Technical Specifications	Table-L Backup Solution for 500 Servers at DC and DRC	Sl. No: 5 Backup software should be a Hardware Agnostic software and it should support snapshot integration with hypervisors like VMware and Hyper-V and support de-duplication on any storage target. It should be able to backup data to tapes (like LTO) as well for long term retention	Since Bank has asked for backup software along with backup storage target, Request to change this clause to "Backup solution should support snapshot integration with hypervisors like VMware and Hyper-V and support de-duplication It should be able to backup data to tapes (like LTO) as well for long term retention"	Bidders to comply with RFP /GeM bid terms and conditions



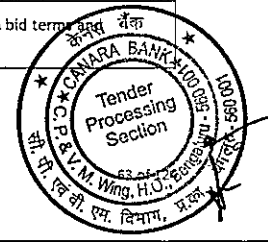
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
403	143	Annexure-9 Technical Specifications	Table-L Backup Solution for 500 Servers at DC and DRC	Sl. No: 6 The proposed Backup software must offer instance based licenses with no restrictions on type of arrays (protecting heterogeneous storage technologies), front end production capacity or backup to disk target capacity restrictions. Licenses and associated software should be supplied for both primary and DR site.	What do Bank mean by instances. Is it the total number of servers which are part of this RFP ? Request Please clarify with details	Yes. Instance are referred to servers
404	143	Annexure-9 Technical Specifications	Table-L Backup Solution for 500 Servers at DC and DRC	Sl. No: 10 Proposed solution should have security and compliance dashboard inbuilt with the product.	Need more details on this as what is the exact requirement	Bidder to refer corrigendum-5.
405	144	Annexure-9 Technical Specifications	Table-L Backup Solution for 500 Servers at DC and DRC	Sl. No: 13 The proposed backup software should have object storage backup.	Request to change this to " The proposed backup solution should have object storage backup"	Bidder to refer corrigendum-5.
406	144	Annexure-9 Technical Specifications	Table-L Backup Solution for 500 Servers at DC and DRC	Sl. No: 15 Backup software should support instant file share recovery in NAS storages to allow users to access files fast after disaster	Request to change this to " Backup solution should support instant file share recovery in NAS storages to allow users to access files fast after disaster"	Bidders to comply with RFP/GeM bid terms and conditions
407	144	Annexure-9 Technical Specifications	Table-L Backup Solution for 500 Servers at DC and DRC	Sl. No: 17 Software should be able to extend the backup repository to a public cloud service provider by moving older files to any S3 Compatible Object storage or Azure BLOB repositories.	Request to change this to "Backup Solution should be able to extend the backup repository to a public cloud service provider by moving older files to any S3 Compatible Object storage or Azure BLOB repositories."	Bidders to comply with RFP/GeM bid terms and conditions
408	144	Annexure-9 Technical Specifications	Table-L Backup Solution for 500 Servers at DC and DRC	Sl. No: 18 The software must has the functionality to back up on-prem data directly into cloud repositories such as AWS S3 or Microsoft Blob	Request to change this to " The solution must has the functionality to back up on-prem data directly into cloud repositories such as AWS S3 or Microsoft Blob"	Bidders to comply with RFP/GeM bid terms and conditions
409	145	Annexure-9 Technical Specifications	Table-L Backup Solution for 500 Servers at DC and DRC	Sl. No: 39 Backup software should support immutable backups for protecting backups from ransomware and malicious attacks. The immutability should be controllable from the backup management specification itself.	Request to change this to " Backup solution should support immutable backups for protecting backups from ransomware and malicious attacks. The immutability should be controllable from the backup management specification itself"	Bidders to comply with RFP/GeM bid terms and conditions
410	145	Annexure-9 Technical Specifications	Table-L Backup Solution for 500 Servers at DC and DRC	Sl. No: 41 The backup software should support multiple types of backup repositories including Purpose built backup alliances, S3 Object Storage, Hardened NFS repositories etc. Compatibility list to be provided	Request to change this to "The backup solution should support multiple types of backup repositories including Purpose built,backup alliances, S3 Object Storage, Hardened NFS repositories etc. Compatibility list to be provided"	Bidders to comply with RFP/GeM bid terms and conditions
411	159	Annexure-9 Technical Specifications	Table-Q Technical Specifications of 2 LTO9 standalone Tape Drive (1 DC and 1 DRC)	Sl. No: 5 Tape Drive- One LTO-9 Drive with FC Connectivity to support 8Gbps or more.	Overall Backup Capacity requirement	Bidders to comply with RFP/GeM bid terms and conditions



Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
412	158	Annexure-9 Technical Specifications	Table-P Technical Specifications of 2 LTO9 Tape Library (1 Nos at DC and 1Nos at DR) and 200 LTO7 & 3800 LTO8 & 800 LTO9 Tapes & 200 No. of LTO9 Cleaning Cartridge	Sl. No: 8 LTO7 & LTO 8 & LTO 9 Tapes Up to LTO 9 Cleaning cartridges  3800 quantities (1900 DC & 1900 DRC) of LTO-8 standard tapes with custom Bar Codes compatible with the proposed Tape Library. 800 quantities (400 DC & 400 DRC) of LTO-9 standard tapes with custom Bar Codes compatible with the proposed Tape Library. 200 quantities (100 DC & 100 DRC) of LTO-7 standard tapes with custom Bar Codes.	Overall Backup Capacity requirement. As LTO 9 Supports 18TB Native and 45TB Compressed and 1900 LTO9 will equal to 32PB Native capacity and 85.5 Compressed capacity	Bidders to comply with RFP/GeM bid terms and conditions
413	159	Annexure-9 Technical Specifications	Table-Q Technical Specifications of 2 LTO9 standalone Tape Drive (1 DC and 1 DRC)	Sl. No: 5 Tape Drive- One LTO-9 Drive with FC Connectivity to support 8Gbps or more.	Standalone Tapedrive Supports only SAS Connectivity	Bidder to refer corrigendum-5.
414	140	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	B. Type 2 Switch - 24 numbers (12 DC+ 12 DRC) for Data Sl. No. 33 High Mean Time Between Failure values (>3.5 lakh hours) should be available to ensure long life of switch hardware.	Request Bank to change this value, as this is single OEM specific point . Higher MTBF values always donot provide the product reliability measurements	Bidder to refer corrigendum-5.
415	142	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	C. Type 4 Switch - 4 numbers (2 DC+ 2 DRC) - Storage Sl. No. 33 High Mean Time Between Failure values (>3.5 lakh hours) should be available to ensure long life of switch hardware.	Request Bank to change this value, as this is single OEM specific point . Higher MTBF values always donot provide the product reliability measurements	Bidder to refer corrigendum-5.
416	85	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC)	Sl. No: 5- Processor Processor Make- Latest generation x86_64 bit architecture-based CPU's	CPU vendors have different Class of CPU and given the general ask , both CPU type like high range platinum 8500 and Mid range Gold 6500 aslo qualify hence this ask.	Bidders to comply with RFP/GeM bid terms and conditions
417	91	Annexure-9 Technical Specifications	Table-B Technical Specification - 28 servers (17 DC and 11 DRC)	Sl. No: 5- Processor Processor Make- Latest generation x86_64 bit architecture-based CPU's	CPU vendors have different Class of CPU and given the general ask , both CPU type like high range platinum 8500 and Mid range Gold 6500 aslo qualify hence this ask.	Bidders to comply with RFP/GeM bid terms and conditions
418	154	Annexure-9 Technical Specifications	Table-N Technical Specifications of 4 SAN Director (2 Nos at DC and 2 Nos at DR)	Sl. No: 21 Other Features The director class switch should provide Inter Chassis Link (ICL) for connecting multiple Chassis	ICL is Single OEM specification , we provide the same capability using more open Industry standard ISL/Trunking . Request bank to change this remove or change this clause	Bidder to refer corrigendum-5.



Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
419	91	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC)	Sl. No: 13 Warranty And Support 3 Years onsite warranty+ 2 years AMC, On-Site Support Warranty including part replacement/repairs within 4 hours of reporting, and Software support for updates, upgrades, patches, and bug fixes for supplied s/w from OEM 24 x 7 x 365 days. SSD drives should be covered for irrespective of read/writes on them. In case of Disk failure, the faulty disk will be maintained /destroyed / Degauss by Canara Bank. Proactive storage monitoring & support from OEM should be enabled. The proposed bidder will need to ensure support of product & change of components @ zero cost in case of any part becoming obsolete/EOL & EOS. Faulty Disks would not be returned back to OEM/Vendor or faulty disks will be destroyed before returning.	Software (Subscription based License) Bank has requested for "standard" subscription for Openshift & JBoss license along with premium. Only "premium subscription" meet the criteria "OEM 24 x 7 x 365 days. " The "standard" version	Bidder to refer corrigendum-5.
420	22	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	9. Warranty	9.2. The selected bidder has to provide comprehensive On-site warranty for Three (3) years for proposed Hardware from the date of installation of the Hardware, System Software, OS, licenses etc., supplied.	Bank will require L1- L4 Enterprise support from the respective OS OEM and the selected bidder has to ensure the respective OEM support portal is made available.	Respective softwares OEM with the support level mention in the RFP to be provided and supplied licenses to be reflected under respective OEM portal used by Bank where ever applicable
421	79	Annexure-8 Scope of Work	Evaluation for Scope of Work for Apache Tomcat	Entire Clause	Software Subscription for JBoss Web Server is not mentioned for implementing Apache Tomcat, Bank to confirm on the sizing and the required subscriptions for JBoss Web Server, what kind of support is expected for Prod and Non Prod Environment.	Bidders to comply with RFP/GeM bid terms and conditions
422	80	Annexure-8 Scope of Work	Evaluation for Scope of Work for Apache Tomcat	Sl. No: 9 testing procedures to ensure the cluster and load balancer configurations are functioning correctly	Bank has to define the testing process and testing scenarios?	Details will be shared with the selected bidder
423	77	Annexure-8 Scope of Work	Evaluation for Scope of Work For Open shift	Entire Clause	What is the Hardware configuration for Openshift hosting?	Details will be shared with the selected bidder
424	77	Annexure-8 Scope of Work	Evaluation for Scope of Work For Open shift	Entire Clause	What storage bank has present, does bank have Object, Block and File with certified Openshift CSI Driver? can same be used for Openshift Cluster?	Details will be shared with the selected bidder
425	77	Annexure-8 Scope of Work	Evaluation for Scope of Work For Open shift	Entire Clause	For Control Plane and Infrastructure Nodes (EPK, registry, Quay, ACS, ACM, Grafana, Prometheus) can you share the infra configuration bank is expecting to provide	Details will be shared with the selected bidder
426	77	Annexure-8 Scope of Work	Evaluation for Scope of Work For Open shift	Entire Clause	Bank to confirm if they intend the OEM to implement the solution for the mentioned scope of work	Bidders to comply with RFP/GeM bid terms and conditions
427	172	Annexure-16 Bill of Material	Table - C Price details of Software/License Items (Subscription based Licenses)	Sl. No: 2 RHEL 9 with premium support	Is this for Physical host of virtual host?	Bidder to refer corrigendum-5.
428	NA	Generic	Generic	Generic	Please clarify on number of clusters considered to be delivered within 12 weeks.	Bidders to comply with RFP/GeM bid terms and conditions
429	172	Annexure-16 Bill of Material	Table - C Price details of Software/License Items (Subscription based Licenses)	Sl. No: 1 RHEL 9 Virtual DataCentre with premium support	Do we need to propose RHEL with Satellite?	Bidders to comply with RFP/GeM bid terms and conditions

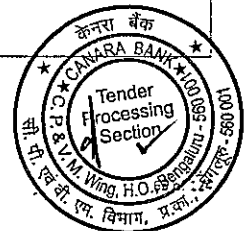


Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
430	172	Annexure-16 Bill of Material	Table - C Price details of Software/License Items (Subscription based Licenses)	Sl. No: 4 RedHat OpenShift - RHCOS latest version subscription with premium support	The Scope mentions implementation of Advanced Cluster Management and Cluster Security that is available only with Red Hat OpenShift Container Platform Plus, Bank to update the SKU with Red Hat OpenShift Container Platform Plus in the Bill of material and Scope of Work.	Bidder to refer corrigendum-5.
431	172	Annexure-16 Bill of Material	Table - C Price details of Software/License Items (Subscription based Licenses)	Sl. No: 5 RedHat OpenShift - RHCOS latest version subscription with standard support.	The Scope mentions implementation of Advanced Cluster Management and Cluster Security that is available only with Red Hat OpenShift Container Platform Plus, Bank to update the SKU with Red Hat OpenShift Container Platform Plus in the Bill of material and Scope of Work.	Bidder to refer corrigendum-5.
432	139	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	B. Type 2 Switch - 24 numbers (12 DC+ 12 DRC) for Data  Sl. No: 3 6 fixed 40/100-Gbps QSFP+ ports for uplink connectivity with fully populated trans receivers on single chassis.	All uplinks will be 40G ?	All should be 40/100 gig supported for Uplinks
433	139	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	B. Type 2 Switch - 24 numbers (12 DC+ 12 DRC) for Data Sl. No: 7 Latency should be less than 2 microsecond.	<2.3us	Bidders to comply with RFP/GeM bid terms and conditions
434	139	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	B. Type 2 Switch - 24 numbers (12 DC+ 12 DRC) for Data  Sl. No: 5 Switch should support EVPN and Virtual Extensible LAN (VXLAN) to create Fabric. Fabric should be capable to integrate with SDDC like Open stack, VMWare etc. Switch should support In Service Software Upgrade.	1.can the integration with SDDC of VMWare and Openstack be done with a lifecycle management component provided by Dell and then integrated with Dell Switch Fabric? 2.Whether In Service Software Upgrade is required for minor upgrades ( patch updates) or for Major upgrades ( version level changes)?	Bidders to comply with RFP/GeM bid terms and conditions
435	139	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	A. Type 1 Switch - 14 numbers (07 numbers in DC and 07 numbers in DRC) - Mgmt. Sl. No: 27 Proposed Switches must integrate seamlessly with active - active ports for redundancy and high availability from two core/distributed switches from day one with our existing Infrastructure of Cisco/Juniper Datacenter router/switches.	you have mentioned about interoperability with other OEMs for Open standard tech- any specific Cisco patent or open standard feature you are looking to implement?	Bidders to comply with RFP/GeM bid terms and conditions
436	82	Annexure-8 Scope of Work	Evaluation for Scope of Work for TOR Switches	Sl. No: 3 Bidder should ensure planning and designing for proposed solution. Sl. No: 14 Design includes low & high level diagrams, planning of the implementation and should be aimed at ensuring that a new network or service meets the needs of the Bank.	can you please share the current network architecture diagram to design the new one?	Details will be shared with the selected bidder

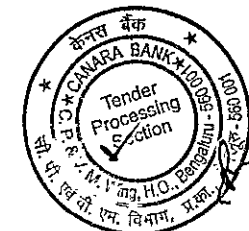




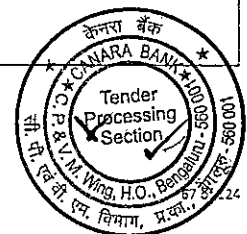
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
437	82	Annexure-8 Scope of Work	Evaluation for Scope of Work for TOR Switches	Sl. No: 13 Bidder has to Plan, Design considering various failovers scenarios, Migrate, Integrate with existing and future infrastructure, Implement day to day changes, maintain and coordinate with OEM at Bank Data Centre and at Data Recovery Centre.	what all should be migrated to new infra? Any specific protocols you are using so that we understand the integration with existing network	Bidder to refer corrigendum-5.
438	NA	Generic	Generic	Backup	-	Query not clear
439	-	-	-	-	Bidders Query	Query not clear
440	143	Annexure-9 Technical Specifications	Table-L Backup Solution for 500 Servers at DC and DRC	Sl. No. 5 Backup software should be a Hardware Agnostic software and it should support snapshot integration with hypervisors like VMware and Hyper-V and support de-duplication on any storage target. It should be able to backup data to tapes (like LTO) as well for long term retention..	Backup is critical and should be protected at all points in time. Offering a capability to write to generic storage or any storage target could compromise the backup and could lead to loss of backup data. It is important to ensure the backup is performed to purpose built backup appliance.	Bidders to comply with RFP/GeM bid terms and conditions
441	143	Annexure-9 Technical Specifications	Table-L Backup Solution for 500 Servers at DC and DRC	Sl. No: 6 The proposed Backup software must offer instance based licenses with no restrictions on type of arrays (protecting heterogeneous storage technologies), front end production capacity or backup to disk target capacity restrictions. Licenses and associated software should be supplied for both primary and DR site.	Every software vendor has unique licensing models and to encourage maximum participation, request Bank to modify the specifications and benefit Bank by providing unlimited scalability for their virtual instances. Requesting bank to change to the following : The proposed Backup software must be offered as Front end capacity/instance based licenses. Licenses and associated software should be supplied for both primary and DR site.	Bidders to comply with RFP/GeM bid terms and conditions
442	144	Annexure-9 Technical Specifications	Table-L Backup Solution for 500 Servers at DC and DRC	Sl. No. 15 Backup software should support instant file share recovery in NAS storages to allow users to access files fast after disaster	To help in fast recovery of backed up data and for generic inclusion of this functionality, request Bank to modify the following as Backup software should support file share recovery in NAS storages to allow users to access files fast after disaster. Backup solution should support instant VM/NAS recoveries.	Bidder to refer corrigendum-5.
443	144	Annexure-9 Technical Specifications	Table-L Backup Solution for 500 Servers at DC and DRC	Sl. No: 16 Proposed backup software should have the ability to perform staged restores to enable admins to comply to regulations by selectively deleting files / records which should not be restored from the backup copies. This will help in complying to "right to be forgotten" regulations like GDPR, where user data is deleted from restored backup copies in an auditable manner.	With the increase in cyber attacks, it is important to secure the system from eavesdropping of staged data as well as by prohibiting any deletions/modifications to backup copies. As this specification can be achieved functionality during traditional recovery and as a software feature is Proprietary, hence request deletion.	Bidder to refer corrigendum-5.
444	144	Annexure-9 Technical Specifications	Table-L Backup Solution for 500 Servers at DC and DRC	Sl. No: 21 Recovery verification should automatically boot the server from backup and verify the recoverability of VM image, Guest OS and Application Consistency and then publish automated reports to be used in backup / recovery audits.	The clause in preset form is proprietary to a particular vendor. We understand that the solution should have capability to verify and validate the integrity of the data.	Bidder to refer corrigendum-5.



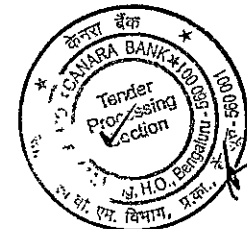
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
445	134	Annexure-9 Technical Specifications	Table-H Storage Technical Specifications: (Enterprise Block Storage 2.0PB Usable Space: DC -2, DRC -2)	Sl. No: 27 Remote Replication Offered Storage array should provide both Synchronous and Asynchronous replication across 2 storage arrays natively. Offered Storage array shall support 3 Data Center solution natively where Primary site shall be able to replicate synchronously to nearby / Bunker location and at the same time shall be able to replicate to Far location asynchronously. Necessary replication licenses/ Infrastructure required for replication should be provided with the array	We understand from the RFP that the bank is looking for a 2 Site DC and DR and needs replication from DC to DR using Sync and Async replication natively without any additional hardware for Replication. The Storage array should be able to switch between Sync and Async Modes without requiring to resync entire data.	Bidder to refer corrigendum-5.
446	145	Annexure-9 Technical Specifications	Table-L Backup Solution for 500 Servers at DC and DRC	Sl. No: 27 Offered backup solution should multiple kubernetes distributions including RHOS, VMware Tanzu, SUSE Rancher, Ezmeral Runtime etc.	We request the bank to consider the clause to offer open integration and have extended support for multiple kubernetes platforms such as RHOS/VMware Tanzu/SUSE Rancher/Ezmeral Runtime etc	Bidder to refer corrigendum-5.
447	124	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.0PB Usable Space: DC -1, DRC -1)	Sl. No: 5- Architecture Scale-Out "Any to Any" access? Security Model S3-Vault, Security services for accounts? S3-Metadata Distributed Metadata Engine. Interface, Capability to write simultaneously to the same folder from different file connectors (Folder Scale Out). Seamless load balancing and failover among the file connectors. Built in Load balancing.	Request Bank to provide more details on these points, folder scaleout, Security model S3 vault, built in load balancing etc.. Request bank to consider NAS and Object requirements as an overall solution.	Bidder to refer corrigendum-5.
448	124-125	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.0PB Usable Space: DC -1, DRC -1)	Sl. No: 8 Capacity- Minimum usable storage 2 PB after RAID6/ Dual RAID6 Configuration. ( Without considering any data reduction features such as compression, deduplication etc ..)	Traditional RAID is has dependencies on the Drives and rebuild is limited/restricted to the RAID Groups and controller pairs. Industry has evolved and adopted Erasure coding which offers beter flexibility and also reliability and can protect against more than 2 drive failures across Nodes/controllers, reducing the risk of data loss. Request bank to consider erasure coding as a protection mechanism instaed of Traditional RAID.	Bidder to refer corrigendum-5.
449	125	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.0PB Usable Space: DC -1, DRC -1)	Sl. No: 13 RAID Support- RAID array supporting 10, 0, 1, 5 and 6 or better levels. It should support a mix and match of RAID levels behind a pair of controllers. The storage array should allow online expansion of existing RAID Groups / Storage Disk Pools.	Request the bank to consider erasure coding instead of traditional RAID. Large data sets and scaleout architecture required for the object store needs high availability, reliability and serviceability by leveraging Erasure coding, by distributing the data across controllers/Nodes to offer 99.99999% availability and no outage in the event of a disk rebuild. Traditional RAID Groups have limitations around the rebuild times and availability for large data sets. REquest the bank to consider Erasure Coding instead of Traditional Raid.	Bidders to comply with RFP/GeM bid terms and conditions



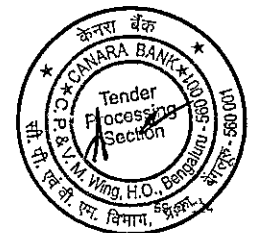
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
450	126	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.OPB Usable Space: DC -1, DRC -1)	Sl. No: 16 Services- Proposed storage array should include storage based compression, inline Deduplication, storage to storage replication, Snapshot for the entire supported capacity of the storage array from day one. All the required or necessary licenses must be perpetual and provided for the Full capacity of each storage from Day one. This should include licenses for Management and monitoring module and all the storage features such as Snapshot, Cloning, Replication etc. Upgrade in capacity should not incur any additional license cost. Offered storage system have online and historical performance reporting capability.	Object store is designed for erasure coding and for long term archival. The functionality requested is not native to object storage. Request the bank to consider inline compression, inline dedupe, Dedupe (cluster wide) on NAS and only compression on Object Storage.	Bidder to refer corrigendum-5.
451	135	Annexure-9 Technical Specifications	Table-H Storage Technical Specifications: (Enterprise Block Storage 2.OPB Usable Space: DC -2, DRC -2)	Sl. No: 31 Capacity Efficiency features- Offered storage array should support thin provisioning It should also support inline data reduction (deduplication & compression) for maximizing flash storage capacity The array should offer the flexibility to enable / disable the data reduction on a per-volume basis	Request bank to consider Deduplication and compression across the array. The compression should be hardware based to reduce the overhead on the controllers. Data reduction when applied globally across the arrays, gives better data reduction, compared to setting this up individually on a per volume basis.	Bidder to refer corrigendum-5.
452	129	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.OPB Usable Space: DC -1, DRC -1)	Sl. No. 32 Compliance  1. Offered storage shall ensure that Data must be tamper-proof. 2. Data must be kept for a specified period which means offered storage shall provide retention mechanism. 3. Offered storage shall have capability to migrate the data to an alternative media	Point 3. We understand the bank needs flexibility to move data to an alternate storage which could be another cloud/on prem object store. Request Bank to provide more clarity on this.	Bidder to refer corrigendum-5.
453	145	Annexure-9 Technical Specifications	Table-L Backup Solution for 500 Servers at DC and DRC	Sl. No: 33 Offered solution should support intelligent policy definitions for backup windows, automatic staggering of backups to reduce impact on the system backend, use of declarative policies for backups etc.	The clause in the present form is restrictive and proprietary to a particular vendor. Please change to the below. The offered solution should support policy based backup architecture with calendar/frequency based scheduling.	Bidder to refer corrigendum-5.
454	132	Annexure-9 Technical Specifications	Table-H Storage Technical Specifications: (Enterprise Block Storage 2.OPB Usable Space: DC -2, DRC -2)	Sl. No: 11 Scalability- Each storage up to 5PB ( Scale UP) and 8 controller ( Scale Out ) DIP( data in-place) upgrade capability	Request the bank to consider 4PB as the overall Storage capacity, since the current Drive sizes that we support are 15TB NVMe SSDs and we would be scaling up to 4PB, and as the new drives are added we will be able to support higher capacities. Request Bank to consider File and Block in the same storage system since the complete feature capabilities of NAS (compression, Dedupe, Snapshot, NFS V4) can be supported in Unified Storage.	Bidder to refer corrigendum-5.



