उत्तर बिहार ग्रामीण बैंक

प्रधान कार्यालय, कलमबागचौक
मुजफ्फरपुर,,बिहार, 842001

UTTAR BIHAR GRAMIN BANK

HEAD OFFICE, KALAMBAGH CHOWK
MUZAFFARPUR, BIHAR, 842 001

(Sponsored By: Central Bank of India)

Website: www.ubgb.in

Letter No. HO/IT/14/2021-22/205   Date: 31-08-2021

Pre-Bid Queries Response and Corrigendum
Tender Reference No. HO/IT/14/2021-22/179 dated 11-08-2021
Summary of pre-bid queries of various vendors along with bank response and corrigendum are as under:

Sl. No.	Page no.	Point/Section	Clarification Point as stated in the Tender Doc.	Comment/ Suggestion/ Deviation	Bank Response	Corrigendum /(Response/Clarification)
12	21	4. Project Time lines	Supply and delivery of Storage and associated software Licenses, SAN Switches, Ethernet Switches, including Structured Cabling components, and its related software licenses at DC and DRC, as per Appendix 1- Bill of Material---Within 6-8 weeks of date of acceptance of the Purchase Order (PO) by the successful Bidder	Considering current COVID Pandemic situation and Shortage of Chips availability globally, may lead to a delay. We request bank to Provide at least 12 Weeks from PO date for the delivery of material without any LD and extend the project schedule accordingly.	The revised clause should be read as "Supply and delivery of Storage and associated software Licenses, SAN Switches, Ethernet Switches, including Structured Cabling components, and its related software licenses at DC and DRC, as per Appendix 1- Bill of Material---Within 8-10 weeks of date of acceptance of the Purchase Order (PO) by the successful Bidder"	Corrigendum
43	Appendix 2 Minimum Technical Specifications v4	48 port 1/10 G Base T switch, 4.2	Switch should support VXLAN (RFC7348) and EVPN symmetric IRB (RFC 7432) for supporting Spine - Leaf architecture to optimise the east - west traffic flow inside the data centre	For required solution RFC 7432 supports both Symmentric as well as asymmetric IRB. Request you to more only symmetric IRB. Or include both Symmetric and Asymmetric IRB.	The Line item stands deleted	Corrigendum
45	Appendix 2 Minimum Technical Specifications v4	48 port 1/10 G Base T switch, 6.2	Switch should support segment routing and VRF route leaking functionality from day 1	Segment routing is used in ISP P/PE routers. Not required for enterprise DC Leaf switches. Kindly remove Segment routing,	The Line item stands deleted	Corrigendum
46	Appendix 2 Minimum Technical Specifications v4	48 port 1/10 G Base T switch, 6.3	Switch should support Segment Routing and Layer3 VPN over Segment Routing	Segment routing is used in ISP P/PE routers. Not required for enterprise DC Leaf switches. Kindly remove Segment routing,	The Line item stands deleted	Corrigendum

49	Appendix 2 Minimum Technical Specifications v4	48 port 1/10/25G Fiber switch , 4.2	Switch should support VXLAN (RFC7348) and EVPN symmetric IRB (RFC 7432) for supporting Spine - Leaf architecture to optimise the east - west traffic flow inside the data center	For required solution RFC 7432 supports both Symmetric as well as asymmetric IRB. Request you to more only symmetric IRB. Or include both Symmetric and Asymmetric IRB.	The Line item stands deleted	Corrigendum
51	Appendix 2 Minimum Technical Specifications v4	48 port 1/10/25G Fiber switch , 6.2	Switch should support segment routing and VRF route leaking functionality from day 1	Segment routing is used in ISP P/PE routers. Not required for enterprise DC Leaf switches. Kindly remove Segment routing,	The Line item stands deleted	Corrigendum
52	Appendix 2 Minimum Technical Specifications v4	48 port 1/10/25G Fiber switch , 6.3	Switch should support Segment Routing and Layer3 VPN over Segment Routing	Segment routung is used in ISP P/PE routers. Not required for enterpise DC Leaf switches. Kindly remove Segment routing,	The Line item stands deleted	Corrigendum
61	Appendix 2 Minimum Technical Specifications v4 , Storage-DC-DRC	Replication ,20	RFP Clause: The proposed storage must support Synchronous and Asynchronous replication across sites / storages for FC data on the storage. The proposed solution should support zero data loss feature with functionality to provide delta resync capability from surviving site in case of disaster. Storage is required to be configured with required redundant IP ports / FC ports / FCIP routers for the replication. The proposed storage must reduce OPEX costs and have an native / external option to preserve bandwidth by compressing the data being replicated to the DR site.	**Change Requested:** We request to remove "**The proposed storage must reduce OPEX costs and have an native / external option to preserve bandwidth by compressing the data being replicated to the DR site.**" from the clause **Justification:** Storage based Replication software does not have the functionality of preserving Bandwidth by compressing the data being replicated. Moreover, Asynchronous replication using Oracle Native replication between DC and DR is planned and hence request to remove the last line from the specification.	The text stands deleted "The proposed storage must reduce OPEX costs and have an native / external option to preserve bandwidth by compressing the data being replicated to the DR site."	Corrigendum

63	Appendix 2 Minimum Technical Specifications v4 , Storage-DC-DRC	**Features required ,30**	RFP Clause: The storage management software must provide multiple levels of access control including role-based security, provision to send alerts via email (mandatory) / SMS(preferred). The proposed storage solution must support Multi Factor / Two Factor Authentication for Administrative web & Administrative CLI Access . The proposed system is required to have the capability to protect against brute-force attacks. All these features is required to be clearly explained in the proposal.	**Change Requested:** We request to remove" **The proposed storage solution must support Multi Factor / Two Factor Authentication for Administrative web & Administrative CLI Access**" from the Clause. **Justification:** This is vendor specific clause and we provide ROLE based authentication.	The revised clause should be read as "The access to the proposed storage should be role based authentication"	Corrigendum
75	11		Earnest Monet Deposit	Please confirm EMD amount if any.	EMD to be submitted by the participating bidders for the amount of INR 36,00,000/-	Corrigendum
101	73	Appendix 2 Leaf-48Port1& 10G Copper	6.4 Support Multicast Source Discovery Protocol (MSDP) (RFC 3618)	MSDP is the legacy protocol and its features are offered through latest version of PIM-SM and PIM-SSM, hence we request you to rephrase the point as "Support Multicast Source Discovery Protocol (MSDP) (RFC 3618) or PIM-SM and PIM-SSM"	The revised line item should be read as "Support Multicast Source Discovery Protocol (MSDP) (RFC 3618) or PIM-SM and PIM-SSM"	Corrigendum
102	73	Appendix 2 Leaf-48Port1& 10G Copper	8.4 Switch platform should support MAC Sec (802.1AE) encryption in hardware	MAC Sec is a resource intensive feature deployed on the WAN/MetroLAN network to secure traffic and is not a necessary requirement for data center switches. Hence considering this data center LAN switch requirement, we request you to rephrase this point to "Switch platform should support IEEE standard 802.1ae/802.1x i.e. WAN Sec or PEAP encryption in hardware"	The revised line item should be read as "Switch platform should support MAC Sec (802.1AE) / 802.1x i.e. WAN Sec or PEAP encryption in hardware"	Corrigendum
103	73	Appendix 2 Leaf-48Port10 &25G Fiber	6.4 Support Multicast Source Discovery Protocol (MSDP) (RFC 3618	MSDP is the legacy protocol and its features are offered through latest version of PIM-SM and PIM-SSM, hence we request you to rephrase the point as "Support Multicast Source Discovery Protocol (MSDP) (RFC	The revised line item should be read as "Support Multicast Source Discovery Protocol (MSDP) (RFC 3618) or PIM-SM and PIM-SSM"	Corrigendum

