ODISHA GRAMYA BANK
Information Technology Department
Head Office, Gandamunda, P.O.-Khandagiri, Bhubaneswar

RFP Ref. No OGB/RFP/ITD/CBS/009/2021-22 dated 28th October 2021, Amendment_6 Date: 18-01-2022

AMENDMENT_6: REQUEST FOR PROPOSAL (RFP) TO SELECT SERVICE INTEGRATOR FOR MIGRATION OF CBS FROM FINACLE 7.0.18 TO FINACLE 10.2.25

All bidders are here by informed that the necessary amendments to RFP are provided in Table#1 for the queries received from bidders after publication of Amendment_5 dated 23-12-2021.

Table#1: Amendment_6

Sr. No.	Document Reference	Page No	Clause No	Description in RFP	Amendment
1	APPENDIX 1 – STORAGE SPECIFICATION Page#116 Amendment_3 dated 14.12.2021	8	Point# 4 ARCHITECTURE:	The proposed array should be SSD / NVMe based all flash (min TLC NAND Flash) with active-active multi-controller/node scale-up and scale-out architecture. The array should be proposed with minimum dual controllers and scalable to at least 8 active-active storage controllers/nodes.	The proposed array should be SSD / NVMe based all flash (min TLC NAND Flash) with active-active multi-controller/node scale-up and scale-out architecture. The array should be proposed with minimum dual controllers and scalable to at least **4** active-active storage controllers/nodes.
2	APPENDIX 1 – STORAGE SPECIFICATION	8	Point# 3 CPU PROCESSING POWER:	Offered storage shall have CPUs based upon latest generation of Intel or AMD family, Minimum Cascade Lake series and shall be supplied with at-least 24 numbers of CPU cores, Scalable to at-least 80 CPU	Offered storage shall have CPUs based upon recent generation of Intel or AMD family and shall be supplied with at-least 24 numbers of CPU cores, Scalable to at-least 80 CPU cores without

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	Page#116 Amendment_3 dated 14.12.2021			cores without replacing the existing controllers. However Bidder to resize the specification to meet the required performance of this project.	replacing the existing controllers. However Bidder to resize the specification to meet the required performance of this project.
3	Annexure-O Commercial Bid Format	109		On-Demand Application Load Balancer L2 and Storage and backup L1 at Hyderabad - 1000mandays	The multiplication factor for Engineers on-demand at DRC Hyderabad has been reduced to 500. Refer to Commercial Bid format-Amended-6.xlsx

Table#2: Clarification on queries of bidders

Sr No	Bidder	Page No	Clause No	Description in RFP	Clarification Sought	Bank's Remark
1	HPE	APPENDIX 1 – STORAGE SPECIFICATION	Point# 4 ARCHITECTURE:	ARCHITECTURE: The proposed array should be SSD / NVMe based all flash (min TLC NAND Flash) with active-active multi-controller/node scale-up and scale-out architecture. The array should be proposed with minimum dual controllers and scalable to at least 8 active-active storage controllers/nodes.	Controller scalability or scale out architecture in storage industry can be of two types. 1. Controller pair scales up only for management and limited data services. There would not be any Global Cache across all Nodes. Individual pair of nodes will continue to run as separate silos. 2. True scale out architecture where in all data and management services scales up together. All controllers' forms a Global Cache providing incremental performance to the volumes connected. It is clear that among above two architectures, 2nd one is superior and comes at premium since it provides better reliability required for CBS application. Present RFP specification is qualifying both architectures and thus OEMs proving a reliable and better architecture (2nd) is in disadvantageous situation.	**Amendment:** Refer to Amendment_6, point# 1

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					Also for only 50 TB requirement there is no need to have 8 controller architecture.	
2	HPE	APPENDIX 1 – STORAGE SPECIFICATION	Point# 3 CPU PROCESSING POWER:	Offered storage shall have CPUs based upon latest generation of Intel or AMD family, Minimum Cascade Lake series and shall be supplied with at-least 24 numbers of CPU cores, Scalable to at-least 80 CPU cores without replacing the existing controllers. However Bidder to resize the specification to meet the required performance of this project.	Most of the storage OEMs are still on either Skylake/ Broadwell processors. As per our best of knowledge only DELL is with Cascade lake CPU. You can cross check on this point.	**Amendment:** Refer to Amendment_6, point# 2
3	HPE	APPENDIX 1 – STORAGE SPECIFICATION	12 BACKEND CONNECTIVITY:	**SSD /** NVMe drive connectivity should be using **12G SAS / PCIe** based technology for low latency with minimum bandwidth of 512Gbps. Other technologies such as RoCE etc. for NVMe disk connectivity will not be acceptable. However Bidder to resize the specification to meet the required performance of this project.	RFP has allowed both NVME as well as SSD based architecture. Request you to normalize as below to qualify both - Offered Storage should be configured with minimum 32 SAS /PCIE lanes running 12 Gb/s or better per lane for disk enclosure connectivity	**Clarification:** The clause mentioned in Amendment_3 dated 14.12.2021, clause # 25 stands. The suggestion of HPE will make this clause restrictive for other OEMs.
4	HPE	APPENDIX 1 – STORAGE SPECIFICATION	13 CAPACITY & PERFORMANCE REQUIREMENT	The proposed array should be configured with usable capacity of 50 TB using SSD / NVMe disks in RAID5/RAID6 or equivalent and should be able to deliver at least 1,50,000 IOPS (8K block size, 70% Read/30% Write) with sub-millisecond latency for both read & write IOs. Mentioned performance numbers should be achieved with data reduction techniques like Compression and deduplication turned ON. Bidder has to	Data Reduction technologies like deduplication and compression is not recommended for CBS application. Request you to amend this as below - The proposed array should be configured with usable capacity of 50 TB using SSD / NVMe disks in RAID5/RAID6 or equivalent and should be able to deliver at least 1,50,000 IOPS (8K block size, 70% Read/30% Write) with sub-millisecond latency for both read & write IOs. Bidder has to submit output of OEM sizing tool/Letter for the performance.	**Clarification:** The clause mentioned in Amendment_2 Date: 03-12-2021, clause # 21 stands.

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				submit output of OEM sizing tool for the performance. However Bidder to resize the specification to meet the required performance of this project.	However Bidder to resize the specification to meet the required performance of this project.	
5	EIT			As per Addendum 2, Point 6 the Database Administrator at Hyderabad should be L2 Level. However,, the commercial template mentioned it as " Database Administrator L1 "	Our understanding is that Bank is looking for L2 Level Database Administrator at Hyderabad. Request you to confirm so we can quote accordingly	**Clarification:** The typo error has been resolved. **Refer to Commercial Bid format-Amended-6.xlsx**
6	EIT			On-Demand Application Load Balancer L2 and Storage and backup L1 at Hyderabad - 1000mandays	1000 man days is very high. Request Bank to kindly review the same	**Amendment:** Refer to Amendment_6, point# 3
7	EIT	42 of RFP	2.28 Antivirus	Antivirus solution should provide following minimum features but not limited to 1. Host Intrusion Prevention 2. Host Firewall 3. Host Vulnerability Scanning 4. Application Control 5. Anti-malware	The Bank is not just asking for Antivirus solution but suite of products and will require dedicated expert resource to manage the same. Request Bank to add one resource for the same so the deployed solution can be utilized properly and managed	**Clarification:** Bidder should use their in-house expertise to manage the Antivirus through engaged infra engineers.