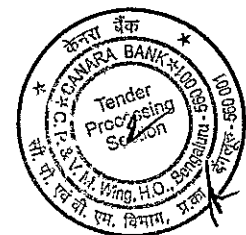
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
455	132	Annexure-9 Technical Specifications	Table-H Storage Technical Specifications: (Enterprise Block Storage 2.0PB Usable Space: DC -2, DRC -2)	Sl. No: 13 RAID Support- RAID array supporting 10, 0, 1, 5 and 6 or better levels. It should support a mix and match of RAID levels behind a pair of controllers. The storage array should allow online expansion of existing RAID Groups / Storage Disk Pools.	We understand that the bank is looking for an All Flash Storage and needs higher availability, Reliability and serviceability. Since the disk capacities are increasing, the Storage should support mixing and matching of different capacity NVMe disks within the same pool for flexibility of capacity for expansion. The RAID level that gives best availability and capacity is RAID 6 or Dual Parity. Request the bank to consider RAID 5/6. and should allow online expansion of Pool.	Bidder to refer corrigendum-5.
456	132	Annexure-9 Technical Specifications	Table-H Storage Technical Specifications: (Enterprise Block Storage 2.0PB Usable Space: DC -2, DRC -2)	Sl. No: 14 Encryption- should have native encryption capabilities as per PCI DSS standards and encryption should not add any performance overheads	we understand that the bank is looking for encryption. the storage array should use Self Encrypting drives to ensure the encryption is not burdening or adding any overheads to the storage array. Request the bank to include Self Encrypting drives to be mandatory for the encryption.	Bidders to comply with RFP/GeM bid terms and conditions
457	145	Annexure-9 Technical Specifications	Table-L Backup Solution for 500 Servers at DC and DRC	Sl. No: 36 Should support direct integration support and air-gapped environments with support for private registries	For integration and protecting against destructive ransomware, please change to the below The proposed solution should support direct integration with multiple backup softwares and support automated physical isolations (air-gap) architecture.	Bidder to refer corrigendum-5.
458	NA	Annexure-9 Technical Specifications	Table-L Backup Solution for 500 Servers at DC and DRC	Additional Clause: Capacity and Performance- Purpose built backup appliance should be sized appropriately for front-end data of 200 TB as per below mentioned backup policies.  a. Daily incremental backup - retained for 4 weeks in Purpose built backup appliance. b. Weekly full backup for all data types - retained for 1 month in Purpose built backup appliance. c. Monthly full backups - for 12 months. d. Yearly full backups - retained for 5 years in Purpose built backup appliance.  The appliance should be quoted with adequate capacity considering 1% daily change rate for entire duration of 5 years warranty. Bidder must provide a sizing certificate showcasing this sizing consideration on the OEM's letter head with seal and sign from the authorized signatory. Entire capacity of appliance must be offered as single pool with global deduplication to increase the data reduction efficiency.	We request the bank to include the backup policies as part of the RFP to ensure all bidders are evaluated on the same page.  *Purpose built backup appliance should be sized appropriately for front- end data of 200 TB as per below mentioned backup policies.  a. Daily incremental backup - retained for 4 weeks in Purpose built backup appliance. b. Weekly full backup for all data types - retained for 1 month in Purpose built backup appliance. c. Monthly full backups - for 12 months. d. Yearly full backups - retained for 5 years in Purpose built backup appliance.  The appliance should be quoted with adequate capacity considering 1% daily change rate for entire duration of 5 years warranty. Bidder must provide a sizing certificate showcasing this sizing consideration on the OEM's letter head with seal and sign from the authorized signatory. Entire capacity of appliance must be offered as single pool with global deduplication to increase the data reduction efficiency."	Bidders to comply with RFP/GeM bid terms and conditions
459	171	Annexure-16 Bill of Material	Table - B Price details of Software/License Items (Perpetual)	Sl. No. 4 IBM WebSphere ND 9.5 PVU with support- Qty- 17920	While IBM WebSphere specifications, can the bank provide more clarity on the requirement. Also, would it be feasible to supply the item without MAF or can bank drop the requirement from the RFP as this is specific vendor requirement which is in denied list of direct vendors for our organization	Bidders to comply with RFP/GeM bid terms and conditions



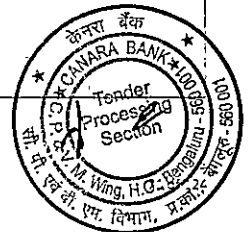
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
460	172	Annexure-16 Bill of Material	Table - C Price details of Software/License Items (Subscription based Licenses)	1. RHEL 9 Virtual DataCentre with premium support 2. RHEL 9 with premium support 3. RHEL 9 High Availability with premium support for CISC - X86 machines 4. RedHat OpenShift - RHCOS latest version subscription with premium support 5. RedHat OpenShift - RHCOS latest version subscription with standard support	Can bank reconsider other compatible Linux platforms like Oracle Linux rather than RHEL alone, as Linux is an open platform and naming a particular support group is making the RFP restrictive even in Linux platforms	Bidders to comply with RFP/GeM bid terms and conditions,
461	64	Annexure-2 Pre-Qualification Criteria	Sl. No: 8	Pre-Qualification Criteria The Bidder/OEM should have successfully supplied minimum cumulative 500 Nos. of Servers in India in the last three years out of which the bidder should have successfully supplied Hardware and software as a service model at least 100 servers deployed at Customer's DC and DR in Indian Market in any 1 Scheduled Commercial Bank/ NBFC/ Insurance Company/ PSU/ Central Government Organization in India in the last three years as on the date of submission of bid for this RFP.	Request change the clause as follows : The Bidder/OEM should have successfully supplied minimum cumulative 200 Nos. of Servers in India in the last 7 years out of which the bidder should have successfully supplied Hardware and software as a service model at least 100 servers deployed at Customer's DC and DR in Indian Market/ built manage 100 servers cloud environment for any 1 Scheduled Commercial Bank/ NBFC/ Insurance Company/ PSU/ SDC/Central Government Organization in India in the last Seven years as on the date of submission of bid for this RFP.	Bidder to refer corrigendum-5.
462	64	Annexure-2 Pre-Qualification Criteria	Sl. No. 5	Pre-Qualification Criteria: The Bidder should have an active and premium partnership with Hardware OEM to offer their Hardware and Software as a service to Bank.	Request change the clause as follows : The Bidder should have an active partnership with Hardware OEM .	Bidders to comply with RFP/GeM bid terms and conditions
463	64	Annexure-2 Pre-Qualification Criteria	Sl. No. 5	Pre-Qualification Criteria: The Bidder should have an active and premium partnership with Hardware OEM to offer their Hardware and Software as a service to Bank.	Please also suggest if MAF shall be required only by the hardware OEM	Bidders to comply with RFP/GeM bid terms and conditions



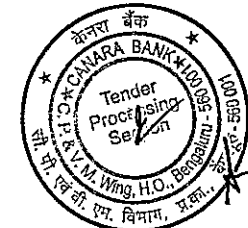
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
464	124	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.0PB Usable Space: DC -1, DRC-1)	Sl. No: 5 Architecture Controllers shall be active-active so that all volumes are automatically load balanced without needing administrative intervention for manual balancing of workloads/volumes. Connectivity -Object interface would be scalable S3.its architecture shall include the following: o S3-Server: S3 API Server for Buckets/Objects and more o-Out "any-to-any"access o Security model S3-Vault: Security service for accounts a. Multi-tenant, Support for S3 IAM - Identity and Access Management. b. Bucket & Object ACLs o S3-Metadata: Distributed Metadata Engine o S3 Object Lock o Transparent Bucket-Level At-REST Encryption o S3 Console: GUI Web interface to manage accounts, users, policy and monitor usage. o S3 Browser: GUI Web Interface to create buckets and upload objects. o Quota for S3. Connectivity-File Interface/connector o Capability to write simultaneously to the same	Please modify "Controllers shall be active-active so that all volumes are automatically load balanced without needing administrative intervention for manual balancing of workloads/volumes. Connectivity -Object interface would be scalable S3.its architecture shall include the following: o S3-Server: S3 API Server for Buckets/Objects and more o-Out "any-to-any"access o Security model S3-Vault: Security service for accounts a. Multi-tenant, Support for S3 IAM - Identity and Access Management. b. Bucket & Object ACLs o S3-Metadata: Distributed Metadata Engine o S3 Object Lock o Transparent Bucket-Level At-REST Encryption o S3 Console: GUI Web interface to manage accounts, users, policy and monitor usage. o S3 Browser: GUI Web Interface to create buckets and upload objects. o Quota for S3. Connectivity-File Interface/connector o Capability to write simultaneously to the same folder/bucket from different file connectors (folder scale out). o Seamless load balancing and failover among the file connectors. o Federated Access "Single Sign On" to S3 Connector. o Compatible with LDAP, Active Directory and Kerberos. o Volume protection feature (can't modify/delete files once written to the volume). o Quota for file/object. o Supports mixed environment Windows & Linux. o Built in load balancing"	Bidder to refer corrigendum-5.
465	126	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.0PB Usable Space: DC -1, DRC-1)	Sl. No: 17 Protocol Support- CIFS, SMB, NFSV3&V4, HTTPS, HTTP, REST APIs, FTP, Linux FS (FUSE), S3 Protocol, SWIFT & all kinds of rest full APIs. Vendor shall configure the licenses all interfaces All above protocol shall be native to cluster and shall not require any additional gateway. Vendor can provision additional gateway if required from performance perspective but capability shall be native to main nodes only.	Please modify "CIFS, SMB, NFSV3&V4, HTTPS, HTTP, REST APIs, S3 Protocol, SWIFT & all kinds of rest full APIs. Vendor shall configure the licenses all interfaces All above protocol shall be native to cluster and can be provided with connector if required."	Bidder to refer corrigendum-5.
466	126-127	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.0PB Usable Space: DC -1, DRC-1)	Sl. No: 19 Ports- Minimum 4 Number of 10/25 Gigabit for IP Traffic per node and 2 Number of 10/25 Gbps for Replication (Network). Minimum Two Management Ports of 1Gbps	Please modify "Minimum 4 Number of 10/25 Gigabit for IP Traffic per node and Minimum Two Management Ports of 1Gbps"	Bidder to refer corrigendum-5.



Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
467	127	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.OPB Usable Space: DC -1, DRC -1)	Sl. No: 21 Other Features	<p>Please modify as "The proposed storage system should support SNMP, Address resolution protocol, Network Time Protocol, LDAP The Storage array should be licensed with Performance monitoring tools should be offered with the storage array. The proposed storage system shall support a browser based GUI built in management. All objects stored in Object Storage have a URL. All objects have their own metadata. Developers interact with the object storage system through a RESTful HTTP API. Object data can be located anywhere in the cluster. Backup &amp; Recovery: Data backup and recovery rely on accessible and reliable storage. Object-based storage provides the infrastructure for secure data backup and efficient recovery procedures. There shall be no separate and dedicated control node or metadata node in the cluster. In case, nodes are separate then vendor shall over Metadata / control nodes in HA using active / active approach. Offered solution shall be completely redundant and there shall be no single point of failure. Offered solution shall have file integrity checking when reading the file and automatic rebuild if an error is detected."</p>	Bidder to refer corrigendum-5.
468	128	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.OPB Usable Space: DC -1, DRC -1)	Sl. No: 23 Power Supply Storage should be provided with Redundant hot swappable Power supplies. The Power supplies should be FCC class A certified.	Please modify as "Storage should be provided with Redundant hot swappable Power supplies. The Power supplies should be FCC class A certified /Carbon Footprint for Products by ENERGY STAR certified"	Bidders to comply with RFP/GeM bid terms and conditions
469	132-133	Annexure-9 Technical Specifications	Table-H Storage Technical Specifications: (Enterprise Block Storage 2.OPB Usable Space: DC -2, DRC -2)	Sl. No: 16- Services Proposed storage array should include storage based Thin Provisioning, compression, inline Deduplication Synchronous-Asynchronous Replication, Snapshot, and Volume cloning features for the entire supported capacity of the storage array from day one. All the required or necessary licenses must be perpetual and provided for the Full capacity of each storage from Day one. This should include licenses for Management and monitoring module and all the storage features such as Snapshot, Cloning, Sync and Async Replication etc. Upgrade in capacity should not incur any additional license cost Offered Storage management console shall be able to manage multiple arrays from a single console is preferred. Management console shall provide following functionalities: Offered storage system have online and historical performance reporting capability. At least 1 year of historical performance information should be available online for capacity and performance forecasting, trend analysis etc. In case this capability is not available natively, then necessary software subscription shall be provided for the entire	Q1 Storage based Async remote Replication required ? If yes FCIP Router provided by Bank ? Or FCIP router already exist ? What is the dedicated bandwidth available in DC & DR for the storage systems ? And what is rate of change of data for each storage system ? what are RPO RTO requirements ?	FCIP router is not required

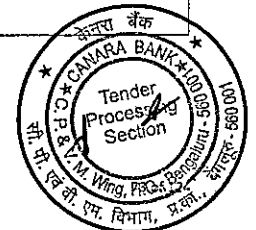


Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
470	133	Annexure-9 Technical Specifications	Table-H Storage Technical Specifications: (Enterprise Block Storage 2.0PB Usable Space: DC -2, DRC -2)	Sl. No: 19 Ports- Minimum 16 number of FC Ports of 32/64 Gbps each ( SAN ), Minimum 4 Number of 10/25 Gbps for IP Traffic (iSCSI) and 2 Number of 10/25 Gbps for Replication (Network). Minimum two management Ports of 1Gbps. Storage should support FC-NVMe: 32Gb/s	recommend to add FCIP Router for Storage base Remote Replication	FCIP router is not required
471	159	Annexure-9 Technical Specifications	Table-Q Technical Specifications of 2 LTO9 standalone Tape Drive (1 DC and 1 DRC)	Sl. No: 5 Tape Drive- One LTO-9 Drive with FC Connectivity to support 8Gbps or more.	STAND ALONE DRIVES are Not available in FC , all major brands provide Standalone drive in SAS model only. ELSE, Bank can ask bidders to provide 1U, 8 Slots Autoloader with LTO9 FC drive , each site can be provided if Required . As such, request modification to : One LTO-9 Drive with SAS/FC Connectivity to support 8Gbps FC or 12Gbps SAS or more to be provided , Bidder must provide the appropriate SAS HBA card on the Server directly & SAS/FC Cable by the Bidder	Bidder to refer corrigendum-5.
472	159	Annexure-9 Technical Specifications	Table-Q Technical Specifications of 2 LTO9 standalone Tape Drive (1 DC and 1 DRC)	Sl. No: 6 Cables- Necessary OM3/OM4 FC cables of length 15 meters	STAND ALONE DRIVES are Not available in FC , all major brands provide Standalone drive in SAS model only. . As such, request modification to : Necessary OM3/OM4 FC cables of length 15 meters or SAS CABLE 12Gbps HD apprx 2 mtrs	Bidder to refer corrigendum-5.
473	64	Annexure-2 Pre-Qualification Criteria	Sl. No. 6	Pre-Qualification Criteria: The bidder should have yearly average turnover of 300 Crores in India for the last three financial years 2020-2021, 2021-2022, 2022-2023 from their Indian operation as per the audited Financial Statements. This must be the individual company turnover and not of any group of companies.	We request you to amend the clause to "The bidder should have yearly average turnover of 300 Crores in India for the last three financial years 2020-2021, 2021-2022, 2022-2023, 2023-24 (Provisional) from their Indian operation as per the audited Financial Statements. This must be the individual company turnover and not of any group of companies."  OR  The bidder should have yearly average turnover of 275 Crores in India for the last three financial years 2020-2021, 2021-2022, 2022-2023 from their Indian operation as per the audited Financial Statements. This must be the individual company turnover and not of any group of companies.	Bidders to comply with RFP/GeM bid terms and conditions
474	64	Annexure-2 Pre-Qualification Criteria	Sl. No: 8	Pre-Qualification Criteria The Bidder/OEM should have successfully supplied minimum cumulative 500 Nos. of Servers in India in the last three years out of which the bidder should have successfully supplied Hardware and software as a service model at least 100 servers deployed at Customer's DC and DR in Indian Market in any 1 Scheduled Commercial Bank/ NBFC/ Insurance Company/ PSU/ Central Government Organization in India in the last three years as on the date of submission of bid for this RFP.	The Bidder/OEM should have successfully supplied minimum cumulative 500 Nos. of Servers in India in the last three years out of which the bidder should have successfully supplied Hardware and software of as a service model at least 100 servers deployed at Customer's DC and DR in Indian Market in any 1 Scheduled Commercial Bank/ NBFC/ Insurance Company/ PSU/ Central Government Organization in India in the last three years as on the date of submission of bid for this RFP.  Kindly amend this clause as per above request as this bid is for CAPEX and no OPEX solution is asked as part of this bid. "As a Service Model" refers to OPEX and hence request you to change this clause. In case "As a Service Model" is required then CAMC orders may be allowed for consideration as these are offered as services to customers.	Bidder to refer corrigendum-5.

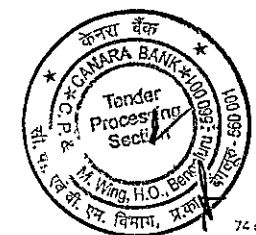




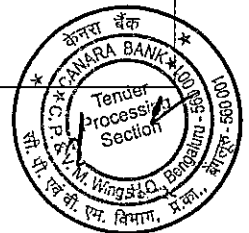
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
475	88	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC)	Sl. No: 13- Warranty and Support 3 Years onsite warranty+ 2 years AMC, On-Site Support Warranty including part replacement/repairs within 4 hours of reporting, and Software support for updates, upgrades, patches, and bug fixes for supplied s/w from OEM 24 x 7 x 365 days. SSD drives should be covered for irrespective of read/writes on them. In case of Disk failure, the faulty disk will be maintained /destroyed / Degauss by Canara Bank. Proactive storage monitoring & support from OEM should be enabled. The proposed bidder will need to ensure support of product & change of components @ zero cost in case of any part becoming obsolete/EOL & EOS. Faulty Disks would not be returned back to OEM/Vendor or faulty disks will be destroyed before returning.	Software (Subscription based License) Bank has requested for "standard" subscription for Openshift & JBoss license along with premium. Only "premium subscription" meet the criteria "OEM 24 x 7 x 365 days." Request you to indlu amend the same to Premium version	Bidder to refer corrigendum-5.
476	23	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	9. Warranty	9.2. The selected bidder has to provide comprehensive On-site warranty for Three (3) years for proposed Hardware from the date of installation of the Hardware, System Software, OS, licenses etc., supplied.	Bank will require L1- L4 Enterprise support from the respective OS OEM and the selected bidder has to ensure the respective OEM support portal is made available. Kindly incorporate this clause	Respective softwares OEM with the support level mention in the RFP to be provided and supplied licenses to be reflected under respective OEM portal used by Bank where ever applicable
477	80	Annexure-8 Scope of Work	Evaluation for Scope of Work for Apache Tomcat	Sl. No: 9 testing procedures to ensure the cluster and load balancer configurations are functioning correctly	Request Bank to define the testing process and testing scenarios	Details will be shared with the selected bidder
478	77	Annexure-8 Scope of Work	Evaluation for Scope of Work For Open shift	Entire Clause	Kindly share the Hardware configuration for Openshift hosting	Details will be shared with the selected bidder
479	77	Annexure-8 Scope of Work	Evaluation for Scope of Work For Open shift	Entire Clause	Request you to kindly confirm what storage does bank have presently on Object, Block and File with certified Openshift CSI Driver. Can the same be used for Openshift Cluster. Please clarify	Details will be shared with the selected bidder
480	77	Annexure-8 Scope of Work	Evaluation for Scope of Work For Open shift	Entire Clause	Request Bank to share the infra configuration for Control Plane and Infrastructure Nodes (EFK, registry, Quay, ACS,ACM, Grafana, Prometheus)	Details will be shared with the selected bidder
481	172	Annexure-16 Bill of Material	Table - C Price details of Software/License Items (Subscription based Licenses)	Sl. No: 2 RHEL 9 with premium support	Kindly clarify if this is for Physical host of virtual host.	Physical Host
482	172	Annexure-16 Bill of Material	Table - C Price details of Software/License Items (Subscription based Licenses)	Sl. No: 3 RHEL 9 High Availability with premium support for CISC - X86 machines	Request Bank to clarify on CISC. Please specify what support is needed here.	Bidder to refer corrigendum-5.
483	157	Annexure-9 Technical Specifications	Table-P Technical Specifications of 2 LTO9 Tape Library (1 Nos at DC and 1Nos at DR) and 200 LTO7 & 3800 LTO8 & 800 LTO9 Tapes & 200 No. of LTO9 Cleaning Cartridge	Sl. No: 5 Tape Drive- Minimum 40 LTO-9 Drive with FC Connectivity to support 8Gbps or more.	Please clarify what is Expected performance in total across all 40 Drives. Also kindly let us know if there an expansion plan in future.	Bidders to comply with RFP/GeM bid terms and conditions. No Future expansion is planned



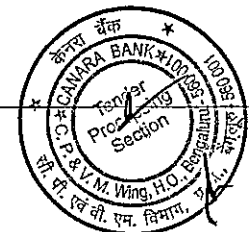
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply.
484	158	Annexure-9 Technical Specifications	Table-P Technical Specifications of 2 LTO9 Tape Library (1 Nos at DC and 1Nos at DR) and 200 LTO7 & 3800 LTO8 & 800 LTO9 Tapes & 200 No. of LTO9 Cleaning Cartridge	SL No: 8 LTO7 & LTO 8 & LTO 9 Tapes Up to LTO 9 Cleaning cartridges  3800 quantities (1900 DC & 1900 DRC) of LTO-8 standard tapes with custom Bar Codes compatible with the proposed Tape Library. 800 quantities (400 DC & 400 DRC) of LTO-9 standard tapes with custom Bar Codes compatible with the proposed Tape Library. 200 quantities (100 DC & 100 DRC) of LTO-7 standard tapes with custom Bar Codes.	Kindly confirm the plan to Access LTO7 tapes.  Since the licensed slots are only 250, kindly clarify the plan to store 1900*LTO8, 400*LTO9, 100*LTO7 and 100*CLN tapes in each site.	Bidders to comply with RFP/GeM bid terms and conditions
485	85-159	Annexure-9 Technical Specifications	Entire Clause	Entire Clause	Requesting Bank to clarify if the SSD capacity mentioned in the RFP include boot drive capacity or it needs to be added separately.	Bidder to refer corrigendum-5.
486	86	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC)	Sl. No: 6- Memory Slot Count- Minimum 24 or higher, Minimum 8 free memory slots should be available.	Requesting bank to change it to minimum 16 memory slots per processor and minimum 50% free memory slots should be available so that bank has a better option for future expandability	Bidder to refer corrigendum-5.
487	87	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC)	Sl. No: 9- SAN & Network Network cards 1 Gbps- 2*1Gbps - Two Network Cards, each equipped with at least two 1-gigabit network ports ( Four Port of 1Gbase-T On-Board or separate NIC with supported minimum 5 meter of compatible Cat6/Cat7 UTP Cable )	Request bank to clarify on the number of actual 1GB network card required. We understand that the requirement is for 4 ports of 1 GB ethernet. We would request bank to look at 4 -port (embedded/PCIe) card instead of dual port card inorder to maintain empty PCI slot for future expandability	Bidders to comply with RFP/GeM bid terms and conditions
488	87,93, 99, 105, 111 & 119	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 9 SAN & Network Network cards 10 Gbps 2*10Gbps -Two Network Cards, each equipped with at least two 10-gigabit network ports (Four Port BaseT NIC LOM or separate NIC with minimum 5 meter Cat6A/Cat7 UTP Cable.	Request bank to clarify on the number of actual 10 GB network card. We understand that the requirement is for 4 ports of 10 GB. We would request bank to look at 4 -port (embedded/PCIe) card instead of dual port card inorder to maintain empty PCI slot for future expandability	Bidders to comply with RFP/GeM bid terms and conditions



Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
489	87, 93, 99, 105, 112, 119	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No. 10. OS & Hypervisor Compatibility  Windows Compatibility- 2016/2019/2022	Request Bank to kindly remove Windows 2016 since it is EoL, also latest generation of servers supports Windows 2019 and above.	Bidder to refer corrigendum-5.
490	87, 93, 99, 106, 112 & 119	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 10- OS & Hypervisor Compatibility Other Latest Linux Flavours- Latest server operating versions of Centos, SUSE Linux, Oracle Linux, Ubuntu ,RHCOS	Request bank to remove CentOS since open source and community support is only available	Bidder to refer corrigendum-5.
491	87, 93, 99, 106, 112 & 119	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 10- OS & Hypervisor Compatibility Other Latest Linux Flavours- Latest server operating versions of Centos, SUSE Linux, Oracle Linux, Ubuntu ,RHCOS	Requesting bank to make it RHCOS/ Redhat Openshift container platform. As there is no separate certification for RHCOS. RHCOS is a part of Redhat Openshift container platform	Bidder to refer corrigendum-5.