				3618) or PIM-SM and PIM-SSM"		
104	73	Appendix 2 Leaf-48Port10 &25G Fiber	8.4 Switch platform should support MAC Sec (802.1AE) encryption in hardware	MAC Sec is a resource intensive feature deployed on the WAN/MetroLAN network to secure traffic and is not a necessary requirement for data center switches. Hence considering this data center LAN switch requirement, we request you to rephrase this point to "Switch platform should support IEEE standard 802.1ae/802.1x i.e. WAN Sec or PEAP encryption in hardware"	The revised line item should be read as "Switch platform should support MAC Sec (802.1AE) / 802.1x i.e. WAN Sec or PEAP encryption in hardware"	Corrigendum
129		Appendix 2	27. The proposed storage must provide multiple snapshots & full copy clones with minimal impact to source. Snapshots & full copy clones to be taken without affecting the storage performance.	Can you please rephrase this point to, "The proposed storage must provide multiple snapshots & full copy clones or Thin Clones with minimal impact to source. Snapshots & full copy clones or Thin Clones to be taken without affecting the storage performance."	The revised clause should be read as "The proposed storage must provide multiple snapshots & full copy clones or equivalent with minimal impact to source. Snapshots & full copy clones or Thin Clones to be taken without affecting the storage performance."	Corrigendum
155		Appendix 2	Storage-DC-DRC	21. The proposed storage is required to be compatible with major hypervisors like VMware, RHEV, AHV and Hyper-V etc. and upgrades.	Can you please rephrase this point to by removing AHV from it. Because as per following KB article from Nutanix, it is not recommended to connect external storage to Nutanix system/AHV. https://portal.nutanix.com/page/documents/kbs/details?targetId=kA00e000000CtelCAC "*The proposed storage is required to be compatible with major hypervisors like VMware, RHEV and Hyper-V etc. and upgrades.*"	The proposed storage is required to be compatible with major hypervisors like VMware, RHEV, and Hyper-V etc. and upgrades.	Corrigendum
186		Appendix 2 Leaf-24 Port 1&10G Copper	Annexture 2: 3.6 Minimumm Technical Specificaitons for Leaf-24 Port 1G &10G Copper		The 24 Port Ethernet Switch is out of scope of the bidder; and Bidder is not required to quote the Leaf-24 Port 1&10G Copper Switch	Corrigendum

1	48	5.69 Liqui dated Dam ages	Bank may at its option demand and recover from the Successful Bidder(s) an amount equivalent to 1(one) percent of the undelivered portion of contract value for every week of delay or part thereof, subject to a maximum of 10% of the total purchase order value. Once the maximum is reached, the Bank may consider termination of the contract. If the Service Provider fails to deliver any or all of the Goods or perform the Services within the time period(s) specified in the RFP/Contract or contract duration, the Bank shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to 0.50% of the total purchase order value until actual delivery or performance, per week or part thereof (5 days will be treated as a week); and the maximum deduction is 10% of the total purchase order value. Once the maximum is reached, the Bank may consider termination of the contract, invoke of bank guarantee or any other rights as deem fit.	LD is mentioned as 1% per Week & 0.5% per week as well. Which one is to be considered. Request Bank to consider the LD as 0.5% of the cost of non delivered items per weeks and Maximum upto 5% of the contract value as per industry standered.	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
2	49	5.72 Penal ty Claus e	Delay in hardware and related system software -- Penalty will be charged 1% of hardware cost per week or part thereof for delay in delivery and installation of hardware beyond the timeline mentioned as part of Project Timelines subject to a maximum cap of 10% of the project cost.	Request Bank to consider the Penalty as 0.5% of the cost of non delivered items per weeks and Maximum upto 5% of the contract value as per industry standard.	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion

3	62	7.4.1 REVE RSE AUCT ION	If a Bidder quoting higher prices, higher by more than 20% as compared to the average quoted prices (of all technically qualified bidders) for all items in aggregate, the same Bidder may not be called for reverse auction process. If due to such price variation factor, a Bidder is not found eligible to be called for revere auction and only one bidder is left commercially eligible, in such situation, Bank reserves the right to award contract to the L1 Bidder.	Request Bank to remove this clause or Increase the variation to the average cost as minimum 50%.	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
4	64	8. Paym ent Term s	Hardware Cost (Storage/LAN & SANS Switches / Structured Cabling, etc.) part of Appendix 1- Bill of Material 70% Delivery of Hardware 30% Installation & Commissioning of Hardware	Implementation Payment Terms not Specified, Hope the percentage calculated on total 3 year cost as per Appendix 1- Bill of Material including Hardware Cost , Implementation cost & Structured cabling cost (No AMC Applicable)as well. Request Bank to consider the payment terms as " Hardware/Software Cost (Storage/LAN & SANS Switches / Structured Cabling, etc.) part of Appendix 1- Bill of Material 80% Delivery of Hardware 20% Installation & Commissioning of Hardware"	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
5	64	8. Paym ent Term s	3. Payment will be made by Central Bank of India Sponsored RRBs (UBGB & UBKGB) in ratio 90:10 i.e 90% by UBGB & 10% by UBKGB 4. Invoices will be raised separately to both the RRBs in the ratio mentioned above.	Request Bank to release the payment centrally by the tender release authority. Since separation of all components in 90:10 ratio as mentioned in the RFP will be a challenge to the bidder.	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion