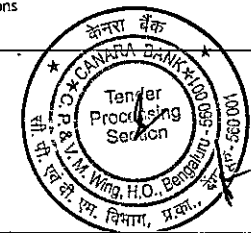
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
492	88, 94, 100, 106, 112 & 120	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 14- Port 3 USB3.0 port and 1 VGA Port	Requesting bank to change it to USB 3.0 or higher and 1 VGA Port	Bidder to refer corrigendum-5.
493	89, 95, 101, 107, 113 & 121	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 18 Remote Management- Telemetry Streaming, Idle Server Detection, Real-time power meter, temperature monitoring, customized administration and management of System Temperature and Cooling Sub-system.	Requesting bank to remove customized administration of System Temperature and Cooling Sub-system for wider participation of OEM	Bidder to refer corrigendum-5.
494	90, 96, 102, 108, 115 & 122	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 19- System Management Solution 3. The system management solution should be provided: c. Bare-metal server deployment and cloning	Please clarify cloning functionality desired	Bidder to refer corrigendum-5.



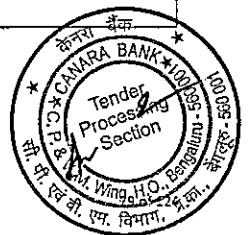
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
495	110	Annexure-9 Technical Specifications	Table-E Technical Specification - 226 servers (135 DC and 91 DRC)	Sl. No: 5- Processor Socket Minimum 2 sockets i.e., 16*1 =16 core ( 1 Populated & 1 For future upgrade )	Requesting bank to modify the requirement to accommodate two processors of 16 core; in order to meet network interface card requirement. For a single processor only 3 Nos of PCIe slots & 16 nos of DIMM slots will be available. Now as per the RFP the total nos of PCIe slot required is 6 Nos & 24 nos DIMM slot required which can only be complied by adding another processor	Bidder to refer corrigendum-5.
496	117	Annexure-9 Technical Specifications	Table-F Custom Technical Specification - 12 servers	Sl. No: 7- SSD Total Capacity for SATA SSD- 1.92 TB SSD disks or Higher ( to support RAID 1,5,6,10)	Since the type of interface for SSD is mentioned as NVMe requesting bank to clarify on the drives to be considered as SATA or NVME.	Bidder to refer corrigendum-5.
497	132	Annexure-9 Technical Specifications	Table-H Storage Technical Specifications: (Enterprise Block Storage 2.0PB Usable Space: DC -2, DRC -2)	Sl. No: 10- Hard Disk Capacity Each hard disk Capacity should not be less than 15 TB and not more than 20 TB	Each TLC NVMe SSD Capacity should not be more than 16 TB	Bidder to refer corrigendum-5.
498	138	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	A. Type 1 Switch - 14 numbers (07 numbers in DC and 07 numbers in DRC) - Mgmt.  Sl. No: 5 Switch must have redundant Power Supply.	Request to change the clause "Switch must have hot-swappable redundant FAN tray & Power Supply day 1"  Since it's DC switches, Proposed switches must support hot-swappable which will not impact the DC operational" RPS stand for internal/external, hence request to modify the clause.	Bidders to comply with RFP /GeM bid terms and conditions
499	140	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	B. Type 2 Switch - 24 numbers (12 DC+ 12 DRC) for Data Sl. No. 33 High Mean Time Between Failure values (>3.5 lakh hours) should be available to ensure long life of switch hardware.	Request to change the clause to Min 2L Hours or above to qualify all the standard OEMs	Bidder to refer corrigendum-5.
500	140	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches B. Type 2 Switch - 24 numbers (12 DC+ 12 DRC) for Data	Additional Clause	is there any existing Spine switches? Can you please let us know the Spine details to understand, also please confirm the leaf to spine connectivity type and speed?	Details will be shared with the selected bidder
501	142	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	C. Type 4 Switch - 4 numbers (2 DC+ 2 DRC) - Storage Sl. No. 33 High Mean Time Between Failure values (>3.5 lakh hours) should be available to ensure long life of switch hardware.	Request to change the clause to Min 2L Hours or above to qualify all the standard OEMs	Bidder to refer corrigendum-5.
502	140	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches C. Type 4 Switch - 4 numbers (2 DC+ 2 DRC) - Storage	Additional Clause- Proposed switches must support - iSCSI, Lossless iSCSI, RDMA over Converged Ethernet version 2 (RoCE v1 and v2) and Non-Volatile Memory Express (NVMe over Fabrics)	DC Storage switches, hence please consider this storage related protocol.	Bidders to comply with RFP /GeM bid terms and conditions
503	142	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	In addition to the above access switches Bidder to supply Distribution Switches in High availability with required capacity to connect all supplied access switches with dual uplink of 10/40/100 Gbps in active-active mode for redundancy and load sharing ( DC - 2, DRC - 2 )	Please clarify the Points.. What is the Port speed and Port Counts?	Bidders to comply with RFP /GeM bid terms and conditions
504	NA	Generic	Generic	Generic	In this Category of servers 38 NVme Slots are been asked -- As per Industry standard max Nvme Support on server class systems will be 32. So we request a slot count dilution. For type 3 bank can ask for more than 1.92TB Nvme SSD.	Bidder to refer corrigendum-5.



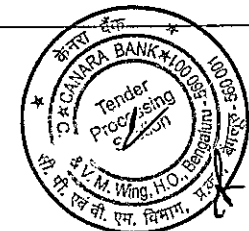
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
505	14	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	1. Project Timelines	1.3. The timelines for the delivery and installation of all Hardware and Software should be completed within 24 weeks from the date of acceptance of the Purchase Order or 25 weeks from the date of Purchase Order for all the locations. It will be the sole responsibility of the vendor to submit any form required for release of shipment from the check post.	Considering the post-pandemic conditions and amount of work, request authorities to allow 52 weeks for completion of delivery and installation of all Hardware and Software.	Bidders to comply with RFP/GeM bid terms and conditions
506	73	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 9 The Bidder should note that servers and other items being procured shall be delivered at locations as per requirements of the Bank.	Request authorities to confirm the delivery location and number of locations.	Details will be shared with the selected bidder
507	73	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No. 11 All necessary cables and other accessories required for successful installation of the hardware items as per the scope of work to be supplied by the Bidder and the cost of the same to be added along with the respective Hardware items while quoting.	Request authorities to confirm approximate area & number of locations to be covered, so cabling length can be estimated.	Bidder to refer corrigendum-5.
508	74	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 28 Bidder must also provide the necessary power cables, LAN cables, FC cables from source to their provided rack as per the guideline of the Bank.		Cable details are mentioned along with device technical specifications.
509	74	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No. 12 Bidder should follow a standard development process to ensure that proposed servers meets functional, security performance and regulatory requirements of the bank.	Request authorities to provide specific reference for security and regulatory requirement.	Details will be shared with the selected bidder
510	74	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No. 13 Bidder should comply as per the IT related policies of the bank.	Any additional item Non-SoR (Except covered in this RFP BoQ) required to achieve compliance to these referred IT policies, will be provided by the Bank. Please confirm.	Bidders to comply with RFP/GeM bid terms and conditions
511	76	Annexure-8 Scope of Work	Evaluation for Scope of Work for Servers	Sl. No: 2 Deployment of servers requires co-ordination with different project application vendors. The bidder should co-ordinate with the software vendors while installing and ensure installation and commissioning for running the applications for which these servers are procured.	Bank application I&C either from existing infra or newly procured will be out of scope of this RFP. please confirm.	Bidders to comply with RFP/GeM bid terms and conditions
512	74	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 16 Bidder is responsible for collection of logs and submission of the logs for further analysis and providing the solution to resolve any hardware incidents.	Request authorities to confirm log retention period both online and offline.	Bidders to comply with RFP/GeM bid terms and conditions
513	74	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 16 Bidder is responsible for collection of logs and submission of the logs for further analysis and providing the solution to resolve any hardware incidents.	As per our understanding, Bank has already estimated and covered required storage for log retention period. bidder need not to factor additional storage. please confirm.	Bidders to comply with RFP/GeM bid terms and conditions



Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
514	74	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 20 Bidder has to provide the escalation matrix to escalate any incident.	Any onsite resource required during warranty and AMC period post commissioning . Please confirm.	No resident resource required.
515	74	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 21 Bidder is responsible to provide the periodic reports of the proposed hardware health as per the bank requirement.	As per our understanding, Customer (Bank) already have NMS/EMS system in place for monitoring and reporting purpose. As NMS is not listed in RFP BOQ. Bidder need to fetch the report with existing ENS/NMS. Please clarify.	Bidders to comply with RFP/GeM bid terms and conditions
516	76	Annexure-8 Scope of Work	Evaluation for Scope of Work for Storages	Sl. No: 4 Showcase the Monitor storage performance metrics including throughput, latency, and IOPS.		Bidders to comply with RFP/GeM bid terms and conditions
517	74	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 23 Bidder shall conduct preventive maintenance as may be necessary from time to time to ensure that equipment is in efficient running condition so as to ensure trouble free functioning.	Request authorities to confirm the frequency of PM activities per year.	Preventive maintenance referres to health check of devices once in three month including firmware upgade and activity report to be submitted
518	74	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 25 All proposed equipment's are required to connect existing SAN infrastructure.	Request authorities to share details of Existing SAN infra.	Details will be shared with the selected bidder
519	74	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 30 Bidder support should include advice and help the bank in implementing controls for the risk advised by regulators/Govt. of India.	As per our understanding , it will be limited to RFP BoQ only. please confirm.	Bidders to comply with RFP/GeM bid terms and conditions
520	75	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 38 The proposed server network interfaces ports should be compatible for connecting bank CISCO switches.	Please share existing switch details or bidder understands that given specification for SoR items are compatible to the existing cisco switches. please confirm. Or kindly share switches detail with port type(electrical/optical), speed, connector type etc	Details will be shared with the selected bidder
521	75	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 40 All hardware delivered to be rack mounted, powered on and configured properly including tape drive, tape library , server rack with PDU,TDR Switch etc., supplied as part of this RFP	As per our understanding, Rack Grounding/earthing for devices, cooling and UPS power will be provided by Bank. please confirm.	Yes. Rack Grounding/earthing, power, space will be provided by Bank
522	75	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 42 The Bidder will responsible for the following: h. Server Management connectivity.	As per our understanding, Out-of-band management switches are part of the RFP BoQ. bidder need not to factor additional switches, cabling and accessories for OOB Management. please confirm.	Yes
523	75	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 42 The Bidder will responsible for the following: m. All activities related to Storage Administration assigned during the implementation period and till the project tenure (Warranty and AMC/ATS, if contracted) without any extra cost.	Does onsite resource required to fulfill this requirement or resource required as and when basis. please confirm.	Bidders to comply with RFP/GeM bid terms and conditions



Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
524	76	Annexure-8 Scope of Work	Evaluation for Scope of Work for Servers	Sl. No. 1. Bidder has to install / re-install the operating system (if required), other software in the servers and support the same during warranty and AMC period without any extra cost to the Bank.	Software (which are not part of BoQ) installation will be out of scope. Please amend.	All supplied softwares along with the RFP to be installed and configured
525	76	Annexure-8 Scope of Work	Evaluation for Scope of Work for Servers	Sl. No: 2 Deployment of servers requires co-ordination with different project application vendors. The bidder should co-ordinate with the software vendors while installing and ensure installation and commissioning for running the applications for which these servers are procured.	As part of this RFP, Hardware, OS, DB listed in BoQ are in the scope, another software/application installation need to be done by respective vendor/OEM. Please amend the clause.	Bidders to comply with RFP/GeM bid terms and conditions
526	76	Annexure-8 Scope of Work	Evaluation for Scope of Work for Storages	Sl. No: 3 Integrate storage systems with existing infrastructure including servers, networks, and backup solutions	As per our understanding technical specification of given BoQ is compatible to integrate with existing infra. Please clarify.	Bidders to comply with RFP/GeM bid terms and conditions
527	76	Annexure-8 Scope of Work	Evaluation for Scope of Work for Storages	Sl. No. 5. Identify performance bottlenecks and implement optimization strategies such as load balancing, caching, or tiering.	Additional line items to achieve these optimization strategy will be procured by the bank separately if not procured as part of this RFP SoR/BoQ. please confirm.	Storage should have this features
528	142	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	In addition to the above access switches Bidder to supply Distribution Switches in High availability with required capacity to connect all supplied access switches with dual uplink of 10/40/100 Gbps in active-active mode for redundancy and load sharing ( DC - 2, DRC - 2 )	Request authorities to share specification of switches.  Also confirm that total count of distribution switches will be 4 for this RFP.	Bidder to refer corrigendum-5.
529	14	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	1. Project Timelines	1.3 Sl. No: 1 Delivery of all Hardware and software- Within 12 weeks from date of Acceptance of PO	Request to change 12 weeks to 16 weeks considering the volume	Bidders to comply with RFP/GeM bid terms and conditions
530	14	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	1. Project Timelines	1.3. Configuration, implementation and completion of all scope of work: Within 12 weeks from the date of delivery of hardware/Software	Request to change 12 weeks to 16 weeks considering the volume, configurations and multiple sites	Bidders to comply with RFP/GeM bid terms and conditions
531	15	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	2. Integration & Interfaces	2.1. The selected bidder has to work with different application vendors in order to integrate new solution to the existing workload or new workloads during contract period.	Please elaborate what kind of integrations are expected and its frequency.	Details will be shared with the selected bidder
532	15	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	3. Training:	The selected vendor has to give demo and explain operational guidelines of the product at the site of the installation to Bank's Officials.	Is there any need of any class room training planned, if yes, please provide the expected number of days, participants and topic.	No separate training session is required, other than the training mentioned in the RFP document.
533	24	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	10. Scope involved during Contract period	10.9. Any server for middleware, database, OS and database licenses to be provided by the successful bidder without any additional cost to the Bank	Please remove this clause or mention the specific software in scope	Bidder to refer corrigendum-5.

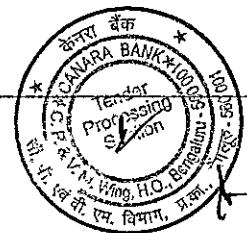




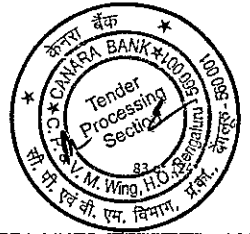
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
534	74	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No. 22 All installed hardware firmware must be of stable version and all recommended patches should be installed by the bidder and the same to be submitted to the bank on quarterly basis.	We understand that the patches to be installed during implementation and then provide the patches to back on quarterly basis. Implementation of quarterly patches not in the scope of bidder. Please confirm	Bidders to comply with RFP/GeM bid terms and conditions
535	64	Annexure-2 Pre-Qualification Criteria	Sl. No. 5	Pre-Qualification Criteria: The Bidder should have an active and premium partnership with Hardware OEM to offer their Hardware and Software as a service to Bank.  Documents to be submitted in compliance with Pre-Qualification Criteria Copy of partnership certificate from OEM.	The Bidder should have an active partnership with Hardware OEM to offer their Hardware and Software as a service to Bank. Documents: Copy of MAF from OEM.	Bidders to comply with RFP/GeM bid terms and conditions
536	64	Annexure-2 Pre-Qualification Criteria	Sl. No. 6	Pre-Qualification Criteria: The bidder should have yearly average turnover of 300 Crores in India for the last three financial years 2020-2021, 2021-2022, 2022-2023 from their Indian operation as per the audited Financial Statements. This must be the individual company turnover and not of any group of companies.	Considering the significant size of Bid, We request you to modify the clause as follows: "The bidder should have average turnover of at least 800 Crores in India over the last three financial years 2020-2021, 2021-2022, 2022-2023 from their Indian operation as per the audited Financial Statements. This must be the individual company turnover and not of any group of companies."	Bidders to comply with RFP/GeM bid terms and conditions
537	64	Annexure-2 Pre-Qualification Criteria	Sl. No: 8	Pre-Qualification Criteria The Bidder/OEM should have successfully supplied minimum cumulative 500 Nos. of Servers in India in the last three years out of which the bidder should have successfully supplied Hardware and software as a service model at least 100 servers deployed at Customer's DC and DR in Indian Market in any 1 Scheduled Commercial Bank/ NBFC/ Insurance Company/ PSU/ Central Government Organization in India in the last three years as on the date of submission of bid for this RFP.	To attract maximum bidders, we request you to remove multiple intersections as asked in Bidder Clause by modifying the clause as follows: "The Bidder/OEM should have successfully supplied minimum cumulative 500 Nos. of Servers in India in the last three years out of which the bidder should have successfully supplied Hardware and software as a service model at least cumulative 100 servers deployed at Customer's DC and DR in Indian Market in any of the following: Scheduled Commercial Bank/ NBFC/ Insurance Company/ PSU/ Central Government Organization in India in the last three years as on the date of submission of bid for this RFP" or Alternatively change the clause as follows. The Bidder/OEM should have successfully supplied minimum cumulative 500 Nos. of Servers in India in the last three years out of which the bidder/OEM should have successfully supplied Hardware and software as a service model at least 100 servers deployed at Customer's DC and DR in Indian Market in any 1 Scheduled Commercial Bank/ NBFC/ Insurance Company/ PSU/ Central Government Organization in India in the last three years as on the date of submission of bid for this RFP	Bidder to refer corrigendum-5.
538	144	Annexure-9 Technical Specifications	Table-L Backup Solution for 500 Servers at DC and DRC	Sl. No: 15 Backup software should support instant file share recovery in NAS storages to allow users to access files fast after disaster.	To help in fast recovery of backed up data and for generic inclusion of this functionality, request Bank to modify the following as: Backup software should support file share recovery in NAS storages to allow users to access files fast after disaster. Backup solution should support instant VM/NAS recoveries.	Bidder to refer corrigendum-5.



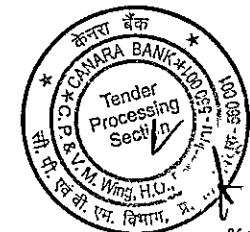
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
539	134	Annexure-9 Technical Specifications	Table-H Storage Technical Specifications: (Enterprise Block Storage 2.0PB Usable Space: DC -2, DRC -2)	Sl. No: 27 Remote Replication Offered Storage array should provide both Synchronous and Asynchronous replication across 2 storage arrays natively. Offered Storage array shall support 3 Data Center solution natively where Primary site shall be able to replicate synchronously to near-by / Bunker location and at the same time shall be able to replicate to Far location asynchronously. Necessary replication licenses/ Infrastructure required for replication should be provided with the array	We understand from the RFP that the bank is looking for a 2 Site DC and DR and needs replication from DC to DR using Sync and Async replication natively without any additional hardware for Replication. The Storage array should be able to switch between Sync and Async Modes without requiring to resync entire data.	Bidder to refer corrigendum-5.
540	125	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.0PB Usable Space: DC -1, DRC -1)	Sl. No: 13 RAID Support- RAID array supporting 10, 0, 1, 5 and 6 or better levels. It should support a mix and match of RAID levels behind a pair of controllers. The storage array should allow online expansion of existing RAID Groups / Storage Disk Pools.	Request the bank to consider erasure coding instead of traditional RAID. Large data sets and scaleout architecture required for the object store needs high availability, reliability and serviceability by leveraging Erasure coding, by distributing the data across controllers/Nodes to offer 99.99999% availability and no outage in the event of a disk rebuild. Traditional RAID Groups have limitations around the rebuild times and availability for large data sets. REquest the bank to consider Erasure Coding instead of Traditional Raid.	Bidder to refer corrigendum-5.
541	126	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.0PB Usable Space: DC -1, DRC -1)	Sl. No: 16 Services- Proposed storage array should include storage based compression, inline Deduplication, storage to storage replication, Snapshot for the entire supported capacity of the storage array from day one. All the required or necessary licenses must be perpetual and provided for the Full capacity of each storage from Day one. This should include licenses for Management and monitoring module and all the storage features such as Snapshot, Cloning, Replication etc. Upgrade in capacity should not incur any additional license cost. Offered storage system have online and historical performance reporting capability.	Object store is designed for erasure coding and for long term archical. The functionality requested is not native to object storage. Request the bank to consider Inline compression, Inline dedupe, Dedupe (cluster wide) on NAS and only compression on Object Storage.	Bidder to refer corrigendum-5.
542	126	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.0PB Usable Space: DC -1, DRC -1)	Sl. No: 17 Protocol Support- CIFS, SMB, NFSV3&V4, HTTP5, HTTP, REST APIs, FTP, Linux FS (FUSE), S3 Protocol, SWIFT & all kinds of rest full APIs. Vendor shall configure the licenses all interfaces All above protocol shall be native to cluster and shall not require any additional gateway. Vendor can provision additional gateway if required from performance perspective but capability shall be native to main nodes only.	Request Bank to remove Linux FS (FUSE). FUSE is using mounted drive as block or file storage which in this case is not required because there is already block, file and Object storage requirement as per RFP.	Bidder to refer corrigendum-5.



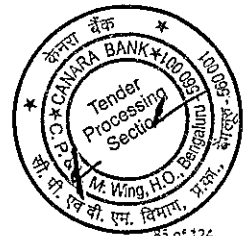
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
543	129	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.0PB Usable Space: DC -1, DRC 1)	Sl. No. 30 Data Management Features 1. It shall be possible to tag and search S3 Metadata. 2. Lifecycle Management - It shall be possible to automatically transition and expiration of data based on criteria. 3. It shall be possible to asynchronously replicate bucket to several Cloud targets 4. Offered storage shall support multi-tenancy and data isolation	For point number 3, request bank to provide details on the asynch replication capability to multiple cloud targets. We understand that the bank needs security and should be able to replicate or copy a bucket(s) to approved cloud target(s) which could be another S3 Target.	Bidder to refer corrigendum-5.
544	132	Annexure-9 Technical Specifications	Table-H Storage Technical Specifications: (Enterprise Block Storage 2.0PB Usable Space: DC -2, DRC -2)	Sl. No: 11 Scalability- Each storage up to 5PB ( Scale UP) and 8 controller ( Scale Out ) D/P( data in-place) upgrade capability	Request the bank to consider 4PB as the overall Storage capacity, since the current Drive sizes that we support are 15TB NVMe SSDs and we would be scaling up to 4PB, and as the new drives are added we will be able to support higher capacities. Request Bank to consider File and Block in the same storage system since the complete feature capabilities of NAS (compression, Dedupe, Snapshot, NFS V4) can be supported in Unified Storage.	Bidder to refer corrigendum-5.
545	132	Annexure-9 Technical Specifications	Table-H Storage Technical Specifications: (Enterprise Block Storage 2.0PB Usable Space: DC -2, DRC -2)	Sl. No: 13 RAID Support- RAID array supporting 10, 0, 1, 5 and 6 or better levels. It should support a mix and match of RAID levels behind a pair of controllers. The storage array should allow online expansion of existing RAID Groups / Storage Disk Pools.	We understand that the bank is looking for an All Flash Storage and needs higher availability, Reliability and serviceability. Since the disk capacities are increasing, the Storage should support mixing and matching of different capacity NVMe disks within the same pool for flexibility of capacity for expansion. The RAID level that gives best availability and capacity is RAID 6 or Dual Parity. Request the bank to consider RAID 5/6. and should allow online expansion of Pool.	Bidder to refer corrigendum-5.
546	132	Annexure-9 Technical Specifications	Table-H Storage Technical Specifications: (Enterprise Block Storage 2.0PB Usable Space: DC -2, DRC -2)	Sl. No: 14 Encryption- should have native encryption capabilities as per PCI DSS standards and encryption should not add any performance overheads	we understand that the bank is looking for encryption. the storage array should use Self Encrypting drives to ensure the encryption is not burdening or adding any overheads to the storage array. Request the bank to include Self Encrypting drives to be mandatory for the encryption.	Bidders to comply with RFP/GeM bid terms and conditions



Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
547	64	Annexure-2 Pre-Qualification Criteria	Sl. No: 8	<p>Pre-Qualification Criteria The Bidder/OEM should have successfully supplied minimum cumulative 500 Nos. of Servers in India in the last three years out of which the bidder should have successfully supplied Hardware and software as a service model at least 100 servers deployed at Customer's DC and DR in Indian Market in any 1 Scheduled Commercial Bank/ NBFC/ Insurance Company/ PSU/ Central Government Organization in India in the last three years as on the date of submission of bid for this RFP.</p>	<p>This RFP PQC clause-8 is bringing two qualifying conditions for Bidders/OEM and Bidder together under one clause, which in turn restrict Bidders to prove/ meet the 100 Server with different server OEM's. Hence we request Bank to keep the clause as below. 1. Bidder/OEM Should have successfully supplied minimum cumulative 500 No Servers in India in the last three Years. 2. Bidder should have successfully supplied hardware and software as a service model at least 100 Servers deployed at customer's DC and DR in Indian market in any Scheduled Commercial Bank/ NBFC/ Insurance Company/ PSU/ Central Government Organization in India in the last three years as on the date of submission of bid for this RFP.</p> <p>We further request Bank to reduce cumulative no's to 250 Nos. of Servers supplied in India in the last three years and remove Hardware and Software as a service model as Bank is buying Upfront/Capex payment as part of the OEM/Bidder Qualifying criteria. Since, this point would restrict Bidders to participate.</p> <p>Further we request bank to limit this clause to workorders only, since most of the workorders for the Hardware supply in nature and will not carry any signoff and customer would have NDA signed with bidder for not disclosing the same.</p> <p>Kindly note: We will not be able to submit the Institution letters due to compliance/NDA and internal policies of the institution, hence request to remove the condition of producing the letter</p>	Bidder to refer corrigendum-5.
548	64	Annexure-2 Pre-Qualification Criteria	Sl. No: 8	<p>Pre-Qualification Criteria The Bidder/OEM should have successfully supplied minimum cumulative 500 Nos. of Servers in India in the last three years out of which the bidder should have successfully supplied Hardware and software as a service model at least 100 servers deployed at Customer's DC and DR in Indian Market in any 1 Scheduled Commercial Bank/ NBFC/ Insurance Company/ PSU/ Central Government Organization in India in the last three years as on the date of submission of bid for this RFP.</p>	<p>We have executed projects in different PSU/ BFSI, wherein customer has released multiple PO's in slotwise against the single RFP. hence, kindly allow us to submit the multiple PO's from a single customers for 40 Servers or allow us to submit multiple PO's from multiple customers for 100 Servers of any OEM deployed at Customer's DC &amp; DR. in any Scheduled Commercial Bank/ NBFC/ Insurance Company/ PSU/ Central Government Organization in India in the last three years and remove Hardware and Software as a service model as Bank is buying Upfront/Capex payment. Since, this point would restrict Bidders to participate.</p> <p>Kindly note: We will not be able to submit the Institution letters due to compliance and internal policies of the institution, hence request to remove the condition of producing the letter</p> <p>We request bank to limit this clause to workorders only, since most of the workorders for the Hardware supply in nature and will not carry any signoff</p>	Bidder to refer corrigendum-5.



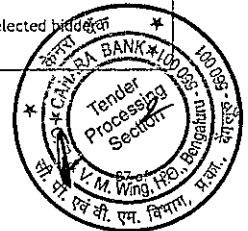
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
549	64	Annexure-2 Pre-Qualification Criteria	Sl. No. 5	Pre-Qualification Criteria: The Bidder should have an active and premium partnership with Hardware OEM to offer their Hardware and Software as a service to Bank.	We request Bank to clarify whether this certificate to produce to only Hardware OEM. Also clarify its applicable to only server and storage OEMs  We further request Bank to amend the clause to active and authorized partnership with Hardware OEM. Kindly request Bank to remove Hardware and Software as a service model as Bank is buying Upfront/Capex payment. Since, this point would restrict Bidders to participate.	Bidders to comply with RFP/GeM bid terms and conditions
550	20	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	8. Payment Terms	8.1. The payment schedule for Hardware will be as under and will release after execution of contract agreement:  On Supply/delivery of all the of Hardware as per RFP- 50%	Bidder has to agree to the OEM Commercial and Credit offering which does not allow bidder to pay 50% of the payment to OEM while taking delivery, all OEMs ask for 100% payment against delivery, The RFP stated payment term is too less remittance from Bank to procure Hardware from the OEM through bidder and it will deteriorate the liquidity position of the any bidder, since its a big value project. Also this will restrict us to not to participate as it is difficult to get the approval from our Finance.  Hence, we kindly request Bank to amend the clause to 80% payment against delivery of Hardware on production of relevant documents as per GeM Terms & conditions. As we have standard credit terms with OEM and distributor which we need to agree to supply Hardware & Software.	Bidders to comply with RFP/GeM bid terms and conditions
551	20	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	8. Payment Terms	8.1. The payment schedule for Hardware will be as under and will release after execution of contract agreement:  Installation of all Hardware- 20%	We kindly request Bank to amend the clause-5% payment against successful installation of Hardware as per Scope of Work and Technical requirements as per GeM Terms & conditions. As we have standard credit terms with OEM and distributor which we need to agree to supply Hardware & Software.	Bidders to comply with RFP/GeM bid terms and conditions
552	21	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	8. Payment Terms	8.1. The payment schedule for Hardware will be as under and will release after execution of contract agreement:  Configuration, implementation and completion of all scope of work- 20%	we kindly request Bank to amend the clause- 5% payment against After successful configuration and implementation of Hardware and software as per Scope of Work and Technical requirements as per GeM Terms & conditions. As we have standard credit terms with OEM and distributor which we need to agree to supply Hardware & Software.	Bidders to comply with RFP/GeM bid terms and conditions
553	22	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	8. Payment Terms	8.1. The payment schedule for Hardware will be as under and will release after execution of contract agreement: Sl. No: 8 AMC as mentioned in Table-F- Quarterly in arrears on submission of Quarterly Preventive Maintenance activity report and acceptance duly signed by Bank officials of the respective officials of the respective Branch/Office.	Bank has put the AMC in Table F where as it should be Table E, we request for the change.	Bidder to refer corrigendum-5.



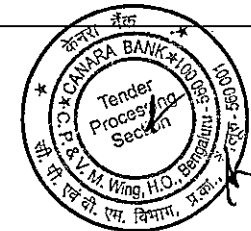
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
554	22	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	8. Payment Terms	8.1. The payment schedule for Hardware will be as under and will release after execution of contract agreement:  AMC as mentioned in Table-F- Quarterly in arrears on submission of Quarterly Preventive Maintenance activity report and acceptance duly signed by Bank officials of the respective officials of the respective Branch/Office.	This clause is mandatorily need to be amended to yearly in advance since no longer no OEMs are following quarterly payment terms for AMC/ATS.  We need to pay Upfront to OEMs (Hardware & Software) every year in beginning as we have standard credit terms with OEM and distributor. Hence we kindly request Bank to amend the clause for Yearly upfront payment against AMC as per Table - E against ABG without which it is difficult for us to get financial approval to participate.	Bidder to refer corrigendum-5.
555	73	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 4 The bidder has to provide AMC/ATS for the all supplied Hardware and Software as per the Scope of Work post warranty period. During the warranty period and AMC period, the Bidder is bound to do all hardware spares replacement and upgrade/update of proposed hardware to next or required version without extra cost to the Bank covering all parts & labour from the date of acceptance of the systems by the Bank at the respective locations i.e. on-site comprehensive warranty. The Bank, however, reserves the right to enter into Annual Maintenance Contract (AMC) agreement either location-wise or from a single centralized location.	Request you to remove upgrade word from below point since its calls out for new hardware replacement incase its needed by BANK. " the upgrade/update of proposed hardware to next or required version without extra cost to the Bank"	Bidder to refer corrigendum-5.
556	74	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 12 Bidder should follow a standard development process to ensure that proposed servers meets functional, security performance and regulatory requirements of the bank.	As bidder is not supplying the security device / software , what sort of security performance is expected from bidder?Kindly Clarify	Details will be shared with the selected bidder
557	74	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 13 Bidder should comply as per the IT related policies of the bank.	Requesting to share the policies.	Details will be shared with the selected bidder
558	74	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 18 Bidder is responsible to inform if any new version/update/Service pack/firmware/code upgrade/upgrade of proposed hardware is available by OEM, to the bank within seven days (7 days) of the release and provide the upgrade solution (software) within one month of such releases without any cost to the bank during the period of contract.	Please change it to, "Bidder is responsible to inform if any new stable version/update/Service pack/firmware/code upgrade/upgrade of proposed hardware is available" and "provide the upgrade solution (software) within one month of such stable releases without any cost"	Bidder to refer corrigendum-5.
559	74	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 19 If any more additional licenses are procured by the bank through the successful bidder all such licenses are to be maintained by the bidder.	In that case the maintainacne cost has to be proportionately should be considered by bank as an increment to the successful bid price closer	Bidders to comply with RFP/GeM bid terms and conditions
560	76	Annexure-8 Scope of Work	Evaluation for Scope of Work for Servers	Sl. No: 5 Hardening of the servers as per the bank secure configuration document based on the OS, Hypervisor and hardware flavours	our understanding is that hardening is only for operating system and Hypervisor kindly clarify	Bidders to comply with RFP/GeM bid terms and conditions



Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
561	74	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 21 Bidder is responsible to provide the periodic reports of the proposed hardware health as per the bank requirement.	Please mention the frequency, is it monthly, quarterly etc. Since there is no FMS service asked in the RFP, how bank will provide access to bidder. Is FMS service part of this RFP then will the bank will provide the required space and related systems to bidder to perform the activity, require clarity	Preventive maintenance refers to health check of devices once in three month including firmware upgrade and activity report to be submitted
562	74	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 24 All the connectivity for the hardware i.e. LAN and SAN switches need to be ensured by the bidder.	Please provide the uplink details for LAN to connect with existing network traffic. The Core to Server Rack connectivity will be provided by Bank or Bidder. Kindly Clarify. Also requesting for site visit before proposing the BoM.	Bidders to comply with RFP/GeM bid terms and conditions
563	74	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 25 All proposed equipment's are required to connect existing SAN infrastructure.	Please share the existing SAN infra details along with avail port & SFPs etc. Who would be responsible for Zoning of existing SAN switch?	Details will be shared with the selected bidder. Existing SAN switch zoning will be done by Bank team
564	74	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 28 Bidder must also provide the necessary power cables, LAN cables, FC cables from source to their provided rack as per the guideline of the Bank.	Bidder has to only provide the LAN cable and Existing vendor will lay or bidder also have to lay the cables? clarification required.  Quantity, quality and length and colour of the cables is not mentioned for LAN and SAN cables, is it bidder's responsibility to supply LAN and SAN cables. These details are very much necessary to stick on to the project timelines, else we loose time unnecessarily	Selected Bidder has to lay the cables. Cable details are mention under the device technical specification
565	75	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 39 The proposed server FC HBA interface ports should be compatible for existing SAN Switch.	Information required for Existing SAN switch to check the compatibility with updated server generation for HBA compatibility	Bidder to refer corrigendum-5.
566	75	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 34 During installation if the bank requires any new Software/OS/Utility, Bidder has to install without any cost where the licenses of the software are with the Bank.	Need details of the software's which we need to install later. Our understanding is that any installation / reinstallation is only for the products supplied by bidder, require clarity	Bidders to comply with RFP/GeM bid terms and conditions
567	75	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 38 The proposed server network interfaces ports should be compatible for connecting bank CISCO switches.	Need details of the existing cisco switches	Bidder to refer corrigendum-5.
568	75	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 42 The Bidder will responsible for the following: m. All activities related to Storage Administration assigned during the implementation period and till the project tenure (Warranty and AMC/ATS, if contracted) without any extra cost.	Bank has not mentioned for the resident engineer in the tender, please let us know, if RE is required for this activity or we can manage it remotely?	No resident engineer required.
569	76	Annexure-8 Scope of Work	Evaluation for Scope of Work for Servers	Sl. No: 2 Deployment of servers requires co-ordination with different project application vendors. The bidder should co-ordinate with the software vendors while installing and ensure installation and commissioning for running the applications for which these servers are procured.	Please clarify the expectation of "ensure installation and commissioning for running the applications" - which is not supplied by the bidder. Any delay due to installation of the application software by respective vendors will be excluded in the Implementation timeline. Bank has to ensure the required Spoc from bank would help the successful bidder to co-ordinate with the existing applications vendors and bidders for the project completion.	Bidders to comply with RFP/GeM bid terms and conditions
570	76	Annexure-8 Scope of Work	Evaluation for Scope of Work for Storages	Sl. No: 3 Integrate storage systems with existing infrastructure including servers, networks, and backup solutions	Please share the existing infra details for compatibility check before proposing the BoM.	Details will be shared with the selected bidder



Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply:
571	76	Annexure-8 Scope of Work	Evaluation for Scope of Work for Storages	Sl. No: 5 Identify performance bottlenecks and implement optimization strategies such as load balancing, caching, or tiering.	what is the expectation on existing infrastructure which is not supplied by the bidder and going to connect to new storage	Same is requested for new infrastructure. Bidders to comply with RFP/GeM bid terms and conditions
572	77	Annexure-8 Scope of Work	Evaluation for Scope of Work for Hyper-V - Microsoft	Sl. No: 1 Implementing a Hyper-V environment with clustering or load balancing for deploying applications	As per new policy Only stand alone Hyp-V virtualization is possible, Hyp-V cluster is not possible other than MS Azure stack product. Please confirm if stand alone virtualization will be enough for the configuration.	Bidders to comply with RFP/GeM bid terms and conditions
573	77	Annexure-8 Scope of Work	Evaluation for Scope of Work for Hyper-V - Microsoft	Sl. No: 6 Configuration of Hyper-V Clustering ( Active/Active and Active/Passive ) or Load Balancing	As per new policy Only stand alone Hyp-V virtualization is possible, Hyp-V cluster is not possible other than MS Azure stack product. Please confirm if stand alone virtualization will be enough for the configuration.	Bidders to comply with RFP/GeM bid terms and conditions
574	74	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 29 The Selected Bidder has to coordinate with existing vendor for the SAN cable lay, connectivity and Zoning of the SAN ports as required connecting the Proposed Hardware and Software.	There is an ambiguity between this two statement , please let us know whether bidder has to only coordinate with existing vendor for Laying or needs to lay cable end to end by supplying the material? Bank has to ensure the required Spoc from bank would help the successful bidder to co-ordinate with the existing applications vendors and bidders for the project completion.  Is there any requirement to have patch panels to connect patch cords from servers to patch panel and then to TOR switches , require clarity  Network Connectivity from Core to TOR to Patch Pannel will be in the scope of bidder or bank  FC and CAT6 Patch cord will be provided by bank or bidder, require clarity	Selected Bidder has to lay the cables and coordinate with Bank teams
575	75	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 42 The Bidder will responsible for the following: i. LAN and SAN Cable lay with proper labelling, tagging and cable dressing.	There is an ambiguity between this two statement , please let us know whether bidder has to only coordinate with existing vendor for Laying or needs to lay cable end to end by supplying the material? Bank has to ensure the required Spoc from bank would help the successful bidder to co-ordinate with the existing applications vendors and bidders for the project completion.  Is there any requirement to have patch panels to connect patch cords from servers to patch panel and then to TOR switches , require clarity  Network Connectivity from Core to TOR to Patch Pannel will be in the scope of bidder or bank  FC and CAT6 Patch cord will be provided by bank or bidder, require clarity	Selected Bidder has to lay the cables and coordinate with Bank teams
576	76	Annexure-8 Scope of Work	Evaluation for Scope of Work for Storages	Sl. No: 3 Integrate storage systems with existing infrastructure including servers, networks, and backup solutions	Bank must let us know the present backup solution as it is required to know for backup integrity without which it is impossible to propose the right backup solution. Is there any requirement to restore the old backups then require existing backup solution being used in bank to propose backup solution	Same is for our storage scope and not backup. Hence, Bidders to comply with RFP/GeM bid terms and conditions

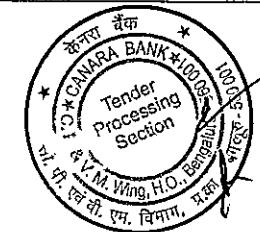




Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
577	146	Annexure-9 Technical Specifications	Table-L Backup Solution for 500 Servers at DC and DRC	Sl. No:45 Offered Device shall integrate and utilize customer's current tape backup infrastructure in the following aspects : Compatibility with existing tape library and tape drives Offered device shall have integrated de-duplication license & replication license so that only unique data or DE duplicated data are transferred to remote / DR location.	Bank must let us know the existing Tape library details before proposing the solution. As compatibility is required with existing one.	Bidder to refer corrigendum-5.
578	NA	Generic	Generic	Site readiness	Bank must let us know the site readiness status of Dc & DRC in respect to Space power & cooling and network.	Selected Bidder has to do site visit and coordinate with bank team for site readiness verification
579	20	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	8. Payment Terms	8.1. The payment schedule for Hardware will be as under and will release after execution of contract agreement:  Sl. No: 2 Installation of all Hardware- 20%	Hardware installation means , rack and stack of hardware and power ON test , does this enough to claim 20% payment require clarity	Bidders to comply with RFP/GeM bid terms and conditions
580	77	Annexure-8 Scope of Work	Evaluation for Scope of Work for MSSQL - Microsoft SQL	Sl. No: 5 Setting up Microsoft SQL Server High Availability: Failover Cluster Instances as per requirement at DC and DRC sites	In the RFP MSSQL version is mentioned as standard edition where it support active standby setup. Require clarity on whether MSSQL - Active -Active or Active - Passive HA for DR replication and failover. Please let us know the given quantity in BOM for MSSQL is considering Active-active or Active-Passive HA	HA in Active - Passive mode
581	14	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	1. Project Timelines	1.3 Sl. No: 1 Delivery of all Hardware and software- Within 12 weeks from date of Acceptance of PO	Requesting bank to increase supply of hardware timelines to 16 weeks instead of 12 weeks	Bidders to comply with RFP/GeM bid terms and conditions
582	14	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	1. Project Timelines	1.3. Configuration, implementation and completion of all scope of work: Within 12 weeks from the date of delivery of hardware/Software	Requesting bank to increase timelines to 18 weeks instead of 12 weeks	Bidders to comply with RFP/GeM bid terms and conditions
583	136	Annexure-9 Technical Specifications	Table-I Technical Specification of 27 server racks (19 Nos at DC - Single Phase, 8 Three Phase)	Sl. No: 3- Power Factor  PDU Single Phase with 63A Server rack mount power distribution unit 1Ph, 230V, 63A 50/60Hz with redundancy. PDU Three Phase with 32A Server rack mount power distribution unit 3Ph, 440V, 63A 50/60Hz with redundancy.	For uniform power distribution can we offer Single Phase advanced power distribution unit with Switched and Metered by Outlet, 1PH, 7.4kW 230V 32A having 20 universal outlets (Combination of C19 and C13), Dual network port to access and monitor the PDU remotely.  Three Phase : advanced power distribution unit with Switched and Metered by Outlet, 3PH, 22.1kW 400V 32A having 24 universal outlets (Combination of C19 and C13), Dual network port to access and monitor the PDU remotely	Normal PDU is required
584	136	Annexure-9 Technical Specifications	Table-I Technical Specification of 27 server racks (19 Nos at DC - Single Phase, 8 Three Phase)	Sl. No: 10- Over load protection MCB PDU rating approximate 14KVA per PDU for single phase with 63A (4 MCB) PDU rating approximate 22KVA per PDU for Three phase with 32A (6 MCB)	For uniform power distribution can we offer advanced power distribution unit with Switched and Metered by Outlet, 3PH, 22.1kW 400V 32A having 24 universal outlets (Combination of C19 and C13), Dual network port to access and monitor the PDU remotely	Normal PDU is required
585	137	Annexure-9 Technical Specifications	Table-J Technical Specification of server racks (23 Nos with three phase at DR)	Sl. No: 10 Over load protection MCB 16A MCB X 2 circuits - PDU rating approximate 8KVA	The three phase PDU with 6 breakers.	Bidders to comply with RFP/GeM bid terms and conditions



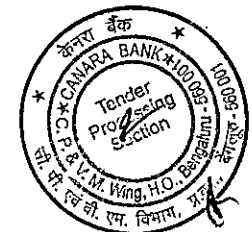
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
586	73	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 4 The bidder has to provide AMC/ATS for the all supplied Hardware and Software as per the Scope of Work post warranty period. During the warranty period and AMC period, the Bidder is bound to do all hardware spares replacement and upgrade/update of proposed hardware to next or required version without extra cost to the Bank covering all parts & labour from the date of acceptance of the systems by the Bank at the respective locations i.e. on-site comprehensive warranty. The Bank, however, reserves the right to enter into Annual Maintenance Contract (AMC) agreement either location-wise or from a single centralized location.	Is there any device retention policy, bank has for that faulty device also need to be kept in DC?	In case of HDD same will be degaussed and returned on arrival on new disk other faulty parts will be returned on replacements of new parts.
587	149	Annexure-9 Technical Specifications	Table-M Technical Specification of Managed file transfer Solution:	Sl. No: 50 The solution should include comprehensive audit logging capabilities, capturing all activities such as data upload, share, download, cut, copy, paste, and rename. These logs must be stored in a non-tamperable format to ensure the integrity and	The cut, copy, paste, rename happens outside the MFT application could you specify in more details about this requirement?	Bidders to comply with RFP/GeM bid terms and conditions
588	73-84	Annexure-8 Scope of Work	Entire Clause	Entire Clause	Scope of work for IBM Websphere is not defined, kindly request bank to confirm if the deployment scope lies with the bidder or it will be taken care by the Bank itself. If its scope of the bidder, request bank to define the SOW for these licenses.	IBM webspher license only to be supplied
589	172	Annexure-16 Bill of Material	Table - C Price details of Software/License Items (Subscription based Licenses)	Sl. No. 6 Apache Tomcat with support - instance base -- 5QTY	Request bank to share the server physical cores / Virtual cores count of the server on which it will be deployed as our licensing model is based on this.	Five servers of each 16 physical cores
590	140	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	B. Type 2 Switch - 24 numbers (12 DC+ 12 DRC) for Data Sl. No: 33 High Mean Time Between Failure values (>3.5 lakh hours) should be available to ensure long life of switch hardware.	Request you to change this to "High Mean Time Between Failure values (>2.7 lakh hours) should be available to ensure long life of switch hardware. Request Bank to change this value, as this is single OEM specific point . Higher MTBF values always donot provide the product reliability measurements	Bidder to refer corrigendum-5.
591	142	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	C. Type 4 Switch - 4 numbers (2 DC+ 2 DRC) - Storage Sl. No: 33 High Mean Time Between Failure values (>3.5 lakh hours) should be available to ensure long life of switch hardware.	Request you to change this to "High Mean Time Between Failure values (>2.7 lakh hours) should be available to ensure long life of switch hardware. Request Bank to change this value, as this is single OEM specific point . Higher MTBF values always donot provide the product reliability measurements	Bidder to refer corrigendum-5.
592	85	Annexure-9 Technical Specifications	Table-A Technical Specification 80 servers (41 DC and 39 DRC)	Sl. No: 5- Processor Processor Make- Latest generation x86_64 bit architecture-based CPU's	Please mention the Class of CPU type required Platinum /Gold/Silver etc  CPU vendors have different Class of CPU and given the general ask , both CPU type like high range platinum 8500 and Mid range Gold 6500 also qualify hence this ask.	Bidders to comply with RFP/GeM bid terms and conditions



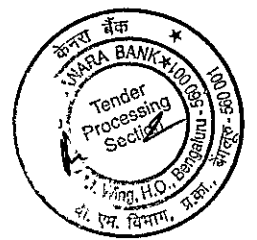
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
593	91	Annexure-9 Technical Specifications	Table-B Technical Specification - 28 servers (17 DC and 11 DRC)	Sl. No: 5- Processor Processor Make- Latest generation x86_64 bit architecture-based CPU's	Please mention the Class of CPU type required Platinum /Gold/Silver etc  CPU vendors have different Class of CPU and given the general ask , both CPU type like high range platinum 8500 and Mid range Gold 6500 also qualify hence this ask.	Bidders to comply with RFP/GeM bid terms and conditions
594	154	Annexure-9 Technical Specifications	Table-N Technical Specifications of 4 SAN Director (2 Nos at DC and 2 Nos at DR)	Sl. No: 21 Other Features The director class switch should provide Inter Chassis Link (ICL) for connecting multiple Chassis	The director class switch should provide Inter Chassis Link (ICL) or Inter Switch Link (ISL) for connecting multiple Chassis  ICL is Single OEM specification , we provide the same capability using more open industry standard ISL/Trunking . Request bank to change this remove or change this clause	Bidder to refer corrigendum-5.
595	156	Annexure-9 Technical Specifications	Table-O Technical Specifications of 8 SAN Switch (4 Nos at DC and 4 Nos at DR)	Sl. No: 5 ISL Trunking connectivity and Cut Thru Switching. Necessary Licenses to be provided by the bidder.	There are only 2 OEM in SAN switching market . Cut Thru SAN switching is single OEM specific mechanism and hence request bank to change this Clause for more participation	Bidder to refer corrigendum-5.
596	75	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 42 The Bidder will responsible for the following: K. SAN connectivity to bank existing SAN Switch	Request Bank to remove this point, with this ask only one OEM qualifies here. This leads to price disadvantage and donot provide chance for Cisco to bid this requirement	Bidder to refer corrigendum-5.
597	85	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC)	Sl. No: 5- Processor Processor Make- Latest generation x86_64 bit architecture-based CPU's	We request Canara bank to Change this to 3rd generation or higher x86_64 bit architecture based CPU's	Bidders to comply with RFP/GeM bid terms and conditions
598	86, 92, 98, 104, 110 & 117	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 6- Memory Ram Size- 128GB*16 = 2 TB	We request Canara Bank to change this to 2TB of Total Memory for better memory bandwidth, MII percentage and price / performance.	Bidders to comply with RFP/GeM bid terms and conditions



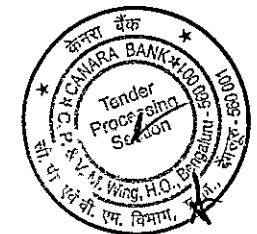
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
599	86, 92, 98, 104, 110 & 117	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 6- Memory Slot Count- Minimum 24 or higher, Minimum 8 free memory slots should be available.	Minimum 24 or higher, Minimum 8 free memory slots should be available.	Bidder to refer corrigendum-5.
600	88, 94, 100, 107, 113 & 120	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 17 PCI Slots- Minimum 4 - x16 PCIe Gen4 or higher free slots(Peripheral Component Interconnect Express)	We request this to be changed to Minimum 4 - PCIe Gen4 or higher free slots(Peripheral Component Interconnect Express)	Bidder to refer corrigendum-5.
601	92	Annexure-9 Technical Specifications	Table-B Technical Specification - 28 servers (17 DC and 11 DRC)	Sl. No: 5- Processor Processor Make- Latest generation x86_64 bit architecture-based CPU's	We request Canara bank to Change this to 3rd generation or higher x86_64 bit architecture based CPU's	Bidders to comply with RFP/GeM bid terms and conditions



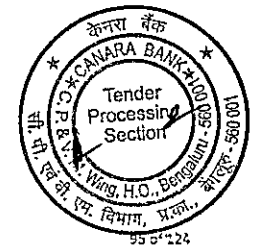
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
602	88, 94, 100, 107, 113 & 120	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 17 PCI Slots- Minimum 4 - x16 PCIe Gen4 or higher free slots(Peripheral Component Interconnect Express)	We request this to be changed to Minimum 4 - PCIe Gen4 or higher free slots(Peripheral Component Interconnect Express)	Bidder to refer corrigendum-5.
603	97	Annexure-9 Technical Specifications	Table-C Technical Specification - 100 servers (60 DC and 40 DRC)	Sl. No: 5- Processor Processor Make- Latest generation x86_64 bit architecture-based CPU's	We request Canara bank to Change this to 3rd generation or higher x86_64 bit architecture based CPU's	Bidders to comply with RFP/GeM bid terms and conditions
604	104	Annexure-9 Technical Specifications	Table-D Technical Specification - 54 servers (28 DC and 26 DRC)	Sl. No: 5- Processor Socket Minimum 2 sockets i.e., 24*1 =24 core ( 1 Populated & 1 For future upgrade )	Since other requirements mentioned in the RFP for the server cannot be met via single socket configuraiton , namely - 1. PCI slot expansion ; PCI Cards required to be populated ; Memory required to be populated and free slots cannot be upgraded without additional CPU etc.. We request Canara Bank to go with dual socket CPU and Ammend this clause with 16 Core DUAL CPU	Bidder to refer corrigendum-5.
605	87, 93, 99, 105, 111 & 118	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 9 SAN & Network	Required SAN and Network cards cannot be populated in single socket system.. We request the server to be changed to dual socket to meet these criteria. (total of 6 cards are required -- 2 nos of 1G, 2Nos of 10G and 2 Nos of FC).	Bidder to refer corrigendum-5.