6	76	11.2 Anne xure 2: Cove r TO	3. We agree to abide by this Scope Offer for 210 days from date of Scope (Commercial Bid) opening and our Offer shall remain binding on us and may be accepted by the Bank any time before expiry of the offer.	This clause is contradicting from offer validity of 180 days from opening of the technical offer. Request Bank to consider the scope offer as maximum 90 days from the date of Scope (Commercial Bid) opening.	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
7	32	5.31 Indm enity	The Bidder shall indemnify the Bank, and shall always keep indemnified and hold the Bank, its employees, personnel, officers, directors, harmless from and against any and all losses, liabilities, claims, actions, costs and expenses (including attorney's fees) relating to, resulting directly or indirectly from or in any way arising out of any claim, suit or proceeding brought against the Bank as a result of:	We propose to modify: The Bidder shall indemnify the Bank, and shall always keep indemnified and hold the Bank, its employees, personnel, officers, directors, harmless from and against any and all losses, liabilities, claims, actions, costs and expenses (including attorney's fees) relating to, resulting directly from or in any way arising out of any claim, suit or proceeding brought against the Bank as a result of:	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
8	33	5.31 Indm enity	Additionally, the Bidder shall indemnify, protect and save the Bank against all claims, losses, costs, damages, expenses, action, suits and other proceedings, a. that the Deliverables and Services delivered or provided under this Agreement infringe a patent, utility model, industrial design, copyright, trade secret, mask work or trademark in any country where the Deliverables and Services are used, sold or received; and/or b. resulting from infringement of any patent, trademarks, copyrights etc. or such other statutory infringements under any laws including the Copyright Act,1957 or Information Technology Act, 2000 in respect of all the Hardware, Software	We propose to modify as the same is already mentioned in the above clause : Service Provider/Vendor shall indmenify Bank for infringement of any IPR , provided the Bank notifies the Vendor in writing as soon as practicable when the Bank becomes aware of the claim however,	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion

			and network equipment or other systems supplied by them to the Bank from whatsoever source, provided the Bank notifies the Vendor in writing as soon as practicable when the Bank becomes aware of the claim however,			
9	16	3. Detailed Scope of Work	Storage should be configured on OEM rack along with Power strips (PDUs), Power cables, Network cables, Fiber cables and any other components required for successful implementation of the solution are to be supplied and commissioned by the successful Bidder.	Hope , the Rack and other accessories will be considered from the different OEM's as well. Please confirm.	42U Racks will be provided by the Bank, however Power strips (PDUs), Power cables, Network cables, Fiber cables and any other components required for successful implementation of the solution are to be supplied and commissioned by the successful Bidder.	Response /Clarificat ion
10	18	3. Detailed Scope of Work	For in-scope hardware and associated software as mentioned in this RFP document and in Appendix 1 – Bill of Material, Bidder should not quote components going end-of-sale within 24 months of its date of delivery.	Request bank to consider the end of sale period as maximum 12 months from the date of delivery.	No Change (As per the Bank's policy the life of the new procured components should be for 7 Year from the date of delivery.)	Response /Clarificat ion
11	18	3. Detailed Scope of Work	All in-scope hardware should be provided with 3 years of comprehensive on-site warranty which will start from the date of installation, commissioning and acceptance by Bank. All in-scope software should be provided with 1 years of comprehensive on-site warranty which will start from the date of installation, commissioning and acceptance by Bank. Post warranty period completion, Bidder should provide AMC for 2 years; and for	Request Bank to consider the warranty start date from the date of Installation & acceptance or from 90th day of delivery of hardware/software , which ever is earlier.	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion

			software 4 years. Bidder is required to co-ordinate with Bank's existing System Integrator for Facilities Management Services throughout the contract tenure.			
12	21	4. Proje ct Time lines	Supply and delivery of Storage and associated software Licenses, SAN Switches, Ethernet Switches, including Structured Cabling components, and its related software licenses at DC and DRC, as per Appendix 1- Bill of Material--- Within 6-8 weeks of date of acceptance of the Purchase Order (PO) by the successful Bidder	Considering current COVID Pandemic situation and Shortage of Chips availability globally, may lead to a delay. We request bank to Provide at least 12 Weeks from PO date for the delivery of material without any LD and extend the project schedule accordingly.	The revised clause should be read as "Supply and delivery of Storage and associated software Licenses, SAN Switches, Ethernet Switches, including Structured Cabling components, and its related software licenses at DC and DRC, as per Appendix 1- Bill of Material---Within 8-10 weeks of date of acceptance of the Purchase Order (PO) by the successful Bidder"	Response /Clarificat ion
13	16	3. Detai led Scop e of Work 3.1	3. Detailed Scope of Work 3.1 as per RFP	Data Migration Involves within Site or Across site ?	Data migration is within the same site	Response /Clarificat ion
14	16	3. Detai led Scop e of Work 3.1	3. Detailed Scope of Work 3.1 as per RFP	How Many Servers will accessed Storage array?	Will be shared with the successful bidder	Response /Clarificat ion
15	16	3. Detai led Scop e of Work 3.1	3. Detailed Scope of Work 3.1 as per RFP	What Multipathing SW used ? No of MP Licenses Required	Will be shared with the successful bidder	Response /Clarificat ion
16	16	3. Detai led Scop e of Work 3.1	3. Detailed Scope of Work 3.1 as per RFP	How many Physical and Virtual Servers will accessed storage array?	Will be shared with the successful bidder	Response /Clarificat ion
17	16	3. Detai led Scop e of Work 3.1	3. Detailed Scope of Work 3.1 as per RFP	Hypervisor solution used in current environment	Will be shared with the successful bidder	Response /Clarificat ion

18	16	3. Detailed Scope of Work 3.1	3. Detailed Scope of Work 3.1 as per RFP	Any Physical Servers or V2V Clustering used ?	Will be shared with the successful bidder	Response /Clarificat ion
19	16	3. Detailed Scope of Work 3.1	3. Detailed Scope of Work 3.1 as per RFP	How many Storage pool configured in existing Environments	Will be shared with the successful bidder	Response /Clarificat ion
20	16	3. Detailed Scope of Work 3.1	3. Detailed Scope of Work 3.1 as per RFP	What types of RAID level Configured	RAID 10 and RAID 5 is currently configured on existing Storage	Response /Clarificat ion
21	16	3. Detailed Scope of Work 3.1	3. Detailed Scope of Work 3.1 as per RFP	What type of Disks used in current array	Will be shared with the successful bidder	Response /Clarificat ion
22	16	3. Detailed Scope of Work 3.1	3. Detailed Scope of Work 3.1 as per RFP	How many Controllers are installed in Existing array	Will be shared with the successful bidder	Response /Clarificat ion
23	16	3. Detailed Scope of Work 3.1	3. Detailed Scope of Work 3.1 as per RFP	Are End users stores their Data on storage array ? How ?	No, end users do not store their data on to the storage	Response /Clarificat ion
24	16	3. Detailed Scope of Work 3.1	3. Detailed Scope of Work 3.1 as per RFP	for quick ticketing Call home or Dial home is configured for existing storage array	No, Not allowed as per the policy of Bank	Response /Clarificat ion
25	16	3. Detailed Scope of Work 3.1	3. Detailed Scope of Work 3.1 as per RFP	Are CBI is OK to configure secure dial home or call home for quick ticking	No, Not allowed as per the policy of Bank	Response /Clarificat ion
26	16	3. Detailed Scope of Work 3.1	3. Detailed Scope of Work 3.1 as per RFP	Shifting to others location involve data movement and Data Protection as well. This will be an additional scope to the bidder. The commercials for the same need to be mutually discussed and agreed for the same. Request Bank confirmation on this.	Bank's understanding; only Storage physical movement	Response /Clarificat ion