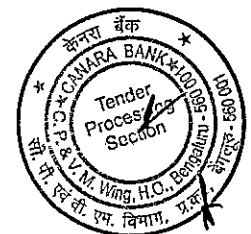
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
606	88, 94, 100, 107, 113 & 120	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 17 PCI Slots- Minimum 4 - x16 PCIe Gen4 or higher free slots(Peripheral Component Interconnect Express)	This clause cannot be met in single socket system. We request the server to be moved to dual socket to abide these clause.	Bidder to refer corrigendum-5.
607	103	Annexure-9 Technical Specifications	Table-D Technical Specification - 54 servers (28 DC and 26 DRC)	Sl. No: 5- Processor Processor Make- Latest generation x86_64 bit architecture-based CPU's	We request Canara bank to Change this to 3rd generation or higher x86_64 bit architecture based CPU's	Bidders to comply with RFP/GeM bid terms and conditions
608	97	Annexure-9 Technical Specifications	Table-C Technical Specification - 100 servers (60 DC and 40 DRC)	Sl. No: 5- Processor Socket Minimum 2 sockets i.e., 32*1 #32 core ( 1 Populated & 1 For future upgrade )	Since other requirements mentioned in the RFP for the server cannot be met via single socket configuration , namely - 1. PCI slot expansion ; PCI Cards required to be populated ; Memory required to be populated and free slots cannot be upgraded without additional CPU etc.. We request Canara Bank to go with dual socket CPU and Amend this clause with 16Core Dual CPU	Bidder to refer corrigendum-5.
609	87, 93, 99, 105, 111 & 118	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 9 SAN & Network	Required SAN and Network cards cannot be populated in single socket system.. We request the server to be changed to dual socket to meet these criteria. (total of 6 cards are required -- 2 nos of 1G, 2Nos of 10G and 2 Nos of FC).	Bidder to refer corrigendum-5.



Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
610	88, 94, 100, 107, 113 & 120	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 17 PCI Slots- Minimum 4 - x16 PCIe Gen4 or higher free slots(Peripheral Component Interconnect Express)	This clause cannot be met in single socket system. We request the server to be moved to dual socket to abide these clause.	Bidder to refer corrigendum-5.
611	110	Annexure-9 Technical Specifications	Table-E Technical Specification - 226 servers (135 DC and 91 DRC)	Sl. No: 5- Processor Processor Make- Latest generation x86_64 bit architecture-based CPU's	We request Canara bank to Change this to 3rd generation or higher x86_64 bit architecture based CPU's	Bidders to comply with RFP/GeM bid terms and conditions
612	110	Annexure-9 Technical Specifications	Table-E Technical Specification - 226 servers (135 DC and 91 DRC)	Sl. No: 5- Processor Socket Minimum 2 sockets i.e., 16*1 =16 core ( 1 Populated & 1 For future upgrade )	Since other requirements mentioned in the RFP for the server cannot be met via single socket configuraiton , namely - 1. PCI slot expansion ; PCI Cards required to be populated ; Memory required to be populated and free slots cannot be upgraded without additional CPU etc.. We request Canara Bank to go with dual socket CPU and Ammend this clause as : Minimum 2 sockets i.e., 16*2 =32 core	Bidder to refer corrigendum-5.
613	87, 93, 99, 105, 111 & 118	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 9 SAN & Network	Required SAN and Network cards cannot be populated in single socket system.. We request the server to be changed to dual socket to meet these criteria. (total of 6 cards are required -- 2 nos of 1G, 2Nos of 10G and 2 Nos of FC).	Bidder to refer corrigendum-5.

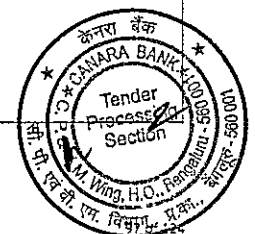


Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
614	88, 94, 100, 107, 113 & 120	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 17 PCI Slots- Minimum 4 - x16 PCIe Gen4 or higher free slots(Peripheral Component Interconnect Express)	This clause cannot be met in single socket system. We request the server to be moved to dual socket to abide these clause.	Bidder to refer corrigendum-5,
615	116	Annexure-9 Technical Specifications	Table-F Custom Technical Specification - 12 servers	Sl. No: 5- Processor Processor Make- Latest generation x86_64 bit architecture-based CPU's	Latest generation x86_64 bit architecture based CPU's  We request Canara bank to Change this to 3rd generation or higher x86_64 bit architecture based CPU's	Bidders to comply with RFP/GeM bid terms and conditions
616	86, 92, 98, 104, 110 & 117	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 6- Memory Ram Size- 128GB*16 = 2 TB	64GB*16 = 1024 GB - Type 2 and Type 3 servers.  This clause cannot be met with one variant of x86 CPU with single socket populated. We request Canara Bank to change the server to dual socket to meet this criteria.	Bidder to refer corrigendum-5.

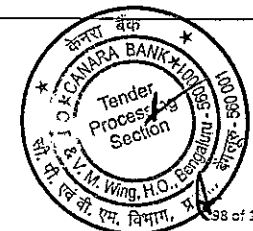




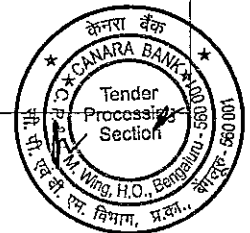
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
617	86, 92, 98, 104, 110 & 117	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 6- Memory Slot Count- Minimum 24 or higher, Minimum 8 free memory slots should be available.	10 or higher, Minimum 4 free slots should be available for future upgrade - Type 1 12 or higher Minimum 4 free slots should be available for future upgrade -Type 2 38 or higher Minimum 4 free slots should be available for future upgrade - Type 3  We request Canara bank to have all servers with min 12 or higher disk slots. Type 3 - 38 slots are asked which are not possible in standard server and a JBOD may have to be provisioned .	Bidder to refer corrigendum-5.
618	87, 93, 99, 105, 111 & 118	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 9 SAN & Network	Required SAN and Network cards cannot be populated in single socket system.. We request the server to be changed to dual socket to meet these criteria. (total of 6 cards are required -- 2 nos of 1G, 2Nos of 10G and 2 Nos of FC).	Bidder to refer corrigendum-5.
619	88, 94, 100, 107, 113 & 120	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 17 PCI Slots- Minimum 4 - x16 PCIe Gen4 or higher free slots(Peripheral Component Interconnect Express)	Minimum 4 - x16 PCIe Gen4 or higher free slots(Peripheral Component Interconnect Express)  This clause cannot be met in single socket system. We request the server to be moved to dual socket to abide these clause.	Bidder to refer corrigendum-5.



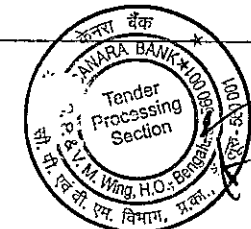
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
620	124-125	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.0PB Usable Space: DC -1, DRC 1)	Sl. No: 8 Capacity- Minimum usable storage 2 PB after RAID6/ Dual RAID6 Configuration. (Without considering any data reduction features such as compression, deduplication etc.,)	Request bank to consider erasure coding protection as well and not just traditional RAID.	Bidder to refer corrigendum-5.
621	77	Annexure-8 Scope of Work	Evaluation for Scope of Work For Open shift	Entire Clause	What is the Hardware configuration for Openshift hosting?	Details will be shared with the selected bidder
622	77	Annexure-8 Scope of Work	Evaluation for Scope of Work For Open shift	Entire Clause	What storage bank has present, does bank have Object, Block and File with certified Openshift CSI Driver? can same be used for Openshift Cluste??	Details will be shared with the selected bidder
623	NA	Generic	Generic	Generic	Please clarify on number of clusters considered to be delivered within 12 weeks.	Bidders to comply with RFP/GeM bid terms and conditions
624	172	Annexure-16 Bill of Material	Table -C Price,details of Software/License Items (Subscription based Licenses)	Sl. No: 3 RHEL 9 High Availability with premium support for CISC - X86 machines	Do we need to propose RHEL with Satellite?	Bidders to comply with RFP/GeM bid terms and conditions
625	140	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	B. Type 2 Switch - 24 numbers (12 DC+ 12 DRC) for Data  Sl. No: 31 Proposed Switches must integrate seamlessly with active - active ports for redundancy and high availability from two core/distributed switches from day one with our existing infrastructure of Cisco/Juniper Datacenter router/switches.	you have mentioned about interoperability with other OEMs for Open standard tech- any specific Cisco patent or open standard feature you are looking to implement?	Bidders to comply with RFP/GeM bid terms and conditions
626	82	Annexure-8 Scope of Work	Evaluation for Scope of Work for TOR Switches	Sl. No: 3 Bidder should ensure planning and designing for proposed solution. Sl. No: 14 Design Includes low & high level diagrams, planning of the implementation and should be aimed at ensuring that a new network or service meets the needs of the Bank.	can you please share the current network architecture diagram to design the new one?	Details will be shared with the selected bidder
627	82	Annexure-8 Scope of Work	Evaluation for Scope of Work for TOR Switches	Sl. No: 13 Bidder has to Plan, Design considering various failovers scenarios, Migrate, Integrate with existing and future infrastructure, Implement day to day changes, maintain and coordinate with OEM at Bank Data Centre and at Data Recovery Centre.	what all should be migrated to new infra? Any specific protocols you are using so that we understand the integration with existing network	Bidders to comply with RFP/GeM bid terms and conditions
628	5	Annexure-9 Technical Specifications	Table-L Backup Solution for 500 Servers at DC and DRC	Sl. No. 5 Backup software should be a Hardware Agnostic software and it should support snapshot integration with hypervisors like VMware and Hyper-V and support de-duplication on any storage target. It should be able to backup data to tapes (like LTO) as well for long term retention.	Request bank to consider it as follows : Backup software should be a Hardware Agnostic software and it should support snapshot integration with hypervisors like VMware and Hyper-V and support de-duplication on proposed storage target. It should support tiering of backup data to tapes (like LTO) or object storage for long term retention.	Bidders to comply with RFP/GeM bid terms and conditions



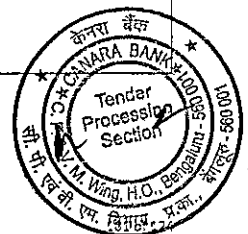
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
629	144	Annexure-9 Technical Specifications	Table-L Backup Solution for 500 Servers at DC and DRC	Sl. No: 16 Proposed backup software should have the ability to perform staged restores to enable admins to comply to regulations by selectively deleting files / records which should not be restored from the backup copies. This will help in complying to "right to be forgotten" regulations like GDPR, where user data is deleted from restored backup copies in an auditable manner.	With the increase in cyber attacks, it is important to secure the system from eavesdropping of staged data as well as by prohibiting any deletions/modifications to backup copies. As this specification can be achieved functionality during traditional recovery and as a software feature is Proprietary, hence request deletion.	Bidder to refer corrigendum-5.
630	144	Annexure-9 Technical Specifications	Table-L Backup Solution for 500 Servers at DC and DRC	Sl. No: 21 Recovery verification should automatically boot the server from backup and verify the recoverability of VM image, Guest OS and Application Consistency, and then publish automated reports to be used in backup / recovery audits.	Vendor Proprietary. Please consider the following : Solution should have the capability for recovery verification to boot the server from backup and verify the recoverability of VM image, Guest OS and Application Consistency and then publish reports to be used in backup / recovery audits.	Bidder to refer corrigendum-5.
631	145	Annexure-9 Technical Specifications	Table-L Backup Solution for 500 Servers at DC and DRC	Sl. No: 27 Offered backup solution should support multiple kubernetes distributions including RHOS, VMware Tanzu, SUSE Rancher, Ezmeral Runtime etc.	For open integration, request to change to the following : Offered backup solution should support multiple kubernetes platforms for e.g., RHOS/VMware Tanzu/SUSE Rancher/Ezmeral Runtime etc	Bidder to refer corrigendum-5.
632	145	Annexure-9 Technical Specifications	Table-L Backup Solution for 500 Servers at DC and DRC	Sl. No: 33 Offered solution should support intelligent policy definitions for backup windows, automatic staggering of backups to reduce impact on the system backend, use of declarative policies for backups etc.	Vendor Proprietary. Please change to the below. The offered solution should support policy based backup architecture with calendar/frequency based scheduling.	Bidder to refer corrigendum-5.
633	NA	Annexure-9 Technical Specifications	Table-L Backup Solution for 500 Servers at DC and DRC	Additional Clause: Capacity and Performance- Purpose built backup appliance should be sized appropriately for front-end data of 200 TB as per below mentioned backup policies.  a. Daily incremental backup - retained for 4 weeks in Purpose built backup appliance. b. Weekly full backup for all data types - retained for 1 month in Purpose built backup appliance. c. Monthly full backups - for 12 months. d. Yearly full backups - retained for 5 years in Purpose built backup appliance.  The appliance should be quoted with adequate capacity considering 1% daily change rate for entire duration of 5 years warranty. Bidder must provide a sizing certificate showcasing this sizing consideration on the OEM's letter head with seal and sign from the authorized signatory. Entire capacity of appliance must be offered as single pool with global deduplication to increase the data reduction efficiency.	Kindly add this clause for sizing the backup storage.	Bidders to comply with RFP/GeM bid terms and conditions



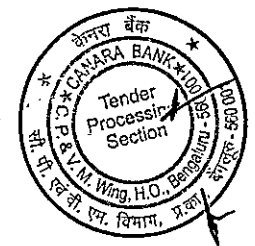
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
634	64	Annexure-2 Pre-Qualification Criteria	Sl. No: 8	Pre-Qualification Criteria The Bidder/OEM should have successfully supplied minimum cumulative 500 Nos. of Servers in India in the last three years out of which the bidder should have successfully supplied Hardware and software as a service model at least 100 servers deployed at Customer's DC and DR in Indian Market in any 1 Scheduled Commercial Bank/ NBFC/ Insurance Company/ PSU/ Central Government Organization in India in the last three years as on the date of submission of bid for this RFP.	We request to modify the clause as below  The Bidder/OEM should have successfully supplied minimum cumulative 500 Nos. of Servers in India in the last Five years out of which the bidder should have successfully supplied hardware/Server at least 100 Nos deployed in Indian Market in any Scheduled Commercial Bank/ NBFC/ Insurance Company/ PSU/ Central Government Organization in India in the last Five years as on the date of submission of bid for this RFP.	Bidder to refer corrigendum-5.
635	20	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	8. Payment Terms	8.1. 50% - On Supply/delivery of all the of Hardware as per RFP 20% - Installation of all Hardware 20% - Configuration, implementation and completion of all scope of work 10% - After Completion of Warranty Period (i.e., three years). Warranty period.	OEM's collects 100% against delivery from SI's, the current payment term seriously impact the Cash Flow , Hence requesting the Bank to modify the clause as below  70% - On Supply/delivery of all the of Hardware as per RFP 10% - Installation of all Hardware 10% - Configuration, implementation and completion of all scope of work 10% - After Completion of Warranty Period (i.e., three years). Warranty period or on submission of BG in the equivalent value	Bidders to comply with RFP/GeM bid terms and conditions
636	21 & 22	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	8. Payment Terms	8.1. The payment schedule for Hardware will be as under and will release after execution of contract agreement:  Sl. No: 5 100 %- On Supply and Installation of all the of Software/ Licenses as per RFP On supply and installation of software on production of relevant documents like delivery signoff and invoice of the items supplied and after deducting applicable penalties and Liquidated damages (if any) as per GeM Terms & conditions. Please note that Originals of invoices (plus One Copy) reflecting Taxes & Duties, Proof of delivery duly signed by Bank officials of the respective Branch/office should be submitted while claiming payment in respect of orders placed.	We request Bank to modify the clause as below  70% - On Delivery of all the of Software/ Licenses as per RFP 30% - On Installation of all the of Software/ Licenses as per RFP	Bidders to comply with RFP/GeM bid terms and conditions
637	22	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	8. Payment Terms	8.1. The payment schedule for Hardware will be as under and will release after execution of contract agreement: Sl. No: 8 AMC as mentioned in Table-F: Quarterly in arrears on submission of Quarterly Preventive Maintenance activity report and acceptance duly signed by Bank officials of the respective officials of the respective Branch/Office.	OEM's collects 100% yearly advance from SI's, the current payment term seriously impact the Cash Flow. Hence requesting Bank to modify the clause as below  AMC - Yearly in advance	Bidders to comply with RFP/GeM bid terms and conditions



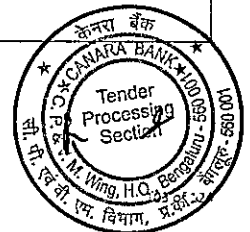
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
638	17-20	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	7. Penalties/Liquidated Damages	Maximum LD to 10%	The Liquidated damages under this section are too stringent increasing the risk exposure of the bidder hence we request you to reduce the cumulative LD maximum 5% of the respective table's total value (Table A/Table B/ Table C/ Table D/ Table E/ Table F/ Table G)	Bidders to comply with RFP/GeM bid terms and conditions
639	64	Annexure-2 Pre-Qualification Criteria	Sl. No. 5	Pre-Qualification Criteria: The Bidder should have an active and premium partnership with Hardware OEM to offer their Hardware and Software as a service to Bank.	The Bidder should have an active and premium/gold partnership with the proposed Hardware OEM (As the procurement is capex based, and also different OEMs use different terminology to the highest level of partnership)	Bidders to comply with RFP/GeM bid terms and conditions
640	140	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	B. Type 2 Switch - 24 numbers (12 DC+ 12 DRC) for Data Sl. No. 33 High Mean Time Between Failure values (>3.5 lakh hours) should be available to ensure long life of switch hardware.	Request you to change this to "High Mean Time Between Failure values (>2.7 lakh hours) should be available to ensure long life of switch hardware.  Request Bank to change this value, as this is single OEM specific point . Higher MTBF values always donot provide the product reliability measurements	Bidder to refer corrigendum-5.
641	142	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	C. Type 4 Switch - 4 numbers (2 DC+ 2 DRC) - Storage Sl. No. 33 High Mean Time Between Failure values (>3.5 lakh hours) should be available to ensure long life of switch hardware.	Request you to change this to "High Mean Time Between Failure values (>2.7 lakh hours) should be available to ensure long life of switch hardware.  Request Bank to change this value, as this is single OEM specific point . Higher MTBF values always donot provide the product reliability measurements	Bidder to refer corrigendum-5.
642	85	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC)	Sl. No: 5- Processor Processor Make- Latest generation x86_64 bit architecture-based CPU's	Please mention the Class of CPU type required Platinum /Gold/Silver etc  CPU vendors have different Class of CPU and given the general ask , both CPU type like high range platinum 8500 and Mid range Gold 6500 aslo qualify hence this ask.	Bidders to comply with RFP/GeM bid terms and conditions
643	91	Annexure-9 Technical Specifications	Table-B Technical Specification - 28 servers (17 DC and 11 DRC)	Sl. No: 5- Processor Processor Make- Latest generation x86_64 bit architecture-based CPU's	Please mention the Class of CPU type required Platinum /Gold/Silver etc  CPU vendors have different Class of CPU and given the general ask , both CPU type like high range platinum 8500 and Mid range Gold 6500 aslo qualify hence this ask.	Bidders to comply with RFP/GeM bid terms and conditions
644	150	Annexure-9 Technical Specifications	Table-N Technical Specifications of 4 SAN Director (2 Nos at DC and 2 Nos at DR)	Sl. No: 9 The switch should support 512 Gbps BW for ISL Trunking connectivity and Cut Thru Switching. Necessary Licenses to be provided by the bidder.	There are only 2 OEM in SAN switching market . Cut Thru SAN switching is single OEM specific mechansim and hence request bank to change this Clause for more participation	Bidder to refer corrigendum-5.
645	154	Annexure-9 Technical Specifications	Table-N Technical Specifications of 4 SAN Director (2 Nos at DC and 2 Nos at DR)	Sl. No: 21 Other Features The director class switch should provide Inter Chassis Link (ICL) for connecting multiple Chassis	The director class switch should provide Inter Chassis Link (ICL) or Inter Switch Link (ISL) for connecting multiple Chassis  ICL is Single OEM specification , we provide the same capability using more open industry standard ISL/Trunking . Request bank to change this remove or change this clause	Bidder to refer corrigendum-5.
646	124	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.OPB Usable Space: DC -1, DRC -1)	Sl. No: 5- Architecture *Security model S3-Vault: Security service for Accounts a. Multi-tenant, Support for S3 IAM - Identity and Access Management.	This is vendor specific terminology, please clarify the requirement with respective security.	Bidder to refer corrigendum-5.



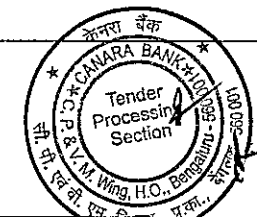
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification.	Bidder's Query	Bank's Reply
647	126	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.OPB Usable Space: DC -1, DRC 1)	Sl. No: 16 Services- Proposed storage array should include storage based compression, inline Deduplication, storage to storage replication, Snapshot for the entire supported capacity of the storage array from day one. All the required or necessary licenses must be perpetual and provided for the Full capacity of each storage from Day one. This should include licenses for Management and monitoring module and all the storage features such as Snapshot, Cloning, Replication etc. Upgrade in capacity should not incur any additional license cost. Offered storage system have online and historical performance reporting capability.	Proposed storage array should include storage based compression/inline Deduplication, storage to storage replication, Snapshot for the entire supported capacity of the storage array from day one. All the required or necessary licenses must be perpetual and provided for the Full capacity of each storage from Day one. This should include licenses for Management and monitoring module and all the storage features such as Snapshot, Cloning, Replication etc. Upgrade in capacity should not incur any additional license cost. Offered storage system have online and historical performance reporting capability.  Offered storage system have online and historical performance reporting capability. At least 1 year of historical performance information should be available online for capacity and performance forecasting, trend analysis etc. In case this capability is not available natively, then necessary software subscription shall be provided for the entire duration of the contract.  As asked capacity is on NL SAS drives, enabling inline duplication is not recommended. And this is vendor specific and also they support dedup for NAS but not for object. So request you to amend the clause.	Bidder to refer corrigendum-5.
648	126	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.OPB Usable Space: DC -1, DRC 1)	Sl. No: 17 Protocol Support- CIFS, SMB, NFSV3&V4, HTTPS, HTTP, REST APIs, FTP, Linux FS (FUSE), S3 Protocol, SWIFT & all kinds of rest full APIs. Vendor shall configure the licenses all interfaces  All above protocol shall be native to cluster and shall not require any additional gateway. Vendor can provision additional gateway if required from performance perspective but capability shall be native to main nodes only.	S3/CIFS/SMB/NFSV/HTTPS/HTTP/REST APIs/FTP/Linux FS (FUSE)/S3 Protocol/SWIFT & all kinds of rest full APIs. Vendor shall configure the licenses all interfaces  The purpose build object storage systems does support S3 protocol only, so we request you to please segregate the file and object requirement. There are solutions which can support NAS and object but it lacks critical object capabilities.  This is not relevant to object storage as S3 access is OS agnostic.	Bidder to refer corrigendum-5.



Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
649	127	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.OPB Usable Space: DC -1, DRC -1)	Sl. No: 21- Other Features Entire Clause	<p>The proposed storage system should support SNMP, Address resolution protocol, Network Time Protocol, LDAP/Network Lock Manager.</p> <p>The Storage array should be licensed with Performance monitoring tools should be offered with the storage array.</p> <p>The proposed storage system shall support a browser based GUI built in management.</p> <p>All objects stored in Object Storage have a URL., All objects have their own metadata. Developers interact with the object storage system through a RESTful HTTP API.</p> <p>Object data can be located anywhere in the cluster.</p> <p>Backup &amp; Recovery: Data backup and recovery rely on accessible and reliable storage. Object-based storage provides the infrastructure for secure data backup and efficient recovery procedures.</p> <p>There shall be no separate and dedicated control node or metadata node in the cluster. In case, nodes are separate then vendor shall over Metadata / control nodes in HA using active / active approach.</p> <p>Offered solution shall be completely redundant and there shall be no single point of failure.</p> <p>Offered solution shall have file integrity checking when reading the file and automatic rebuilt if an error is detected.</p> <p>Please segregate the requirement for object and file as NLM is NFS specific feature. Request you to modify the clause</p>	Bidder to refer corrigendum-5.
650	157	Annexure-9 Technical Specifications	Table-P Technical Specifications of 2 LTO9 Tape Library (1 Nos at DC and 1Nos at DR) and 200 LTO7 & 3800 LTO8 & 800 LTO9 Tapes & 200 No. of LTO9 Cleaning Cartridge	Sl. No: 5 Tape Drive- Minimum 40 LTO-9 Drive with FC Connectivity to support 8Gbps or more.	<p>One LTO-9 Drive with SAS/FC Connectivity to support 8Gbps FC or 12Gbps SAS or more to be provided , Bidder must provide the appropriate SAS HBA card on the Server directly &amp; SAS/FC Cable by the Bidder</p> <p>STAND ALONE DRIVES are Not available in FC , all major brands provide Standalone drive in SAS model only. ELSE, Bank can ask bidders to provide 1U, 8 Slots Autoloader with LTO9 FC drive , each site can be provided if FC is Mandatory Required .</p>	Bidder to refer corrigendum-5.
651	157	Annexure-9 Technical Specifications	Table-P Technical Specifications of 2 LTO9 Tape Library (1 Nos at DC and 1Nos at DR) and 200 LTO7 & 3800 LTO8 & 800 LTO9 Tapes & 200 No. of LTO9 Cleaning Cartridge	Sl. No: 7 Cables- Necessary OM3/OM4 FC cables of length 15 meters	<p>Necessary OM3/OM4 FC cables of length 15 meters or SAS CABLE 12Gbps HD apprx 2 mtrs</p> <p>STAND ALONE DRIVES are Not available in FC , all major brands provide Standalone drive in SAS model only.</p>	Bidder to refer corrigendum-5.
652	2	GeM Bid Document	EMD Amount	75000000	Since the overall bid value is smaller, Requesting Bank to reduce the EMD to 2 Cr.	Bidders to comply with RFP/GeM bid terms and conditions
653	144	Annexure-9 Technical Specifications	Table-L Backup Solution for 500 Servers at DC and DRC	Sl. No: 12 Proposed solution should support automated action for popular alarms (automated or semi-automated), with at-a-glance and drill-down view	Kindly clarify on brief, What is excepted ?	Eg., Backup failed alerts with details of its failure
654	129	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.OPB Usable Space: DC -1, DRC -1)	Sl. No: 32- Compliance 3. Offered storage shall have capability to migrate the data to an alternative media	Kindly provide existing application and database size in DC-DRC which require to migrate in the new environment .	Bidders to comply with RFP/GeM bid terms and conditions

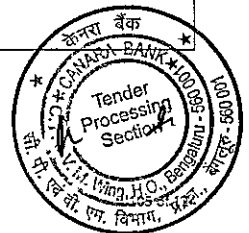


Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
655	76	Annexure-8 Scope of Work	Evaluation for Scope of Work for Servers	Sl. No: 5 Hardening of the servers as per the bank secure configuration document based on the OS, Hypervisor and hardware flavours	Clarifications : OS hardening documents will be provided by Bank or bidder need to provided hardening documents on their best practice.	Details will be shared with the selected bidder
656	76	Annexure-8 Scope of Work	Evaluation for Scope of Work for Storages	Sl. No: 3 Integrate storage systems with existing infrastructure including servers, networks, and backup solutions	Kindly confirm existing Block level and Objective storage used capacity details in DC-DRC	Bidder to refer corrigendum-5.
657	76	Annexure-8 Scope of Work	Evaluation for Scope of Work for MSSQL - Microsoft SQL	Sl. No: 1 Installation and Configuration: Set up SQL Server databases and configure settings to ensure optimal performance and security.	Kindly confirm existing MSQL data size in DC and DRC sites	Bidders to comply with RFP/GeM bid terms and conditions
658	77	Annexure-8 Scope of Work	Evaluation for Scope of Work For Open shift	Sl. No: 8 Installation & Configuration of RHACS OCP clusters	Kindly provide existing OCP cluster work space and infra/work nodes details .OCP cluster exist only on DC or DRC sites?	OCP cluster required at both sites. Details will be shared with the selected bidder
659	80	Annexure-8 Scope of Work	Evaluation for Scope of Work for Backup Solution	Sl. No: 1 proposed backup solution installation, configuration, and deployment of an application in a cluster or load balancer configuration	Kindly confirm backup solution need to integrate with existing solution or this solution is applicable for new environment?. If possible provide existing backup software and data size .	Same is requested for new infrastructure. Bidders to comply with RFP/GeM bid terms and conditions
660	81	Annexure-8 Scope of Work	Evaluation for Scope of Work for Jboss solution	Sl. No: 1 install, configure, and deploy applications in a clustered or load-balanced configuration using JBoss Application Server	Clarifications : Whether Jboss environment is required for both Linux and Windows environments. Splitup for both environments.	RedHat Linux Platform
661	79	Annexure-8 Scope of Work	Evaluation for Scope of Work for Apache Tomcat	Sl. No. 1 Apache Tomcat web & application server installation, configuration, and deployment in a cluster or load balancer configuration	Kindly confirm Apache Tomcat environment required for Linux or Windows platform? .Details of any existing version and data size.	RedHat Linux Platform
662	15	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	2. Integration & Interfaces	2.1. The selected bidder has to work with different application vendors in order to integrate new solution to the existing workload or new workloads during contract period.	Clarifications: Whether bank will help for third party bank applications integrations along with application vendor.	Details will be shared with the selected bidder
663	76	Annexure-8 Scope of Work	Evaluation for Scope of Work for Storages	Sl. No: 3 Integrate storage systems with existing infrastructure including servers, networks, and backup solutions	Kindly provide existing infrastructure details like storage, backup softwares	Details will be shared with the selected bidder
664	146	Annexure-9 Technical Specifications	Table-L Backup Solution for 500 Servers at DC and DRC	Sl. No: 45 Offered Device shall integrate and utilize customer's current tape backup infrastructure in the following aspects : Compatibility with existing tape library and tape drives Offered device shall have integrated de-duplication license & replication license so that only unique data or DE duplicated data are transferred to remote / DR location.	Kindly confirm existing Tape library details in DC-NDR .	Details will be shared with the selected bidder
665	149	Annexure-9 Technical Specifications	Table-M Technical Specification of Managed file transfer Solution:	Sl. No: 46 The solution should possess the capability to create shared folders for each group, department, or team, with customizable access levels and storage size restrictions.	Could you explain about this requirement in detail?	Bidders to comply with RFP/GeM bid terms and conditions

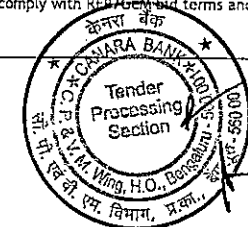




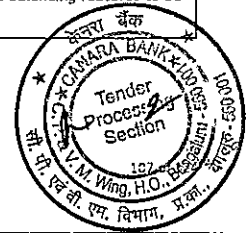
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
666	149	Annexure-9 Technical Specifications	Table-M Technical Specification of Managed file transfer Solution:	Sl. No: 50 The solution should include comprehensive audit logging capabilities, capturing all activities such as data upload, share, download, cut, copy, paste, and rename. These logs must be stored in a non-tamperable format to ensure the integrity and reliability of the recorded information for compliance and security purposes.	The cut, copy, paste, rename happens outside the MFT application could you specify in more details about this requirement?	Bidders to comply with RFP/GeM bid terms and conditions
667	172	Annexure-16 Bill of Material	Table - C Price details of Software/License Items (Subscription based Licenses)	Sl. No: 8 File Sync Software instance base with support (Qty- 50)	Can specify what do you mean by instances here? Servers or concurrent file syncs?	Yes. Instance are referred to servers
668	Na	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC)	Sl. No: 6- Memory Slot Count- Minimum 24 or higher, Minimum 8 free memory slots should be available.	Minimum 16 or higher, Minimum 8 free memory slots should be available.	Bidder to refer corrigendum-5.
669	12	SECTION B - INTRODUCTION	5. Requirement Details	5.2. The term of contract will be for a period of five (05) years. However, Bank reserves the right to have an annual review on completion of 12 months the date of acceptance of purchase order. If the services are found to be unsatisfactory Bank reserves the right to discontinue the Services.	1. Contract period should cover even implementation period hence >5years 2. We assume unsatisfactory here means if the SLAs are breached beyond the maximum permissible limits of the contract	Bidders to comply with RFP/GeM bid terms and conditions
670	14	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	1. Project Timelines	1.6. The installation will be deemed as incomplete if any component of the hardware/Software is not delivered or is delivered but not installed and / or not operational or not acceptable to the Bank after acceptance testing/ examination. In such an event, the supply and installation will be termed as incomplete and system(s) will not be accepted and the warranty period will not commence. The installation will be accepted only after complete commissioning of hardware.	We assume that being operational hereby means, supplied hardware and software are configured as per the design requirement and specifications. Signoff should not be depend on running of applications as its beyond the scope of bidder	Bidders to comply with RFP/GeM bid terms and conditions
671	15	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	1. Project Timelines	1.10. Date of delivery shall be treated as date of last material delivered to the ordered locations if materials are not damaged.	There may be many items required at the site; we assume partial here means when the particular item is not delivered in completeness i.e. there is no short shipment in an item. However the timelines should not impact the items which are delivered completely	Bidders to comply with RFP/GeM bid terms and conditions



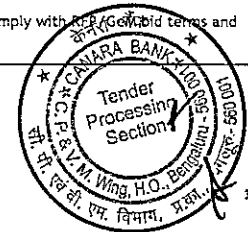
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
672	17	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	7. Penalties/Liquidated Damages	7.1. Penalties/Liquidated damages for delay in Supply, Installation, Configuration, Implementation Other related items would be as under:	We request to keep it penalty applicable only on delayed item, not on complete value of section	Bidders to comply with RFP/GeM bid terms and conditions
673	25	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	12. Annual Maintenance Contract (AMC) / Annual Technical Support (ATS) (if contracted):	12.3. Support for maintenance of solution (including Hardware, Software, OS and software license) supplied should be available for a minimum period of Three (3) years, covering all parts, maintenance and support, after expiry of warranty period.	Since the AMC/ATS is only for 2 years post warranty so we assume, 3 years hereby means that the solution should be available for purchase of 1 year extra AMC after 5 years of wty+AMC period is over	Bidders to comply with RFP/GeM bid terms and conditions
674	27	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	19. Right to Audit	19.1. The selected bidder has to get itself annually audited by internal/ external empaneled Auditors appointed by the Bank/inspecting official from the Reserve Bank of India or any regulatory authority, covering the risk parameters finalized by the Bank /such auditors in the areas of products (IT hardware/software) and services etc., provided to the Bank and the selected bidder is required to submit such certification by such Auditors to the Bank. The selected bidder and or his/their outsourced agents/subcontractors (if allowed by the Bank) shall facilitate the same. The Bank can make its expert assessment on the efficiency and effectiveness of the security, control, risk management, governance system and process created by the selected bidder. The selected bidder shall, whenever required by the Auditors, furnish all relevant information, records/data to them. All costs for such audit shall be borne by the Bank.	We assume that the scope under this audit is restricted to the project	Bidders to comply with RFP/GeM bid terms and conditions
675	49	SECTION G - GENERAL CONDITIONS	17. Business Continuity Plan:	17.1. The service provider/vendor/ Bidder shall develop and establish a robust Business Continuity and Management of Disaster Recovery Plan if not already developed and established so as to ensure uninterrupted and continued services to the Bank and to ensure the agreed upon service level. 17.2. The service provider/vendor/ Bidder shall periodically test the Business Continuity and Management of Disaster Recovery Plan. The Bank may consider joint testing and recovery exercise with the Service provider/vendor.	This RFP has limited scope of the DC and DR, bidder in his limited role can't be expected to provide BCP as it involves operations of the DC and entire DC architecture & items; if it is still asked then there should be a separate scope and price in the bid. And giving plan should be a separate activity, not related to signoff of the hardware/software	Bidders to comply with RFP/GeM bid terms and conditions
676	43-44	SECTION G - GENERAL CONDITIONS	4. Human Resource Requirement	Entire Clause	Manpower requirement for the operation period is not mentioned in the RFP. Kindly specify the minimum resources required to maintain the Operation period OR It is left for the bidder to decide	Bidders to comply with RFP/GeM bid terms and conditions



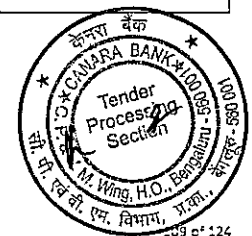
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
677	64	Annexure-2 Pre-Qualification Criteria	Sl. No: 8	Pre-Qualification Criteria The Bidder/OEM should have successfully supplied minimum cumulative 500 Nos. of Servers in India in the last three years out of which the bidder should have successfully supplied Hardware and software as a service model at least 100 servers deployed at Customer's DC and DR in Indian Market in any 1 Scheduled Commercial Bank/ NBFC/ Insurance Company/ PSU/ Central Government Organization in India in the last three years as on the date of submission of bid for this RFP.	Requesting the bank to kindly consider 7 years of experience in supplying servers. Also kindly consider to include state government/agencies experience in criteria The additional condition of supplying 100 servers as a service model is purely incidental because not necessarily bidder would have gained experience in such financial modeling of project and moreover the current RFP is not on service model so additional condition of 100 servers through service model should be removed. The clause can be met by OEM or bidder in case of 500 servers, but looks like an omission when it is about experience of 100 servers as only bidder is mentioned.	Bidder to refer corrigendum-5.
678	75	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 32 The Bidder should note that Servers & Other Items being procured shall be delivered at locations as per requirements of bank and the Bidder will be required to support all such installations. The Bank reserves the right to change location by giving prior notice.	Kindly share the list of locations where the infra to be installed / shifted.	Details will be shared with the selected bidder
679	75	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 38 The proposed server network interfaces ports should be compatible for connecting bank CISCO switches.	Kindly confirm the make, model & network interfaces ports of existing Network Switch	Bidder to refer corrigendum-5.
680	75	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 39 The proposed server FC HBA interface ports should be compatible for existing SAN Switch.	Kindly confirm the make, model & FC HBA interface ports of existing SAN Switch	Bidder to refer corrigendum-5.
681	74	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 40 All hardware delivered to be rack mounted, powered on and configured properly including tape drive, tape library, server rack with PDU, TOR Switch etc., supplied as part of this RFP	Our understanding is that Bank will provision the power upto the rack PDU. Kindly confirm.	Required space and power will be provided by Bank.
682	75	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 42. The Bidder will responsible for the following: k. SAN connectivity to bank existing SAN Switch	Kindly share the approx distance from existing SAN switch to the new SAN switch which to be supplied under this RFP	Bidder to refer corrigendum-5.
683	75	Annexure-8 Scope of Work	Evaluation for Scope of Work for this project	Sl. No: 42 The Bidder will responsible for the following: l. LAN connectivity to bank existing network switch	Kindly share the approx distance from existing SAN switch to the new Network switch which to be supplied under this RFP	Bidders to comply with RFP/GeM bid terms and conditions
684	76	Annexure-8 Scope of Work	Evaluation for Scope of Work for Storages	Sl. No: 3 Integrate storage systems with existing infrastructure including servers, networks, and backup solutions	Kindly share the details of existing infrastructure which to be integrated with new proposed Storage system.	Details will be shared with the selected bidder
685	77	Annexure-8 Scope of Work	Evaluation for Scope of Work for Hyper-V - Microsoft	Sl. No: 7 Configuration of failover clustering or network load balancing features.	Our understanding on "network load balancing features" is Hyper-V inbuilt feature, no additional NLB is required here. Kindly confirm	Hyper-V inbuilt clustering/load balancing features to be used



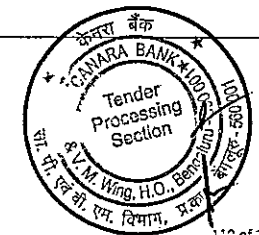
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
686	82	Annexure-8 Scope of Work	Evaluation for Scope of Work for TOR Switches	Sl. No: 9 Bidder should ensure use the IP address provided by Bank for any of the host without network architectural changes at DC and DRC	Our understanding is that IP addressing will be designed by bank and share to successful bidder. Kindly confirm	IP addressing will be taken care by Bank.
687	82	Annexure-8 Scope of Work	Evaluation for Scope of Work for TOR Switches	Sl. No: 13 Bidder has to Plan, Design considering various failovers scenarios, Migrate, Integrate with existing and future infrastructure, implement day to day changes, maintain and coordinate with OEM at Bank Data Centre and at Data Recovery Centre.	Kindly confirm what is required to be migrated? Kindly share the details	Bidders to comply with RFP/GeM bid terms and conditions
688	82	Annexure-8 Scope of Work	Evaluation for Scope of Work for TOR Switches	Sl. No: 15 Bidder should ensure and demonstrate failover scenarios at DC and to ensure Disaster recovery Plan for Business Continuity.	Our understanding on demonstration of failover scenario is HA testing of DC devices. Kindly confirm.	Selected Bidder has to demonstrate all possible failover scenarios as per RFP clause.
689	82	Annexure-8 Scope of Work	Evaluation for Scope of Work for TOR Switches	Sl. No: 18 Bidder to submit Migration plan, implementation document, solution architecture, traffic flow, cabling diagram etc.	Kindly confirm what is required to be migrated? Kindly share the details	Bidders to comply with RFP/GeM bid terms and conditions
690	82	Annexure-8 Scope of Work	Evaluation for Scope of Work for TOR Switches	Sl. No: 25 Bidder to configure the device to integrate with SIEM, NBA etc.	Bidder is required to do the necessary configuration at TOR switch. Configuration at SIEM & NBA end to be done by the Bank.	Bidders to comply with RFP/GeM bid terms and conditions
691	82	Annexure-8 Scope of Work	Evaluation for Scope of Work for TOR Switches	Sl. No: 26 Bidder to configure uplink from Spine switch to Firewall with redundant 10/25/40/100Gbps links.	Firewall & Spine switch is not part of the rfp. Kindly suggest.	Bidders to comply with RFP/GeM bid terms and conditions
692	138	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	A. Type 1 Switch - 14 numbers (07 numbers in DC and 07 numbers in DRC) - Mgmt. Sl. No: 24 The Switches must be supplied with Indian Standard Power cables.	Rack PDU socket requested is C13 & C19 type and here it is mentioned as Indian standard power cords. Request you to please clarify the required type of power cords, since Indian standard power cords will not fit to the PDUs requested.	Bidder to refer corrigendum-5.
693	142	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	In addition to the above access switches Bidder to supply Distribution Switches in High availability with required capacity to connect all supplied access switches with dual uplink of 10/40/100 Gbps in active-active mode for redundancy and load sharing ( DC - 2, DRC - 2 )	* What is the uplink speed required to the core or the port speed availability in the core. * Will the management switch (Type1 switch) also get connected to the distribution switch itself? If Yes, request you to please add 40G uplinks also as option to the Specification of Type1 switch	Bidders to comply with RFP/GeM bid terms and conditions
694	NA	Generic	Generic	There is no clause on Limitation of liability CAP	Bidder's cumulative liability for its obligations under the contract shall not exceed the value of the charges payable by the Bank within the remaining duration of the contract term from the day claim is raised and selected agency shall not be liable for incidental, consequential, or indirect damages including loss of profit or saving	Bidders to comply with RFP/GeM bid terms and conditions
695	NA	Generic	Generic	Right to suspend and terminate by bidder	Bidder should have right to suspend the services if payments are delayed by 30 days and right to terminate, if payments are delayed by 60 days over and above 30 days credit period	Bidders to comply with RFP/GeM bid terms and conditions



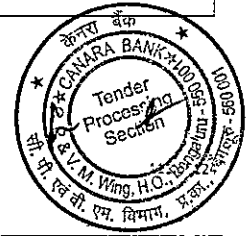
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
696	18	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	7. Penalties/Liquidated Damages	7.2. Penalties/Liquidated damages for not maintaining uptime: 7.2.1 & 7.2.2  % of total cost* for every hour and total cost means total cost under annexure-16	We assume that penalty will be applied on the failed device, not the sum total of annexure 16 otherwise failure of 1hr for each server failure will mean reduction of half the cost of server [0.1%*500] Similarly for other hardware as well, we assume penalty is applied on total cost of failed device	Bidders to comply with RFP/GeM bid terms and conditions
697	41	SECTION F - OWNERSHIP & AWARDDING OF CONTRACT	13. Order Cancellation/Termination of Contract	13.1. Bank reserve the right to terminate the contract with or without assigning any reasons by serving notice to the vendor at least 30 days prior.	Request for deletion of clause as it allows termination without any fault of the bidder. This will make the whole business case for the project non viable as will carry the risk of cancellation throughout (irrespective of any amount of good work done for the project	Bidders to comply with RFP/GeM bid terms and conditions
698	48	SECTION G - GENERAL CONDITIONS	14. Exit Management Plan	14.10. Successful bidder will provide shadow support for a minimum of 90 days or as decided by the Bank before the end of termination of notice period or expiry of the contract as applicable at no additional cost to the Bank.	The EXIT management period is 6 months, out of which last 90 days are kept for shadow support. What is the definition of shadow support, what will be the deliverables because if those are the same then bidder should be paid for the delivered services, as have been paid before the start of EXIT period	Bidders to comply with RFP/GeM bid terms and conditions
699	49	SECTION G - GENERAL CONDITIONS	19. Adherence to Banks IS Security/Cyber Security Policies:	19.2. In case of any security incident including but not limited to data breaches, denial of service, service unavailability, etc., the Bidder/vendor/Service Provider shall immediately report such incident to the Bank.	As bidder is not running managed services or operations for the bank hence such incidents will not be noticed by bidder's team but by DC operations team. Hence the clause should not be kept as bidder can't be made responsible for something bidder is not managing	Bidders to comply with RFP/GeM bid terms and conditions
700	52	SECTION G - GENERAL CONDITIONS	25. Force Majeure	25.4. In such a case, the time for performance shall be extended by a period (s) not less than the duration of such delay. If the duration of delay continues beyond a period of three months, the Bank and the selected bidder shall hold consultations with each other in an endeavor to find a solution to the problem. Notwithstanding above, the decision of the Bank shall be final and binding on the selected bidder.	If the duration of delays is beyond 3 months then bidder should have equal rights to decide. Bidder is not running away from the services but beyond a point (3 months), bidder has to decide looking at condition of the project. Please change it to "If the duration of delay continues beyond a period of three months, the Bank and the selected bidder shall hold consultations with each other in an endeavor to find a solution to the problem. Notwithstanding above, the decision of the Bank shall be final and binding on the selected bidder. Bidder will have right to exit the contract in case of situation not back to normal in 3 months	Bidders to comply with RFP/GeM bid terms and conditions
701	24	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	10. Scope involved during Contract period	10.9. Any server for middleware, database, OS and database licenses to be provided by the successful bidder without any additional cost to the Bank.	Since the bid is published with all the required hardware, OS and Database software. Request Bank to clarify on this points	Bidders to comply with RFP/GeM bid terms and conditions
702	64	Annexure-2 Pre-Qualification Criteria	Sl. No. 6	Pre-Qualification Criteria: The bidder should have yearly average turnover of 300 Crores in India for the last three financial years 2020-2021, 2021-2022, 2022-2023 from their Indian operation as per the audited Financial Statements. This must be the individual company turnover and not of any group of companies.	We would request Bank to consider Gem/CVC Guidelines for Bids All Canara Bank previous Gem Bids have come with turnover as per gem guidelines we request you consider same for this bid. We request you to kindly amend the turnover as per gem/CVC guidelines or amend it as "The bidder/OEM should have yearly average turnover of 300 Crores in India for the last three financial years 2020-2021, 2021-2022, 2022-2023 from their Indian operation as per the audited Financial Statements. This must be the individual company turnover and not of any group of companies."	Bidders to comply with RFP/GeM bid terms and conditions