27	16	3. Detailed Scope of Work 3.1	3. Detailed Scope of Work 3.1 as per RFP	Need Info on Bank existing SI and its skillset	Will be shared with the successful bidder	Response /Clarification
28	20	3.6 Installation and Configuration point 9	9. Setup and operationalize 3-way DR for CBS and I-banking application	Need tentative plan and date for setting up Near Line DR (NDR)	Tentatively, 2-3 years down the line, Bank may opt of NS; however in case if any regulatory requirement Bank may deploy NS any time	Response /Clarification
29	20	3.6 Installation and Configuration point 9	9. Setup and operationalize 3-way DR for CBS and I-banking application	How will Integrate and replicate CBS and I-banking applications	Near DR is out of scope as of now. However, bank may opt for Near DR in next 2 to 3 year	Response /Clarification
30	20	3.6 Installation and Configuration point 14	14. The Bank shall maintain a register at its site in which, the Bank's operator/ supervisor shall record each event of failure and/or malfunction of the equipment. The bidder's engineer shall enter the details of the action taken in such register. Additionally, every time a preventive or corrective maintenance is carried out, the bidder's engineer shall make, effect in duplicate, a field call report which shall be signed by him and thereafter countersigned by the Bank's official. The original of the field call report shall be handed over to the Bank's official.	Instead of Physical Register for break down and corrective action . Is it OK with email	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarification
31	20	3.6 Installation and Configuration point 16	Provide Knowledge Transfer to bank existing system Integrator throughout which includes a detailed overview on the implementation and configuration parameters and features and functionality of Bank's Systems.	Number of KT session bank are looking for ?	The number of KT session expected is one at each location i.e. one at DC and one at DRC, that too post successful implementation	Response /Clarification

32	20	3.6 Installation and Configuration point 16	Provide Knowledge Transfer to bank existing system Integrator throughout which includes a detailed overview on the implementation and configuration parameters and features and functionality of Bank's Systems.	Are training and KT should be conducted by OEM or SI	OEM / SI, who so ever does the implementation at DC and DRC must conduct the KT session	Response /Clarification
33	20	3.6 Installation and Configuration- DC& DR Replication	1. Asynchronous replication Oracle Native replication between DC and DR 2. Vendor must provide additional hardware/software, if required, to meet the scope of work.	What current RPO and RTO	RPO is 15 Minutes and RTO is 120 Minutes	Response /Clarification
34	20	3.6 Installation and Configuration- DC& DR Replication	1. Asynchronous replication Oracle Native replication between DC and DR 2. Vendor must provide additional hardware/software, if required, to meet the scope of work.	What Replication tools used currently ?	Asynchronous replication is done using Oracle Native replication between DC and DR - is not the responsibility of bidder	Response /Clarification
35	20	3.6 Installation and Configuration- DC& DR Replication	1. Asynchronous replication Oracle Native replication between DC and DR 2. Vendor must provide additional hardware/software, if required, to meet the scope of work.	What is Bandwidth Provioned between DC & DR For replication	Will be shared with the successful bidder	Response /Clarification
36	20	3.6 Installation and Configuration- DC& DR Replication	1. Asynchronous replication Oracle Native replication between DC and DR 2. Vendor must provide additional hardware/software, if required, to meet the scope of work.	any Redundancy between DC & DR Replication link	Yes, there is network link level redundancy between DC and DRC	Response /Clarification
37	20	3.6 Installation and Configuration-	1. Asynchronous replication Oracle Native replication between DC and DR 2. Vendor must provide additional hardware/software, if	How much daily delta changes in DC site ?	Will be shared with the successful bidder	Response /Clarification

		DC& DR Replication	required, to meet the scope of work.			
38	21	4 Project Time lines	1 . Supply and delivery of Storage and associated software Licenses, SAN Switches, Ethernet Switches, including Structured Cabling components, and its related software licenses at DC and DRC, as per Appendix 1- Bill of Material----------Within 6-8 weeks of date of acceptance of the Purchase Order (PO) by the successful Bidder 2. Installation, implementation and commissioning of Storage and associated software Licenses, SAN Switches, Ethernet Switches, including Structured Cabling components, and its related software licenses at DC and DRC, as per Appendix 1- Bill of Material-----Within 4 weeks of date of delivery 3. Data Migration ------Within 12 weeks of date of delivery	Request Bank to consider the schedule as " 1. Supply and delivery of Storage and associated software Licenses, SAN Switches, Ethernet Switches, including Structured Cabling components, and its related software licenses at DC and DRC, as per Appendix 1- Bill of Material-------------Within 12 weeks of date of acceptance of the Purchase Order (PO) by the successful Bidder 2.Installation, implementation and commissioning of Storage and associated software Licenses, SAN Switches, Ethernet Switches, including Structured Cabling components, and its related software licenses at DC and DRC, as per Appendix 1- Bill of Material-------------Within 4-6 weeks of date of delivery in DC and 6-8 Weeks at DR 3. Provisioning, Commissioning of Replication Link by CBI-------------within 6 weeks from Date of Delivery 4. Testing and validating stability of Replication link--------------within 1 weeks from date of Provisioning Link 5. Data Migration---------------Within 17-19 weeks of date of delivery.	The revised clause shoould be read as 1 . Supply and delivery of Storage and associated software Licenses, SAN Switches, Ethernet Switches, including Structured Cabling components, and its related software licenses at DC and DRC, as per Appendix 1- Bill of Material----------Within 8-10 weeks of date of acceptance of the Purchase Order (PO) by the successful Bidder 2. Installation, implementation and commissioning of Storage and associated software Licenses, SAN Switches, Ethernet Switches, including Structured Cabling components, and its related software licenses at DC and DRC, as per Appendix 1- Bill of Material-----Within 6 weeks of date of delivery 3. Data Migration -------Within 12 weeks of date of delivery	Response /Clarification
39	16	3. Detailed Scope of Work	Additional Query	Need existing Power connecters details used in CBI DC & DR Site .	Bidder is required to come up with socket requirement; however 16 Amp industrial socket is generally available	Response /Clarification
40	Appendix 1_Bill of Material-v5	Appendix 1_Bill of Material-v5	The Bidder needs to provide facility management services as per the scope of the RFP	Do the bidder need to provide the onsite resource for the support. Request bank confirmation and updating the same details in the commercial format as well.	Onsite resource is not required, however for AMC/ATS related calls, calls should be closed as per service levels defined in the RFP	Response /Clarification