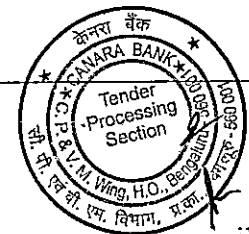
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
703	64	Annexure-2 Pre-Qualification Criteria	Sl. No: 8	Pre-Qualification Criteria The Bidder/OEM should have successfully supplied minimum cumulative 500 Nos. of Servers in India in the last three years out of which the bidder should have successfully supplied Hardware and software as a service model at least 100 servers deployed at Customer's DC and DR in Indian Market in any 1 Scheduled Commercial Bank/ NBFC/ Insurance Company/ PSU/ Central Government Organization in India in the last three years as on the date of submission of bid for this RFP.	Request to change it as 9. The Bidder/OEM should have successfully supplied minimum cumulative 500 Nos. of Servers in India in the last three years out of which the Bidder/OEM should have successfully supplied Hardware and software as a service model at least 100 servers deployed at Customer's DC and DR in Indian Market in any 1 Scheduled Commercial Bank/ NBFC/ Insurance Company/ PSU/ Central Government Organization in India in the last three years as on the date of submission of bid for this RFP.	Bidder to refer corrigendum-5.
704	180	Annexure-16 Bill of Material	Table - G (Optional) Price details of Optional Items for 5 Years	8. Object Storage per TB Cost 9. Block Storage per TB Cost 10. Block Storage per controller cost 11. Object Storage per controller cost	As per OEM Policy Storage systems prices cannot be shared as components-wise (like TB cost and controller cost)	Bidders to comply with RFP/GeM bid terms and conditions
705	169	Annexure-16 Bill of Material	Table - A Price details of Hardware Items	Sl. No: 20 Distribution Switches in High availability with required capacity to connect all supplied access switches with dual uplink of 10/40/100 Gbps in active-active mode for redundancy and load sharing as per Technical Specification (Annexure-9)	Please share us the detailed specifications of distribution switches	Bidders to comply with RFP/GeM bid terms and conditions
706	172	Annexure-16 Bill of Material	Table - C Price details of Software/License Items (Subscription based Licenses)	Sl. No: 8 File Sync Software instance base with support (Qty- 50)	Please share us the detailed specifications	Bidder to refer corrigendum-5. Details provided in Annexure-8 Scope of Work.
707	146	Annexure-16 Bill of Material	Table-M Technical Specification of Managed file transfer Solution:	Sl. No: 3 The MFT solution should support FTP, FTP/S, SSH/SFTP, SSH/SCP and should have capability to support, AS1, AS2, AS3 etc. for future requirements.	All file transfer is done over HTTPS. Data in flight is fully always encrypted using TLS 1.2 at a minimum, with strong ciphers. Kindly request you to amend accordingly	Bidders to comply with RFP/GeM bid terms and conditions
708	148	Annexure-9 Technical Specifications	Table-M Technical Specification of Managed file transfer Solution:	Sl. No: 29 The proposed solution should provide embedded database and should also support and option to deploy it on oracle DB.	Solution comes with an embedded database. Each OEM will come with their own Database. Request to kindly amend it Oracle or equivalent	Bidder to refer corrigendum-5.
709	148	Annexure-9 Technical Specifications	Table-M Technical Specification of Managed file transfer Solution:	Sl. No: 37 The solution should support oracle DB for transactional/ logs as well as file system database.	Each OEM will come with their own Database. Request to kindly amend it Oracle or equivalent	Bidder to refer corrigendum-5.
710	146	Annexure-9 Technical Specifications	Table-M Technical Specification of Managed file transfer Solution:	Additional Query	The offer licensed per user, and we need to quote for how many number of users? Accordingly, we suggest the hardware requirement. Will customer provide the On prem infrastructure as per our requirement or we need to incorporate the same into our proposal.	On prem infrastructure will be provided for setting up the MFT solution



Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
711	136	Annexure-9 Technical Specifications	Table-I Technical Specification of 27 server racks (19 Nos at DC - Single Phase, 8 Three Phase)	Sl. No. 7 (Rack Size) 600 mm*1200mm *2100mm ( 600mm - Width , 1200mm Depth , 2100mm Height)	It is recommended for customer to specify that the racks to be supplied with air sealing kit to prevent cold air getting mixed with hot air , also these should not any vents on the top , bottom and side panels which will change the direction of the air flow. Customer to mention on brush panels cable glands on top and bottom so that there is no loose gaps even after pulling the cables to the rack .	Bidder to refer corrigendum-5.
712	136	Annexure-9 Technical Specifications	Table-I Technical Specification of 27 server racks (19 Nos at DC - Single Phase, 8 Three Phase)	Sl. No: 10- Over load protection MCB PDU rating approximate 14KVA per PDU for single phase with 63A (4 MCB) PDU rating approximate 22KVA per PDU for Three phase with 32A (6 MCB)	Recommended customer to use 24 sockets of C13 & 4 nos of C19 which will be each for branch wise distribution.	Bidders to comply with RFP/GeM bid terms and conditions
713	137	Annexure-9 Technical Specifications	Table-J Technical Specification of server racks (23 Nos with three phase at DR)	Sl. No. 7 (Rack Size) 600 mm*1200mm ( 600mm - Width , 1200mm Depth )	It is recommended for customer to specify that the racks to be supplied with air sealing kit to prevent cold air getting mixed with hot air , also these should not any vents on the top , bottom and side panels which will change the direction of the air flow. Customer to mention on brush panels cable glands on top and bottom so that there is no loose gaps even after pulling the cables to the rack .	Bidder to refer corrigendum-5.
714	171	Annexure-16 Bill of Material	Table - B Price details of Software/License Items (Perpetual)	Sl. No: 1. Windows 2022 Data Centre Edition 16 Corepack with Enterprise support. 2. Windows 2022 Standard Centre Edition 16 Core pack with Enterprise support. 3. Microsoft SQL 2022 standard edition two core pack with Enterprise support.	We request Bank to clarify the level of Enterprise Support required here. Since Microsoft Support Service level is offered in 3 packages and confirm about the existing Service agreement you have OR Bank is looking for the license with Software Assurance	Bidder to refer corrigendum-5.
715	86	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC)	Sl. No. 6 Memory Ram Size- 128GB*16 = 2 TB	We request Canara Bank to change this to 2TB of Total Memory for better memory bandwidth, MI percentage and price / performance.	Bidder to refer corrigendum-5.
716	86	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC)	Sl. No: 6- Memory Slot Count- Minimum 24 or higher, Minimum 8 free memory slots should be available.		Bidder to refer corrigendum-5.
717	88	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC)	Sl. No: 17 PCI Slots- Minimum 4 - x16 PCIe Gen4 or higher free slots(Peripheral Component Interconnect Express)	We request this to be changed to Minimum 4 - PCIe Gen4 or higher free slots(Peripheral Component Interconnect Express)	Bidder to refer corrigendum-5.
718	94	Annexure-9 Technical Specifications	Table-B Technical Specification - 28 servers (17 DC and 11 DRC)	Sl. No: 17 PCI Slots- Minimum 4 - x16 PCIe Gen4 or higher free slots(Peripheral Component Interconnect Express)	We request this to be changed to Minimum 4 - PCIe Gen4 or higher free slots(Peripheral Component Interconnect Express)	Bidder to refer corrigendum-5.
719	97	Annexure-9 Technical Specifications	Table-C Technical Specification - 100 servers (60 DC and 40 DRC)	Sl. No: 5- Processor Socket Minimum 2 sockets i.e., 32*1 =32 core ( 1 Populated & 1 For future upgrade )	Since other requirements mentioned in the RFP for the server cannot be met via single socket configuration , namely - 1. PCI slot expansion ; PCI Cards required to be populated ; Memory required to be populated and free slots cannot be upgraded without additional CPU etc.. We request Canara Bank to go with dual socket CPU and Amend this clause with 16 Core DUAL CPU	Bidder to refer corrigendum-5.
720	99	Annexure-9 Technical Specifications	Table-C Technical Specification - 100 servers (60 DC and 40 DRC)	Sl. No: 9 SAN & Network	Required SAN and Network cards cannot be populated in single socket system.. We request the server to be changed to dual socket to meet these criteria. (total of 6 cards are required -- 2 nos of 1G, 2Nos of 10G and 2 Nos of FC).	Bidder to refer corrigendum-5.

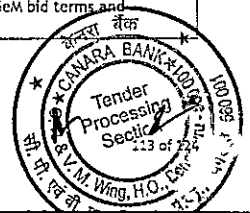


Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
721	100	Annexure-9 Technical Specifications	Table-C Technical Specification - 100 servers (60 DC and 40 DRC)	Sl. No: 17 PCI Slots- Minimum 4 - x16 PCIe Gen4 or higher free slots(Peripheral Component Interconnect Express)	This clause cannot be met in single socket system. We request the server to be moved to dual socket to abide these clause.	Bidder to refer corrigendum-5.
722	104	Annexure-9 Technical Specifications	Table-D Technical Specification - 54 servers (28 DC and 26 DRC)	Sl. No: 5- Processor Socket Minimum 2 sockets i.e., 24*1 =24 core ( 1 Populated & 1 For future upgrade )	Since other requirements mentioned in the RFP for the server cannot be met via single socket configuraion , namely - 1. PCI slot expansion ; PCI Cards required to be populated ; Memory required to be populated and free slots cannot be upgraded without additional CPU etc.. We request Canara Bank to go with dual socket CPU and Ammend this clause with 16Core Dual CPU	Bidder to refer corrigendum-5.
723	105	Annexure-9 Technical Specifications	Table-D Technical Specification - 54 servers (28 DC and 26 DRC)	Sl. No: 9 SAN & Network	Required SAN and Network cards cannot be populated in single socket system.. We request the server to be changed to dual socket to meet these criteria. (total of 6 cards are required -- 2 nos of 1G, 2Nos of 10G and 2 Nos of FC).	Bidder to refer corrigendum-5.
724	107	Annexure-9 Technical Specifications	Table-D Technical Specification - 54 servers (28 DC and 26 DRC)	Sl. No: 17 PCI Slots- Minimum 4 - x16 PCIe Gen4 or higher free slots(Peripheral Component Interconnect Express)	This clause cannot be met in single socket system. We request the server to be moved to dual socket to abide these clause.	Bidder to refer corrigendum-5.
725	111	Annexure-9 Technical Specifications	Table-E Technical Specification - 226 servers (135 DC and 91 DRC)	Sl. No: 9 SAN & Network	Required SAN and Network cards cannot be populated in single socket system.. We request the server to be changed to dual socket to meet these criteria. (total of 6 cards are required -- 2 nos of 1G, 2Nos of 10G and 2 Nos of FC).	Bidder to refer corrigendum-5.
726	113	Annexure-9 Technical Specifications	Table-E Technical Specification - 226 servers (135 DC and 91 DRC)	Sl. No: 17 PCI Slots- Minimum 4 - x16 PCIe Gen4 or higher free slots(Peripheral Component Interconnect Express)	This clause cannot be met in single socket system. We request the server to be moved to dual socket to abide these clause.	Bidder to refer corrigendum-5.
727	116	Annexure-9 Technical Specifications	Table-F Custom Technical Specification - 12 servers	Sl. No: 5- Processor Processor Make- Latest generation x86_64 bit architecture-based CPU's	We request Canara bank to Change this to 3rd generation or higher x86_64 bit architecture based CPU's	Bidders to comply with RFP/GeM bid terms and conditions
728	116	Annexure-9 Technical Specifications	Table-F Custom Technical Specification - 12 servers	Sl. No: 5- Processor Socket Minimum 2 sockets i.e., 16*1 =16 core ( 1 Populated & 1 For future upgrade ) - Type 1 Minimum 2 sockets i.e., 32*1 =32 core ( 1 Populated & 1 For future upgrade ) - Type 2 Minimum 2 sockets i.e., 32*1 =32 core ( 1 Populated & 1 For future upgrade ) - Type 3	Since other requirements mentioned in the RFP for the server cannot be met via single socket configuraion , namely - 1. PCI slot expansion ; PCI Cards required to be populated ; Memory required to be populated and free slots cannot be upgraded without additional CPU etc.. We request Canara Bank to go with dual socket CPU and Ammend this clause as : Minimum 2 sockets i.e., 16*2 =32 core --Type 1 Minimum 2 sockets i.e., 16*2 =32 core - Type 2 Minimum 2 sockets i.e., 16*2 =32 core - Type 3	Bidder to refer corrigendum-5.
729	117	Annexure-9 Technical Specifications	Table-F Custom Technical Specification - 12 servers	Sl. No: 6- Memory Ram Size- 128GB*16 = 2 TB	This clause cannot be met with one variant of x86 CPU with single socket populated. We request Canara.Bank to change the server to dual socket to meet this criteria.	Bidder to refer corrigendum-5.
730	118	Annexure-9 Technical Specifications	Table-F Custom Technical Specification - 12 servers	Sl. No. 7 - SSD  Slot Count 10 or higher, Minimum 4 free slots should be available for future upgrade - Type 1 12 or higher Minimum 4 free slots should be available for future upgrade - Type 2 38 or higher Minimum 4 free slots should be available for future upgrade - Type 2	We request Canara bank to have all servers with min 12 or higher disk slots. Type 3 - 38 slots are asked which are not possible in standard server and a JBOD may have to be provisioned .	Bidder to refer corrigendum-5.

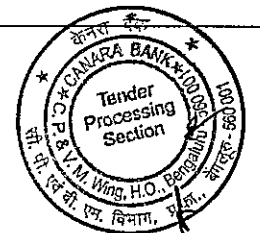




Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
731	118	Annexure-9 Technical Specifications	Table-F Custom Technical Specification - 12 servers	Sl. No: 9 SAN & Network	Required SAN and Network cards cannot be populated in single socket system.. We request the server to be changed to dual socket to meet these criteria. (total of 6 cards are required -- 2 nos of 1G, 2Nos of 10G and 2 Nos of FC).	Bidder to refer corrigendum-5.
732	120	Annexure-9 Technical Specifications	Table-F Custom Technical Specification - 12 servers	Sl. No: 17 PCI Slots- Minimum 4 - x16 PCIe Gen4 or higher free slots(Peripheral Component Interconnect Express)	This clause cannot be met in single socket system. We request the server to be moved to dual socket to abide these clause.	Bidder to refer corrigendum-5.
733	131	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.OPB Usable Space: DC -1, DRC -1)	Sl. No. 38 Core technology - Object  1. Offered Object storage core technology shall be able to abstract the underlying servers, to create a uniformly scalable storage pool 2. There shall be No size limit for object or files which can be stored in the cluster. 3. Offered storage shall do automatic Rebalancing when adding a new server in the cluster 4. Offered storage shall allow capacity extensions done by adding disks to existing servers (scale-up) or adding additional servers to the system (scale-out).	Request bank to cosider support for upto 16TB file size as optional on NAS Storage.	Bidder to refer corrigendum-5.
734	140	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	B. Type 2 Switch - 24 numbers (12 DC+ 12 DRC) for Data Sl. No. 33 High Mean Time Between Failure values (>3.5 lakh hours) should be available to ensure long life of switch hardware.	Request you to change this to "High Mean Time Between Failure values (>2.7 lakh hours) should be available to ensure long life of switch hardware.  Request Bank to change this value, as this is single OEM specific point . Higher MTBF values always donot provide the product reliability measurements	Bidder to refer corrigendum-5.
735	142	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	C. Type 4 Switch - 4 numbers (2 DC+ 2 DRC) - Storage Sl. No. 33 High Mean Time Between Failure values (>3.5 lakh hours) should be available to ensure long life of switch hardware.	Request you to change this to "High Mean Time Between Failure values (>2.7 lakh hours) should be available to ensure long life of switch hardware.  Request Bank to change this value, as this is single OEM specific point . Higher MTBF values always donot provide the product reliability measurements	Bidder to refer corrigendum-5.
736	154	Annexure-9 Technical Specifications	Table-N Technical Specifications of 4 SAN Director (2 Nos at DC and 2 Nos at DR)	Sl. No: 21 Other Features The director class switch should provide inter Chassis Link (ICL) for connecting multiple Chassis	The director class switch should provide Inter Chassis Link (ICL) or inter Switch Link (ISL) for connecting multiple Chassis  ICL is Single OEM specification , we provide the same capability using more open Industry standard ISL/Trunking . Request bank to change this remove or change this clause	Bidder to refer corrigendum-5.
737	77	Annexure-8 Scope of Work	Evaluation for Scope of Work For Open shift	Entire Clause	What is the Hardware configuration for Openshift hosting?	Details will be shared with the selected bidder
738	NA	Generic	Generic	Generic	What storage bank has present, does bank have Object, Block and File with certified Openshift CSI Driver? can same be used for Openshift Cluster?	Details will be shared with the selected bidder
739	NA	Generic	Generic	Generic	For Control Plane and Infrastructure Nodes (EFK, registry, Quay, ACS,ACM, Grafana, Prometheus) can you share the infra configuration bank is expecting to provide	Details will be shared with the selected bidder
740	NA	Generic	Generic	Generic	Bank to confirm if they intend the OEM to implement the solution for the mentioned scope of work	Bidders to comply with RFP/GeM bid terms and conditions



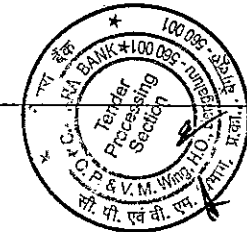
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
741	172	Generic	Generic	Generic	Please clarify on number of clusters considered to be delivered within 12 weeks.	Bidders to comply with RFP/GeM bid terms and conditions
742	138	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	A. Type 1 Switch - 14 numbers (07 numbers in DC and 07 numbers in DRC) - Mgmt. Sl. No: 16 Switch should support duplicates port traffic (Ingress and egress) to a local or remote monitoring port.	Need further clarity on this point	Switches must support port mirroring.
743	139	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	B. Type 2 Switch - 24 numbers (12 DC+ 12 DRC) for Data Sl. No: 7 Latency should be less than 2 microsecond.	Need to understand the calculation for Latency	Bidders to comply with RFP/GeM bid terms and conditions
744	140	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	B. Type 2 Switch - 24 numbers (12 DC+ 12 DRC) for Data Sl. No: 21 Switch should support duplicates port traffic (Ingress and egress) to a local or remote monitoring port.	Need further clarity on this point	Switches must support port mirroring.
745	140	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	B. Type 2 Switch - 24 numbers (12 DC+ 12 DRC) for Data Sl. No. 33 High Mean Time Between Failure values (>3.5 lakh hours) should be available to ensure long life of switch hardware.	Need further clarity on this point	Bidder to refer corrigendum-5.
746	141	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	C. Type 4 Switch - 4 numbers (2 DC+ 2 DRC) - Storage Sl. No: 6 Latency should be less than 1 microsecond.	Need to understand the calculation for Latency	Bidders to comply with RFP/GeM bid terms and conditions
747	85-159	Annexure-9 Technical Specifications	Entire Clause	Entire Clause	Requesting Bank to clarify if the SSD capacity mentioned in the RFP include boot drive capacity or it needs to be added seperately.	Bidder to refer corrigendum-5.
748	Na	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC)	Sl. No: 6- Memory Slot Count- Minimum 24 or higher, Minimum 8 free memory slots should be available.	Requesting bank to change it to minimum 16 memory slots per processor and minimum 50% free memory slots should be available so that bank has a better option for future expandability	Bidder to refer corrigendum-5.



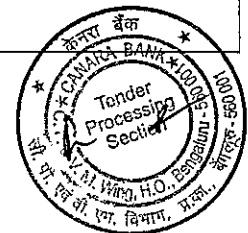
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
749	87	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC)	Sl. No: 9- SAN & Network Network cards 1 Gbps- 2*1Gbps - Two Network Cards, each equipped with at least two 1-gigabit network ports ( Four Port of 1Gbase-T On-Board or separate NIC with supported minimum 5 meter of compatible Cat6/Cat7 UTP Cable )	Request bank to clarify on the number of actual 1GB network card required. We understand that the requirement is for 4 ports of 1 GB ethernet. We would request bank to look at 4 -port (embedded/PCIe) card instead of dual port card inorder to maintain empty PCI slot for future expandability	Bidder to refer corrigendum-5.
750	87,93, 99, 105, 111 & 119	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 9 SAN & Network Network cards 10 Gbps 2*10Gbps -Two Network Cards, each equipped with at least two 10-gigabit network ports (Four Port BaseT NIC LOM or separate NIC with minimum 5 meter Cat6A/Cat7 UTP Cable.	Request bank to clarify on the number of actual 10 GB network card. We understand that the requirement is for 4 ports of 10 GB. We would request bank to look at 4 -port (embedded/PCIe) card instead of dual port card inorder to maintain empty PCI slot for future expandability	Bidder to refer corrigendum-5.
751	87, 93, 99, 105, 112, 119	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No. 10. OS & Hypervisor Compatibility Windows Compatibility- 2016/2019/2022	Request Bank to kindly remove Windows 2016 since it is EoL, also latest generation of servers supports Windows 2019 and above.	Bidder to refer corrigendum-5.



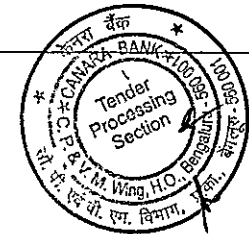
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
752	87, 93, 99, 106, 112 & 119	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 10- OS & Hypervisor Compatibility Other Latest Linux Flavours- Latest server operating versions of Centos, SUSE Linux, Oracle Linux, Ubuntu ,RHCOS	Request bank to remove CentOS since open source and community support is only available	Bidder to refer corrigendum-5.
753	87, 93, 99, 106, 112 & 119	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 10- OS & Hypervisor Compatibility Other Latest Linux Flavours- Latest server operating versions of Centos, SUSE Linux, Oracle Linux, Ubuntu ,RHCOS	Requesting bank to make it RHCOS/ Redhat Openshift container platform. As there is no separate certification for RHCOS. RHCOS is a part of Redhat Openshift container platform	Bidder to refer corrigendum-5.
754	88, 94, 100, 106, 112 & 120	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 14- Part 3 USB3.0 port and 1 VGA Port	Requesting bank to change it to USB 3.0 or higher and 1 VGA Port	Bidder to refer corrigendum-5.



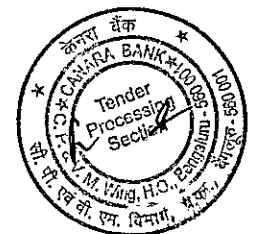
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
755	89, 95, 101, 107, 113 & 121	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 18 Remote Management- Telemetry Streaming, Idle Server Detection, Real-time power meter, temperature monitoring, customized administration and management of System Temperature and Cooling Sub-system.	Requesting bank to remove customized administration of System Temperature and Cooling Sub-system for wider participation of OEM	Bidder to refer corrigendum-5.
756	90, 96, 102, 108, 115 & 122	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 19- System Management Solution 3. The system management solution should be provided: c. Bare-metal server deployment and cloning	Please clarify cloning functionality desired	Bidder to refer corrigendum-5.
757	97	Annexure-9 Technical Specifications	Table-C Technical Specification - 100 servers (60 DC and 40 DRC)	Sl. No: 5- Processor Socket Minimum 2 sockets i.e., 32*1 =32 core ( 1 Populated & 1 For future upgrade )	Requesting bank to modify the requirement to accommodate two processors of 32 core; in order to meet network interface card & the memory requirement as per RFP. For a single processor only 3 Nos of PCIe slots & 16 nos of DIMM slots will be available. Now as per the RFP the total nos of PCIe slot required is 6 Nos & 24 nos DIMM slot required which can only be complied by adding another processor	Bidder to refer corrigendum-5.
758	110	Annexure-9 Technical Specifications	Table-E Technical Specification - 226 servers (135 DC and 91 DRC)	Sl. No: 5- Processor Socket Minimum 2 sockets i.e., 16*1 =16 core ( 1 Populated & 1 For future upgrade )	Requesting bank to modify the requirement to accommodate two processors of 16 core; in order to meet network interface card requirement. For a single processor only 3 Nos of PCIe slots & 16 nos of DIMM slots will be available. Now as per the RFP the total nos of PCIe slot required is 6 Nos & 24 nos DIMM slot required which can only be complied by adding another processor	Bidder to refer corrigendum-5.



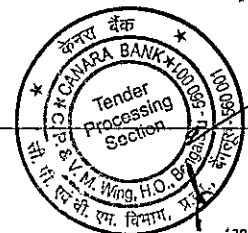
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
759	116	Annexure-9 Technical Specifications	Table-F Custom Technical Specification - 12 servers	Sl. No: 5- Processor Socket Minimum 2 sockets i.e., 16*1 =16 core ( 1 Populated & 1 For future upgrade ) - Type 1	Requesting bank to modify the requirement to accommodate two processors of 16 core; in order to meet network interface card requirement For a single processor only 3 Nos of PCIe slots & 16 nos of DIMM slots will be available. Now as per the RFP the total nos of PCIe slot required is 6 Nos & 24 nps DIMM slot required which can only be complied by adding another processor	Bidder to refer corrigendum-5.
760	118	Annexure-9 Technical Specifications	Table-F Custom Technical Specification - 12 servers	Sl. No: 7- SSD Slot Count- 38 or higher Minimum 4 free slots should be available for future upgrade - Type 2	Slot count 38 has been mentioned with minimum 4 free slots in the RFP. As per our calculation 12 slots are occupied with 4 free slots, as a result of which the slot count should be 16. Requesting bank to change slot count to 16 or 24 with minimum 4 free slots for wider participation of OEM	Bidder to refer corrigendum-5.
761	132	Annexure-9 Technical Specifications	Table-H Storage Technical Specifications: (Enterprise Block Storage 2.OPB Usable Space: DC -2, DRC -2)	Sl. No: 10- Hard Disk Capacity Each hard disk Capacity should not be less than 15 TB and not more than 20 TB	Each TLC NVMe SSD Capacity should not be more than 16 TB	Bidder to refer corrigendum-5.
762	138	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	A. Type 1 Switch - 14 numbers (07 numbers in DC and 07 numbers in DRC) - Mgmt.		Bidders to comply with RFP/GeM bid terms and conditions
763	140	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches.	B. Type 2 Switch - 24 numbers (12 DC+ 12 DRC) for Data Sl. No. 33 High Mean Time Between Failure values (>3.5 lakh hours) should be available to ensure long life of switch hardware.	Request to change the clause to Min 2L Hours or above to qualify all the standard OEMs	Bidder to refer corrigendum-5.
764	140	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches B. Type 2 Switch - 24 numbers (12 DC+ 12 DRC) for Data	Additional Clause	is there any existing Spine switches? Can you please let us know the Spine details to understand, also please confirm the leaf to spine connectivity type and speed?	Details will be shared with the selected bidder
765	142	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	C. Type 4 Switch - 4 numbers (2 DC+ 2 DRC) - Storage Sl. No. 33 High Mean Time Between Failure values (>3.5 lakh hours) should be available to ensure long life of switch hardware.	Request to change the clause to Min 2L Hours or above to qualify all the standard OEMs	Bidder to refer corrigendum-5.
766	140	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches C. Type 4 Switch - 4 numbers (2 DC+ 2 DRC) - Storage	Additional Clause- Proposed switches must support - iSCSI, Lossless (iSCSI), RDMA over Converged Ethernet version 2 (RoCE v1 and v2) and Non-Volatile Memory Express (NVMe over Fabrics)	DC Storage switches, hence please consider the this storage related protocol.	Bidders to comply with RFP/GeM bid terms and conditions
767	142	Annexure-9 Technical Specifications	Table-K Technical Specification of Network TOR Switches	In addition to the above access switches Bidder to supply Distribution Switches in High availability with required capacity to connect all supplied access switches with dual uplink of 10/40/100 Gbps in active-active mode for redundancy and load sharing ( DC - 2, DRC - 2 )	Please clarify the Points.. What is the predominant Port speed ?	Bidders to comply with RFP/GeM bid terms and conditions



Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
768	64	Annexure-2 Pre-Qualification Criteria	Sl. No. 6	Pre-Qualification Criteria: The bidder should have yearly average turnover of 300 Crores in India for the last three financial years 2020-2021, 2021-2022, 2022-2023 from their Indian operation as per the audited Financial Statements. This must be the individual company turnover and not of any group of companies.	Kindly request bank team to relax the turnover criteria of 300 Cr to 200 Cr and also to consider ORC in turnover calculation	Bidders to comply with RFP/GeM bid terms and conditions
769	64	Annexure-2 Pre-Qualification Criteria	Sl. No: 8	Pre-Qualification Criteria The Bidder/OEM should have successfully supplied minimum cumulative 500 Nos. of Servers in India in the last three years out of which the bidder should have successfully supplied Hardware and software as a service model at least 100 servers deployed at Customer's DC and DR in Indian Market in any 1 Scheduled Commercial Bank/ NBFC/ Insurance Company/ PSU/ Central Government Organization in India in the last three years as on the date of submission of bid for this RFP.	Kindly request Bank team to relax the minimum cumulative number of Servers to 300 Servers	Bidder to refer corrigendum-5.
770	77	Annexure-8 Scope of Work	Evaluation for Scope of Work For Open shift	Entire Clause	What is the Hardware configuration for Openshift hosting?	Details will be shared with the selected bidder
771	77	Annexure-8 Scope of Work	Evaluation for Scope of Work For Open shift	Entire Clause	What storage bank has present, does bank have Object, Block and File with certified Openshift CSI Driver? can same be used for Openshift Cluster?	Details will be shared with the selected bidder
772	32	SECTION D - BID PROCESS	6. Earnest Money Deposit (EMD)/Bank Guarantee in lieu of EMD	Entire Clause	Kindly request if Bank can consider Fixed Deposit with the Bank for the same amount.	Bidders to comply with RFP/GeM bid terms and conditions
773	15	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	3. Training:	The selected vendor has to give demo and explain operational guidelines of the product at the site of the installation to Bank's Officials.	Kindly share the No of Person and Training Location details	No separate training session is required, other than the training mentioned in the RFP document.
774	15	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	2. Integration & Interfaces	2.1. The selected bidder has to work with different application vendors in order to integrate new solution to the existing workload or new workloads during contract period.	Please share the Migration details for SOW. What kind of application running	Details will be shared with the selected bidder
775	15	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	2, Integration & Interfaces	2.1. The selected bidder has to work with different application vendors in order to, integrate new solution to the existing workload or new workloads during contract period.	Please share the existing workload details	Details will be shared with the selected bidder

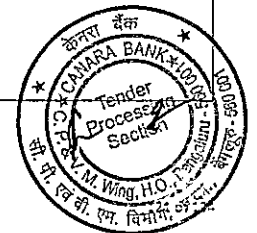


Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
776	17	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	7. Penalties/Liquidated Damages	7.1. Penalties/Liquidated damages for delay in Supply, Installation, Configuration, Implementation Other related items would be as under:  7.1.1. Non-compliance of the Supply/delivery of Hardware as per Table mentioned in clause 1.3, Section C will result in the Bank imposing penalty of 0.50% on delay in delivery per week or part thereof, on the Total cost of Servers & other Items mentioned in Table-A as per Bill of material Annexure-16, subject to the maximum of 10% of the Total Cost mentioned in Table - A.	Kindly amend this clause as the LD on undelivered products	Bidders to comply with RFP/GeM bid terms and conditions
777	20	SECTION C - DELIVERABLE AND SERVICE LEVEL AGREEMENTS	8. Payment Terms	8.1. The payment schedule for Hardware will be as under and will release after execution of contract agreement:  Full Clause	After Completion of Warranty Period (i.e., three years). Warranty period.:10% Please changes to 10% against submission of PBG of equivalent amount AMC HW half yearly in advance SW: ATS for SW yearly advance	Bidders to comply with RFP/GeM bid terms and conditions
778	64	Annexure-2 Pre-Qualification Criteria	Sl. No: 8	Pre-Qualification Criteria The Bidder/OEM should have successfully supplied minimum cumulative 500 Nos. of Servers in India in the last three years out of which the bidder should have successfully supplied Hardware and software as a service model at least 100 servers deployed at Customer's DC and DR in Indian Market in any 1 Scheduled Commercial Bank/ NBFC/ Insurance Company/ PSU/ Central Government Organization in India in the last three years as on the date of submission of bid for this RFP.	Kindly amend this clause as cumulative 300 Nos. of Servers in India in the last Seven years	Bidder to refer corrigendum-5.
779	64	Annexure-2 Pre-Qualification Criteria	Sl. No: 8	Pre-Qualification Criteria The Bidder/OEM should have successfully supplied minimum cumulative 500 Nos. of Servers in India in the last three years out of which the bidder should have successfully supplied Hardware and software as a service model at least 100 servers deployed at Customer's DC and DR in Indian Market in any 1 Scheduled Commercial Bank/ NBFC/ Insurance Company/ PSU/ Central Government Organization in India in the last three years as on the date of submission of bid for this RFP.	This is purchase on CAPX request you to drop the requirement of 100 Servers on SAS mode. Also requires to Cumulative 500 nos. to 300 nos.	Bidder to refer corrigendum-5.

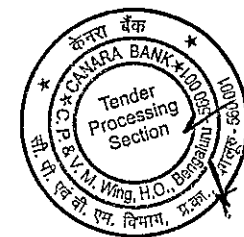




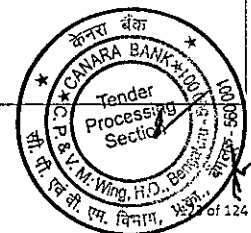
Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
780	205	Appendix-G DRAFT CONTRACT AGREEMENT	17. CORRUPT AND FRAUDULENT PRACTICES:	17.2. Vendor/Service Provider shall ensure compliance of CVC guidelines issued or to be issued from time to time for selection of vendor for Supply, Implementation, Migration and Support of the hardware by the Bank.	If you can remove the Software IBM, Jboss etc. from this scope of this RFP	Bidders to comply with RFP/GeM bid terms and conditions
781	88	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC)	Sl. No: 14 Port- 3 USB3.0 port and 1 VGA Port	We request the Bank to also add "RDX USB 3.0 External Removable RDX Drive with 5TB Media" with Each Server which gives these Servers an added technology & protects system & OS against Drive failure, System Crash, Virus Infection and ransomware. Previously, Banks used to buy DAT 160/DAT 320 etc along with the Server, but those are Obsolete. *OS Volume and Configuration Bare Metal Restore for Quick Server OS Uptime and Serviceability. *Protect System and OS Configurations against Drive Failure, System Crash, Virus Infection or Ransomware Attack. *Removable Disk and Eject Technology provides a True Air-Gapped Data Protection Mechanism.	Bidder to refer corrigendum-5.
782	94	Annexure-9 Technical Specifications	Table-B Technical Specification - 28 servers (17 DC and 11 DRC)	Sl. No: 14 Port- 3 USB3.0 port and 1 VGA Port	We request the Bank to also add RDX USB 3.0 External Removable RDX Drive with 5TB Media with Each Server which gives these Servers an added technology & protects system & OS against Drive failure, System Crash, Virus Infection and ransomware. Previously, Banks used to buy DAT 160/DAT 320 etc along with the Server, but those are Obsolete. OS Volume and Configuration Bare Metal Restore for Better Server OS Uptime and Serviceability. Protect Configurations against Drive Failure, System Crash, Virus Infection or Ransomware Attack. Removable Disk and Eject Technology provides a True Air-Gapped Data Protection Mechanism.	Bidder to refer corrigendum-5.
783	100	Annexure-9 Technical Specifications	Table-C Technical Specification - 100 servers (60 DC and 40 DRC)	Sl. No: 14 Port- 3 USB3.0 port and 1 VGA Port	We request the Bank to also add RDX USB 3.0 External Removable RDX Drive with 5TB Media with Each Server which gives these Servers an added technology & protects system & OS against Drive failure, System Crash, Virus Infection and ransomware. Previously, Banks used to buy DAT 160/DAT 320 etc along with the Server, but those are Obsolete. OS Volume and Configuration Bare Metal Restore for Better Server OS Uptime and Serviceability. Protect Configurations against Drive Failure, System Crash, Virus Infection or Ransomware Attack. Removable Disk and Eject Technology provides a True Air-Gapped Data Protection Mechanism.	Bidder to refer corrigendum-5.
784	106	Annexure-9 Technical Specifications	Table-D Technical Specification - 54 servers (28 DC and 26 DRC)	Sl. No: 14 Port- 3 USB3.0 port and 1 VGA Port	We request the Bank to also add RDX USB 3.0 External Removable RDX Drive with 5TB Media with Each Server which gives these Servers an added technology & protects system & OS against Drive failure, System Crash, Virus Infection and ransomware. Previously, Banks used to buy DAT 160/DAT 320 etc along with the Server, but those are Obsolete. OS Volume and Configuration, Bare Metal Restore for Better Server OS Uptime and Serviceability. Protect Configurations against Drive Failure, System Crash, Virus Infection or Ransomware Attack. Removable Disk and Eject Technology provides a True Air-Gapped Data Protection Mechanism.	Bidder to refer corrigendum-5.



Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
785	112	Annexure-9 Technical Specifications	Table-E Technical Specification - 226 servers (135 DC and 91 DRC)	Sl. No: 14 Port- 3 USB3.0 port and 1 VGA Port	We request the Bank to also add RDX USB 3.0 External Removable RDX Drive with 5TB Media which gives these Servers an added technology & protects system & OS against Drive failure, System Crash, Virus Infection and ransomware. Previously, Banks used to buy DAT 160/DAT 320 etc along with the Server, but those are Obsolete. OS Volume and Configuration Bare Metal Restore for Better Server OS Uptime and Serviceability. Protect Configurations against Drive Failure, System Crash, Virus Infection or Ransomware Attack. Removable Disk and Eject Technology provides a True Air-Gapped Data Protection Mechanism.	Bidder to refer corrigendum-5.
786	87, 93, 99, 105, 111 & 118	Annexure-9 Technical Specifications	Table-A Technical Specification - 80 servers (41 DC and 39 DRC) Table-B Technical Specification - 28 servers (17 DC and 11 DRC) Table-C Technical Specification - 100 servers (60 DC and 40 DRC) Table-D Technical Specification - 54 servers (28 DC and 26 DRC) Table-E Technical Specification - 226 servers (135 DC and 91 DRC) Table-F Custom Technical Specification - 12 servers	Sl. No: 9 SAN & Network FC HBA CARD- Two FC Vard Card with minimum 1 number of 32 Gbps FC ports in each card with Supported SFP+ transceivers (With NVME Capable)	Is the transceivers(optics)required are the native FC 32Gb transceivers or an SFP+ optic? And should it support NVME OF protocol?	Bidders to comply with RFP/GeM bid terms and conditions
787	132	Annexure-9 Technical Specifications	Table-H Storage Technical Specifications: (Enterprise Block Storage 2.OPB Usable Space: DC -2, DRC -2)	Sl. No: 10- Hard Disk Capacity Each hard disk Capacity should not be less than 15 TB and not more than 20 TB	Capacity restriction per drive applies only for near line drives or also for NVMe and SSD drives.	Bidder to refer corrigendum-5.
788	134	Annexure-9 Technical Specifications	Table-H Storage Technical Specifications: (Enterprise Block Storage 2.OPB Usable Space: DC -2, DRC -2)	Sl. No: 22- Uptime The storage should be able to provide availability parameter of 99.90 % from the date of acceptance of the Storage by Bank	Is it possible to specify the application which the object storage would be supporting?	
789	124-125	Annexure-9 Technical Specifications	Table-G Storage Technical Specifications: (Object Storage 2.OPB Usable Space: DC -1, DRC -1)	Sl. No: 8 Capacity- Minimum usable storage 2 PB after RAID6/ Dual RAID6 Configuration.( Without considering any data reduction features such as compression, deduplication etc ..)	The usable space required can considered as the effective capacity. That's after considering De-dupe and compression.	
790	154	Annexure-9 Technical Specifications	Table-N Technical Specifications of 4 SAN Director (2 Nos at DC and 2 Nos at DR)	Sl. No: 21 Other Features The director class switch should provide Inter Chassis Link (ICL) for connecting multiple Chassis	Do we provide FCIP routers for Storage based replication between DC and DR. If yes, pls specify the WAN Bandwidth between DC and DR and RPO details.	Bidder to refer corrigendum-5.

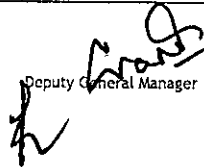


Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
791	159	Annexure-9 Technical Specifications	Table-Q Technical Specifications of 2 LTO9 standalone Tape Drive (1 DC and 1 DRC)	Sl. No: 5 Tape Drive- One LTO-9 Drive with FC Connectivity to support 8Gbps or more.	One LTO-9 Drive with SAS/FC Connectivity to support 8Gbps FC or 12Gbps SAS or more to be provided , Bidder must provide the appropriate SAS HBA card on the Server directly & SAS/FC Cable by the Bidder STAND ALONE DRIVES are Not available in FC , all major brands provide Standalone drive in SAS model only. ELSE, Bank can ask bidders to provide 1U, 8 Slots Autoloader with LTO9 FC drive , each site can be provided if FC is mandatory Required .	Bidder to refer corrigendum-5.
792	159	Annexure-9 Technical Specifications	Table-Q Technical Specifications of 2 LTO9 standalone Tape Drive (1 DC and 1 DRC)	Sl. No: 6 Cables- Necessary OM3/OM4 FC cables of length 15 meters	Necessary OM3/OM4 FC cables of length 15 meters or SAS CABLE 12Gbps HD approx 2 mtrs STAND ALONE DRIVES are Not available in FC , all major brands provide Standalone drive in SAS model only.	Bidder to refer corrigendum-5.
793	97	Annexure-9 Technical Specifications	Table-C Technical Specification - 100 servers (60 DC and 40 DRC)	Sl. No: 5- Processor Socket Minimum 2 sockets i.e., 32*1 =32 core ( 1 Populated & 1 For future upgrade )	Request you to kindly amend this clause to Dual Socket, i.e. 2* 32 Core, or we request to reduce the Quantity of Servers to 50 no.'s from 100 no.'s and increase processor socket to 2 no.'s per node, which will help OEMs to suffice other parameters mentioned in the Tender RFP such as Total no. of DIMM slots, PCI slots and Raid controller card.  Please note: we have limitation on Single socket Processor, as it comes with 12DIMM Memory slots and 2 PCI Slot & RAID Card will be with no cache and supporting O,1 Support, Hence we request you to kindly change it to dual socket i.e. 2*32 core from single socket or we request you to kindly reduce the node count by increasing the socket count per node, or else we will not be able to participate.	Bidder to refer corrigendum-5.
794	104	Annexure-9 Technical Specifications	Table-D Technical Specification - 54 servers (28 DC and 26 DRC)	Sl. No: 5- Processor Socket Minimum 2 sockets i.e., 24*1 =24 core ( 1 Populated & 1 For future upgrade )	Request you to kindly amend this clause to Dual Socket, i.e. 2* 24 Core, or we request to reduce the Quantity of Servers to 27 no.'s from 54 no.'s and increase processor socket count to 2 no.'s per node, which will help OEM's to suffice other parameters mentioned in the Tender RFP such as Total no. of DIMM slots, PCI slots and Raid controller card.  Please note: we have limitation on Single socket Processor, as it comes with 12DIMM Memory slots and 2 PCI Slot & RAID Card will be with no cache and supporting O,1 Support, Hence we request you to kindly change it to dual socket i.e. 2*24 core from single socket or we request you to kindly reduce the node count by increasing the socket count per node, or else we will not be able to participate.	Bidder to refer corrigendum-5.
795	110	Annexure-9 Technical Specifications	Table-E Technical Specification - 226 servers (135 DC and 91 DRC)	Sl. No: 5- Processor Socket Minimum 2 sockets i.e., 16*1 =16 core ( 1 Populated & 1 For future upgrade )	Request you to kindly amend this clause to Dual Socket, i.e. 2* 16 Core, or we request to reduce the Quantity of Servers to 113 no.'s from 226 no.'s and increase processor socket to 2 no.'s per node, which will help OEM's to suffice other parameters mentioned in the Tender RFP such as Total no. of DIMM slots, PCI slots and Raid controller card.  Please note: we have limitation on Single socket Processor, as it comes with 12DIMM Memory slots and 2 PCI Slot & RAID Card will be with no cache and supporting O,1 Support, Hence we request you to kindly change it to dual socket i.e. 2*16 core from single socket or we request you to kindly reduce the node count by increasing the socket count per node, or else we will not be able to participate.	Bidder to refer corrigendum-5.



Sl. No.	Page No.	Section / Annexure / Appendix	RFP Clause	Sub-Clause/ Technical Specification	Bidder's Query	Bank's Reply
796	116	Annexure-9 Technical Specifications	Table-F Custom Technical Specification - 12 servers	Sl. No: 5- Processor Socket Minimum 2 sockets i.e., 16*1 =16 core ( 1 Populated & 1 For future upgrade ) - Type 1 Minimum 2 sockets i.e., 32*1 =32 core ( 1 Populated & 1 For future upgrade ) - Type 2 Minimum 2 sockets i.e., 32*1 =32 core ( 1 Populated & 1 For future upgrade ) - Type 3	Request you to kindly amend this clause to Dual Socket, i.e. 2* 16 Core, 2*32 Core, 2*32 Core, or we request to reduce the Quantity of Servers to 6 no.'s from 12 no.'s and increase processor socket to 2 no.'s per node; which will help OEM's to suffice other parameters mentioned in the Tender RFP such as Total no. of DIMM slots, PCI slots and Raid controller card.  Please note: we have limitation on Single socket Processor, as it comes with 12DIMM Memory slots and 2 PCI Slot & RAID Card will be with no cache and supporting 0,1 Support, Hence we request you to kindly change it to dual socket i.e. 2*16 core, 2* 32 Core, 2* 32Core from single socket or we request you to kindly reduce the node count by increasing the socket count per node, or else we will not be able to participate.	Bidder to refer corrigendum-5.
797	NA	Generic	Generic	Generic	What is the expected performance from the set of 40 drives in the Tape library. Since the TL is a sequential write device, the writes need to be planned by the backup software so that the writes to the tape library are in parallel and backup is completed in the required time	Bidders to comply with RFP/GeM bid terms and conditions
798	NA	Generic	Generic	Generic	What is the type and average size of data that is being backed up as the performance of the tape depends on the data sizes. Small files take longer to backup	Details will be shared with the selected bidder
799	NA	Generic	Generic	Generic	Is the backup software being considered capable of doing parallel writes to the tape drives to ensure that all the drives are engaged in the backup activity and the backup window is met	Bidders to comply with RFP/GeM bid terms and conditions
800	NA	Generic	Generic	Generic	As we see a request to supply LTO7 media, what is the plan to read LTO7 media. Since the LTO9 drives has a backward compatibility of one generation i.e. LTO8, we would need drives that are compatible to read LTO7 media	Bidders to comply with RFP/GeM bid terms and conditions
801	NA	Generic	Generic	Generic	There is a request to supply 400 LTO9 media, 1,900 LTO8 media and 100 LTO7 media per site and this requires a total of 2400 slots on the library, please let us know how the media will be managed	Details will be shared with the selected bidder
802	NA	Generic	Generic	Generic	Would there be a mix of different generation of media in the tape library (LTO9 and LTO8) if yes, we would appreciate if the split between the LTO8 and LTO9 in the TL is shared	Bidders to comply with RFP/GeM bid terms and conditions
803	NA	Generic	Generic	Generic	What is the Backup Policies and Backup Window planned along with Data Retention	Details will be shared with the selected bidder

Date 20-06-2024  
Place Bengaluru

  
Deputy General Manager