41	Appen dix 2 Minim um Techni cal Specifi cations v4	48 port 1/10 G Base T switc h,3.4	Switch should support minimum 600 VRF instances with route leaking functionality	For Storage / server connectivity switch 100 VRFs are more than enough. Please reduce to 100 VRFs.	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
42	Appen dix 2 Minim um Techni cal Specifi cations v4	48 port 1/10 G Base T switc h,3.5	The switch should support minimum of 250k IPv4 LPM routes	for required solution 200K is sufficient. please reduce to 200K IPv4 LPM routes	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
43	Appen dix 2 Minim um Techni cal Specifi cations v4	48 port 1/10 G Base T switc h, 4.2	Switch should support VXLAN (RFC7348) and EVPN symmetric IRB (RFC 7432) for supporting Spine - Leaf architecture to optimise the east - west traffic flow inside the data center	For required solution RFC 7432 supports both Symmentric as well as asymmetric IRB. Request you to more only symmetric IRB. Or include both Symmetric and Asymmetric IRB.	The Line item stands deleted	Response /Clarificat ion
44	Appen dix 2 Minim um Techni cal Specifi cations v4	48 port 1/10 G Base T switc h, 5.11	The switch should support BGP EVPN (RFC 7432) Route Type 2, Type 4 and Route Type 5 for the overlay control plane	For proposed solution type 2, and 4 are sufficient. Type 5 is for Border leaf functionality which is not used here. Kindly remove type 5.	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
45	Appen dix 2 Minim um Techni cal Specifi cations v4	48 port 1/10 G Base T switc h, 6.2	Switch should support segment routing and VRF route leaking functionality from day 1	Segment routing is used in ISP P/PE routers. Not required for enterprise DC Leaf switches. Kindly remove Segment routing,	The Line item stands deleted	Response /Clarificat ion
46	Appen dix 2 Minim um Techni cal Specifi cations v4	48 port 1/10 G Base T switc h, 6.3	Switch should support Segment Routing and Layer3 VPN over Segment Routing	Segment routing is used in ISP P/PE routers. Not required for enterprise DC Leaf switches. Kindly remove Segment routing,	The Line item stands deleted	Response /Clarificat ion
47	Appen dix 2 Minim um Techni cal Specifi cations v4	48 port 1/10 /25G Fiber switc h , 3.4	Switch should support minimum 800 VRF instances with route leaking functionality	For Storage / server connectivity switch 100 VRFs are more than enough. Please reduce to 100 VRFs.	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion

48	Appendix 2 Minimum Technical Specifications v4	48 port 1/10/25G Fiber switch , 3.5	The switch should support minimum of 250k IPv4 LPM routes	for required solution 200K is sufficient. please reduce to 200K IPv4 LPM routes	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarification
49	Appendix 2 Minimum Technical Specifications v4	48 port 1/10/25G Fiber switch , 4.2	Switch should support VXLAN (RFC7348) and EVPN symmetric IRB (RFC 7432) for supporting Spine - Leaf architecture to optimise the east - west traffic flow inside the data center	For required solution RFC 7432 supports both Symmentric as well as asymmetric IRB. Request you to more only symmetric IRB. Or include both Symmetric and Asymmetric IRB.	The Line item stands deleted	Response /Clarification
50	Appendix 2 Minimum Technical Specifications v4	48 port 1/10/25G Fiber switch , 5.12	The switch should support BGP EVPN (RFC 7432) Route Type 2, Type 4 and Route Type 5 for the overlay control plane	For proposed solution type 2, and 4 are sufficient. Type 5 is for Border leaf functionality which is not used here. Kindly remove type 5.	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarification
51	Appendix 2 Minimum Technical Specifications v4	48 port 1/10/25G Fiber switch , 6.2	Switch should support segment routing and VRF route leaking functionality from day 1	Segment routing is used in ISP P/PE routers. Not required for enterprise DC Leaf switches. Kindly remove Segment routing,	The Line item stands deleted	Response /Clarification
52	Appendix 2 Minimum Technical Specifications v4	48 port 1/10/25G Fiber switch , 6.3	Switch should support Segment Routing and Layer3 VPN over Segment Routing	Segment routing is used in ISP P/PE routers. Not required for enterprise DC Leaf switches. Kindly remove Segment routing,	The Line item stands deleted	Response /Clarification
53	Appendix 2 Minimum Technical Specifications v4	General query	General query	Please consider adding Spine switch specs due to the fact hat in VXLAN design both leaf and Spine are required for EVPN VXLAN to work.	The existing Core / Spine switch at DC and DRC is Cisco Nexus make Switches; hence bidder is required to ensure that there should not be compatibility issue between Bank's existing switches and the switches quoted by the bidder	Response /Clarification
54	Appendix 2 Minimum Technical Specifications v4	General query	General query	Please also highlight the design CBI is using for this network as it is critical to understand for overall solution.	Will be shared with the successful bidder	Response /Clarification

55	Appendix 2 Minimum Technical Specifications v4 , Storage-DC-DRC	**Architecture , 4**	RFP Clause: Storage must be configured with FC,SMB,iSCSI, NFS and FTP protocols. Storage must support QoS.	**Changes Requested:** Storage must be configured with FC & iSCSI protocols. Storage must support QoS. **Justification:** Since the requirement if for All Flash Enterprise Storage and SAN Switches is requested in the RFP, We believe the present requirement is for Block Access only and hence request to remove NAS - SMB, NFS, and FTP Protocol support. And requesting to have only the FC and ISCSI protocols to be included in the RFP Specs	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarification
56	Appendix 2 Minimum Technical Specifications v4 , Storage-DC-DRC	**Controllers & Frontend Ports, 6**	RFP Clause: Storage is required to be proposed with minimum 2 controllers. Minimum 16 x 16 Gbps or 8 x 32 Gbps FC Front end ports; and minimum of 4 x 10GbE Ports. Front end ports is required to be evenly distributed across controllers.	**Changes Requested**: Storage is required to be proposed with minimum 4 controllers from Day 1. Minimum 16 x 16 Gbps or 16 x 32 Gbps FC Front end ports. Front end ports is required to be evenly distributed across controllers. The proposed AFA must be a single enterprise-class storage product with Common Backplane and not a storage solution with multiple silo/groups of dual-controller storage in a clustered configuration proposed to meet the performance and scalability requirement. **Justification:** A Multi Controller architecture with Active Active Symmetric access to single LUN from all controllers is needed from an Enterprise Storage Architecture. We recommend to have minimum 4 Controllers to be proposed from Day 1 and all the controllers shall be connected to a common back-plane and not use any loosely connected architecture like through SAN Switches, Ethernet Switches, InfiniBand switches etc. Since the storage is going to be FC SAN Storage and hence request to remove the 10GbE ports that are primarily required for NAS functionality.	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarification

57	Appen dix 2 Minim um Techni cal Specifi cations v4 , Storag e-DC-DRC	**Cont rolle rs & Fron tend Port s , 7**	RFP Clause: Active - Active controllers with automatic load balancing/workload placement across controllers.	**Changes Requested:** True symmetric active-active so that a single logical unit can be shared across all offered controllers in symmetrical fashion **Justification**: This is true enterprise Storage feature to have parallel access to a single lun from all the controllers without any external connectivity between storage controllers.	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
58	Appen dix 2 Minim um Techni cal Specifi cations v4 , Storag e-DC-DRC	**Driv es and RAID ,10**	RFP Clause: Proposed storage capacity is required to be factored on the highest performance RAID protection, offered by the OEM on the proposed storage. The Storage should support and configurable RAID 10, RAID 5, RAID 6 /RAID DP protection.	**Change Requested:** Proposed storage capacity is required to be factored on the highest performance RAID protection, offered by the OEM on the proposed storage. The Storage should support and configurable RAID 6 /RAID DP protection. **Justification:** With Data being so critical having a Dual Parity Protection RAID 6 has become a defacto standard with AFA. Hence we request to remove RAID 10, RAID 5 that provides Single Drive Failure Protection and hence we do not support it.	The revised clause shoud be raad as "Proposed storage capacity is required to be factored on the highest performance RAID protection, offered by the OEM on the proposed storage. The Storage should support and configurable RAID 6 /RAID DP protection."	Response /Clarificat ion
59	Appen dix 2 Minim um Techni cal Specifi cations v4 , Storag e-DC-DRC	**Hot Spar es ,15**	RFP Clause: Necessary hot spares to be configured additional. The proposed storage is required to have minimum 2 hot spare of each type of drives configured	**Change Requested**: Necessary Global hot spares to be configured additional. The proposed storage is required to have minimum 2 hot spare or 2 hot spare equivilent capacity of each type of drives configured **Justification:** We provide distributed Sparing where each of the drive have spare chunklets. This help in faster re-built times as all the drivies are participating in the rebuilding process simultaneously.	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion

| 60 | Appen dix 2 Minim um Techni cal Specifi cations v4 , Storag e-DC-DRC | **Cach e,16** | RFP Clause: The storage is required to have minimum 512 GB for DC/DRC storage usable Data cache / memory available across the pair of controller post write mirroring / protection overheads. The cache memory architecture and the proposed cache is required to be explained in the proposal. | **Change Requested:** The storage is required to have minimum 1TB for DC/DRC storage usable Data cache / memory available across Storage. The cache memory architecture and the proposed cache is required to be explained in the proposal.

Justification: Since we are suggesting to have minimum 4 controllers from Day 1, The Cache Memory for Storage will become 1TB with four controllers from Day 1. This will also ensure that all vendors will propose equivalent models to meet the Enterprise Storage requirements without compromising on the performance requirements. | There is no change in the requirement; the requirement stand as it is (as per RFP) | Response /Clarificat ion |
| 61 | Appen dix 2 Minim um Techni cal Specifi cations v4 , Storag e-DC-DRC | **Repli catio n ,20** | RFP Clause: The proposed storage must support Synchronous and Asynchronous replication across sites / storages for FC data on the storage. The proposed solution should support zero data loss feature with functionality to provide delta resync capability from surviving site in case of disaster. Storage is required to be configured with required redundant IP ports / FC ports / FCIP routers for the replication. The proposed storage must reduce OPEX costs and have an native / external option to preserve bandwidth by compressing the data being replicated to the DR site. | **Change Requested:**We request to remove "**The proposed storage must reduce OPEX costs and have an native / external option to preserve bandwidth by compressing the data being replicated to the DR site.**" from the clause

Justification: Storage based Replication software does not have the functionality of preserving Bandwidth by compressing the data being replicated. Moreover, Asynchronous replication using Oracle Native replication between DC and DR is planned and hence request to remove the last line from the specification. | The text stands deleted "The proposed storage must reduce OPEX costs and have an native / external option to preserve bandwidth by compressing the data being replicated to the DR site." | Response /Clarificat ion |

62	Appen dix 2 Minim um Techni cal Specifi cations v4 , Storag e-DC-DRC	**Feat ures requi ired ,26**	RFP Clause: Must support Replication, Snapshot technology, Cloning, online LUN extension & basic file auditing capabilities.	**Change Requested:** We request to remove the "basic file auditing capabilities" as we are recommending Block Storage access for the requirement and does not support the file level NAS functionality..	GY If we go for NAS / Unified storage, may be required	Response /Clarificat ion
63	Appen dix 2 Minim um Techni cal Specifi cations v4 , Storag e-DC-DRC	**Feat ures requi ired ,30**	RFP Clause: The storage management software must provide multiple levels of access control including role-based security, provision to send alerts via email (mandatory) / SMS(preferred). The proposed storage solution must support Multi Factor / Two Factor Authentication for Administrative web & Administrative CLI Access . The proposed system is required to have the capability to protect against brute-force attacks. All these features is required to be clearly explained in the proposal.	**Change Requested:** We request to remove" **The proposed storage solution must support Multi Factor / Two Factor Authentication for Administrative web & Administrative CLI Access**" from the Clause. **Justification:** This is vendor specific clause and we provide ROLE based authentication.	The revised clause should be read as "The access to the proposed storage should be role based authentication"	Response /Clarificat ion
64	Appen dix 2 Minim um Techni cal Specifi cations v4 , Storag e-DC-DRC	**Migr ation ,38**	Additional Details needed:	**Additional Details needed:** We would need details on the present environment to define the migration Scope.	Will be shared with the sucessful bidder	Response /Clarificat ion
65		Page 13/ Point 2.(Eli gibili ty Crite ria) / Sl. No.4	Bidder should have an annual turnover of at[1]least INR 100 crores in the last three financial years (i.e. 2017-18, 2018-19 and 2019-20)	We are Requesting to change the average turnover of at least **Rs.30.00 Crore** in the last three financial years(i.e. 2017-18, 2018-19, and 2019-20)	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
66		Page 13/ Point 2.(Eli gibili ty Crite	Make in India preference clause, Non- Class 1 and non-class 2 bidders are also eligible to participate. In case bids are received	Need clarification.	The clause is self explanatory	Response /Clarificat ion

		ria) / Sl. No.1	from Class 1 or Class 2 local suppliers, purchase preference will be given to such bidders in-line with Government of India guidelines. If Class 1 and Class-2 Bidders are not available, other bidders will be considered.			
67		Page 21 / Point No. 20	DC &-DR replication :- Asynchronous replication Oracle Native replication between DC and DR	Need to clarify, whether it's bidder responsibility or not.	For Asynchronous replication, Oracle Native replication between DC and DR; and Bidder is required to setup replication between DC and DRC. Refer to section "3.2 Storage at DC and DR" of RFP, for more details	Response /Clarificat ion
68		Page 16/ Point 3.1	Storage should be configured on OEM rack along with Power strips (PDUs), Power cables, Network cables, Fiber cables and any other components required for successful implementation of the solution are to be supplied and commissioned by the successful Bidder.	Requesting bank to make this relaxation of Rack from same storage OEM to any standard available rack, where bank will benefit with more competitive offer.	Rack shall be provided by the Bank	Response /Clarificat ion
69		Eligib ility Crite ria - Point 13	Bidder should have experience in supply, implementation and maintenance of DC & DRC Setup in at least one public sector bank/ scheduled commercial bank in India with Project order value of minimum INR 10 cr of product & services	Bidder should have experience in supply, implementation and maintenance of DC & DRC Setup in at least one public sector bank/ scheduled commercial bank/Public Sector Enterprise in India with Project order value of minimum INR 10 cr of product & services	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
70	73		10.2Appendix 2: Technical Specifications (Minimumm Technical Specificaitons for Storage at DC/DRC/NDR) Point 9. All the storage drives and backend connectivity is required to be based on minimum 12 Gbps SAS. Minimum 8 x 12Gb/s backend ports to be provided.	The physical backend ports vary across every OEM based on internal 12 Gb SAS LANE's inside each physical SAS port. Minimum 4 X 12 Gb/s are typical specifications with most of the OEM's hence requesting you to modify.	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion

71	73		10.2Appendix 2: Technical Specifications (Minimum Technical Specifications for Storage at DC/DRC/NDR) Point 12. The proposed storage must offer 2,50,000 IOPS for DC/DRC Storage at 4K Block Size, 50:50 R:W ratio under sub-millisecond latency from day one. This is the minimum requirement however Bidder is required propose the sizing as per application requirement considering the future growth till the end of the contract.	Generally CBS solutions are sized at 16 KB Block size and 70:30 Read Write ratio. Can you please confirm if existing workload has this kind of IO pattern ?? Bank to provide future growth consideration based on application vendor's estimate in terms of performance	No Change. The storage should be capable to support 4,00,000 IOPS in future	Response /Clarificat ion
72	73		10.2Appendix 2: Technical Specifications (Minimumm Technical Specificaitons for Storage at DC/DRC/NDR) Point 14. Bidder should propose Storage for Data Centres – Usable Capacity DC- 250 TB , DR 180 TB on maximum 7.6TB SSDs. Once the Flash Storage Device reaches the write endurance limits or service life, same needs to be	The SSD/Flash module sizes vary across OEM's basis on their investment on R&D and the decision should be left to OEM to decide the best for achieving the required performance. Please extend the condition of maximum drive size to 20 TB. Also higher SSD/Flash drive will ensure low datacenter footprint saving both power/cooling.	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
73	73		10.2Appendix 2: Technical Specifications (Minimumm Technical Specificaitons for Storage at DC/DRC/NDR) Point 18. Since this is 24*7 delivery channel storage, under no circumstances the cache memory on the storage controller should be bypass to guarantee acceptable performance levels at all times.	The cache architecture is different in every OEM and generally cache memory a volatile memory used for performance enhancement. In circumstances of a controller failure, it is ideal to bypass for ensuring data is secure in non-volatile Flash/SSD's. Evaluation should be based on performance guarantee committed even after bypassing the cache memory.	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion

74	14		2. Eligibility Criteria: Bidder should have its own Support center in Mumbai/Navi Mumbai & Hyderabad for onsite, Telephonic and Remote Assistance Services	Please amended by adding Bidder/OEM should have its own Support center in Mumbai/Navi Mumbai & Hyderabad for onsite, Telephonic and Remote Assistance Services	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
75	11		Earnest Monet Deposit	Please confirm EMD amount if any.	EMD to be submitted by the participating bidders for the amount of INR 36,00,000/-	Response /Clarificat ion
76	18	**48 Port Leaf-1G& 10G Copp er**	Annexure 2: 3.6 Minimum Technical Specifications for 48 Port Leaf-1G&10G Copper The Switch should support intelligent buffer management with a minimum buffer of 30MB	Please consider 32 MB of buffer for better performance in the DC network	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
77	19	**Leaf-10& 25G Fiber**	Annexure 2: 3.6 Minimum Technical Specifications for Leaf-10&25G Fiber The Switch should support intelligent buffer management with a minimum buffer of 30MB	Please consider 32 MB of buffer for better performance in the DC network	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
78	14	2. Eligib ility Crite ria	13. Bidder should have experience in supply, implementation and maintenance of DC & DRC Setup in at least one public sector bank/ scheduled commercial bank in India with minimum 1000 branches with order value of minimum INR 10 cr of product & services	Need clarity - As per our understanding, bidder should submit the PO copy which comprises of IT HW/SW & services which was supplied & deployed at DC - DR sites & the PO should be of Value min 10 Cr. Or PO should be of storage only.	Yes, understanding is correct, that is bidder should submit the PO copy which comprises of IT HW/system SW (i.e. OS, DB, etc.) & services which was supplied & deployed at DC - DR sites & the PO should be of minimum value of 10 Cr.	Response /Clarificat ion
79	14	OEM' s Eligib ility	Proposed Storage series (or its previous version) should be implemented any core banking in at least one public sector bank/ scheduled commercial bank in India with minimum 1000 branches	Can you please rephrase this point to, "Proposed Storage series (or its previous version) should be implemented in at least one public sector bank/ scheduled commercial bank in India with minimum 1000 branches"	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
80	14	OEM' s Eligib ility	OEM's Proposed SAN/LAN Switch (or its previous version) should have been implemented in at least one public sector bank/ scheduled commercial bank in India with minimum 1000 branches	If we provide single PO which has storage & SAN switches part of the solution, Will it suffice the requirement. Or Bank require separate PO of SAN/LAN switches.	Bidder is reuired to provide SAN / LAN PO for the said criteria	Response /Clarificat ion

81	16	3. Detailed Scope of Work 3.1 General	Supply, installation, configuration & maintenance of all the supplied hardware and software at the DC and DR and seamless migration and integration with existing Network Architecture of Bank.	In order to understand and factor efforts for requested seamless migration please provide following inputs - 1) existing storage model, make, & serial no 2) Size, type of data 3) If using any hyperviser for virtualisation, no of VM's & no of physical servers 4) Existing set-up network architecture diagram to understand current set-up & challenges, if any.	EMC DELL SC 9000 at DC and DRC; the usable capacity is 100 TB at DC and DRC respectively at each site With Unix, Linux and MS windows configured in HA and Non-HA environment Oracle DB and MS SQL DB	Response /Clarificat ion
82	17	3. Detailed Scope of Work 3.1 General	Provide comprehensive on-site warranty and AMC/ATS support for the tenure of contract Warranty of hardware and software will start from the date of commissioning and acceptance by Bank. AMC/ATS will start from the date of expiry of warranty period.	Request to consider warranty support start date from the date of material delivery at respective sites.	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
83	18	3. Detailed Scope of Work 3.1 General	All the equipment (hardware, software) supplied as part of solution should be IPV4 as well as IPV6 compliant from day one and should support all the protocols.	Can you please elaborate which all protocols are expected to support by the proposed SAN storage, SAN switches and Network Switches?	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
84	20	3.6 Installatio n and Confi gurat ion	9. Setup and operationalize 3-way DR for CBS and I-banking application	As per the details provided in the RFP there is a mention of only DC and DR site and NDR site isn't considered for deployment, so can you please elaborate the details of 3 way DR expected to be setup and operationalize?	Near DR is out of scope as of now. However, bank may opt for Near DR in next 2 to 3 year	Response /Clarificat ion
85	20	3.6 Installatio n and Confi gurat ion	The bidder shall ensure compatibility of the hardware, software and other equipment that they supply with the hardware and software systems being used in the Bank.	Can you please let us know the details of the hardware and software systems being used in the bank with which we need to ensure the compatibility?	Must be compatible with major hypervisors like VMware, RHEV and Hyper-V and upgrades. Must be compatible with Operating Systems like Microsoft Windows, AIX 7.x , RHEL and upgrades. The storage must support clustering solutions such as Microsoft cluster, MS SQL cluster, SUN Solaris cluster, Linux cluster, Veritas cluster, HP-UX cluster, IBM AIX cluster etc.	Response /Clarificat ion

86	20	3.6 Installation and Configuration	17. It would be the bidder's responsibility to ensure safe disposal of e-waste as per Hazardous Waste (management and handling) Rules 1989 and 2008, without imposing any liability to bank, comprising discarded Hardware/ electrical/ electronic equipment/ components taken under buyback.	Please remove. There is no buyback components involve in this RFP.	Buyback is out of scope of bidder	Response /Clarification
87	21	3.6 Installation and Configuration	20. Bidder will have to complete the successful migration of data from old storage to new storage. Migration of data to be ensured with minimum near zero downtime. Vendor must have sufficient skill sets required for virtualizing existing storages for performing the seamless data migration with no data loss. Skill sets should include expertise in SAN Network, SAN Storage and connected servers.	Can you please rephrase the point as follows, "Bidder will have to complete the successful migration of data from old storage to new storage. Migration of data to be ensured with *mutualy agreed* downtime. Vendor must have sufficient skill sets required for performing the seamless data migration with no data loss. Skill sets should include expertise in SAN Network, SAN Storage and connected servers."	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarification
88	21	DC &-DR replication	1. Asynchronous replication Oracle Native replication between DC and DR 2. Vendor must provide additional hardware/software, if required, to meet the scope of work.	Need clarity- 1) we understand that, the Bank's existing SI (Wipro) or Bank official (Oracle DB team) will configure the replaction in existing Oracle system. please confirm. 2) Please specify, what hardware/software would be required. As Bank using existing Oracle native replication technology so we assume its already in place and Bank will take care of it.	bank is currently using oracle native feature for replication; Replication between DC an DRC is to be done by the successful bidder	Response /Clarification
89	31	5.28 Insurance	The equipment (hardware, software etc.) supplied under the contract shall be fully insured by the successful Bidder against loss or damage incidental to manufacture or acquisition, transportation, storage, delivery and	Request clarity, as its contradict within the clause - 1) valid for the entire period of the Agreement 2) The period of insurance shall be up to the date the supplied components are accepted and the all rights of the property are transferred to the Bank in the Bank's premises.	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarification

			installation. The insurance shall be obtained by the Bidder naming the Bank as the beneficiary, for an amount Equal to 110% of the invoiced value of the goods on "all risks" basis including war risks, burglary, acts of terrorism and natural calamities **valid for the entire period of the Agreement**. . **The period of insurance shall be up to the date the supplied components are accepted and the all rights of the property are transferred to the Bank in the Bank's premises.** Should any loss or damage occur, the selected Bidder shall: - i. Initiate and pursue claim till settlement and ii. Promptly make arrangements for repair and / or replacement of any damaged item irrespective of settlement of claim by the underwriters.	As a bidder, we can insure the material i.e. an amount equal to 110% of the invoice value of the goods. but once its delivered at Bank premises, the liablity of insurance will be on banks account. As a bidder, we will not have any control over premises/property owned / rented by bank.		
90	34	5.33 Security Configuration, Inspection, Audit , Monitoring & Visitations	**Security Configuration** The baseline **security configuration of Database, Web server and all other applications to be done by the Vendor**, according to the industry best practices Compliance with security best practices may be monitored by periodic computer security audits performed by or on behalf of the Bank. The periodicity of these audits will be decided at the discretion of the Bank. Periodicity for Regulatory Audits would be required as per the rules and	This RFP/tender has requirement of storage, SAN & LAN switches at DC & DR sites. Whereas the highlighted phrase talks about Database, Server & application which will not be in bidders/vendor scope. Request to correct the phrase as per RFP/tender requirement (product).	The Baseline security shall be limited to RFP / Tender inscope components	Response /Clarificat ion

			guidelines laid down by the regulator or as required by the regulator. These audit plan to include, but are not limited to, a review of: access and authorization procedures, physical security controls, input/output controls, Database (DB) controls, backup and recovery procedures, Network security controls and program change controls. Compliance of the audit report has to be ensured by the Vendor. To the extent that the Bank deems it necessary to carry out a program of inspection and audit to safeguard against threats and hazards to the confidentiality, integrity, and availability of data, the Vendor shall afford the Bank's representatives access to the Vendor's facilities, installations, technical resources, operations, documentation, records, databases and personnel. The Vendor must provide the Bank access to various monitoring and performance measurement systems (both manual and automated). The Bank has the right to get the monitoring and performance measurement systems (both manual and automated) audited without prior approval / notice to the Vendor.			
91		5.71 Perfo rman ce Bank Guar antee	i. As mentioned above, the Successful Bidder will furnish an unconditional and irrevocable Performance Bank Guarantee (PBG), in the format given by the Bank in Annexure-13, for 3% of the total	Please clarify on below points - 1) Single PBG to be submitted by successful bidder? 2) The beneficiary for PBG would be UBGB or UBKGB?	The PBG should be in the ratio of 90:10 for UBGB and UBKGB	Response /Clarificat ion

			project cost valid for 63 months (may change as per Government guidelines), validity of PBG starting from its date of issuance. The PBG shall be submitted within 21 days of the PO acceptance by the Bidder.			
92	64	8. Payment Terms	3. Payment will be made by Central Bank of India Sponsored RRBs (UBGB & UBKGB) in ratio 90:10 i.e 90% by UBGB & 10% by UBKGB 4. Invoices will be raised separately to both the RRBs in the ratio mentioned above.	Tax invoices can not be split as its has interdependence with e-way bill, GST etc.. Also same HW / SW can not be owned by separate entities in 90:10 ratio. We suggest, either you can split the components while placing an order & accordingly we can submit the TAX invoices.	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
93	67		9. Service Levels & Penalties	Response time of 5 minutes is unrealistic without the team of onsite engineers. Please revise the response time to 2 hours	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
94	Additio nal	Addit ional	Additional	Can you please let us know the Application planned to be hosted on the SAN storage proposed in this RFP?	Will be shared with the successful bidder	Response /Clarificat ion
95	73	10.2 Appe ndix 2	10.2Appendix 2: Technical Specifications (Minimum Technical Specifications for Storage at DC/DRC/NDR) Point 9. All the storage drives and backend connectivity is required to be based on minimum 12 Gbps SAS. Minimum 8 x 12Gb/s backend ports to be provided.	The physical backend ports vary across every OEM based on internal 12 Gb SAS LANE's inside each physical SAS port. Minimum 4 X 12 Gb/s are typical specifications with most of the OEM's hence requesting you to modify.	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion

96	73	10.2 Appe ndix 2	10.2Appendix 2: Technical Specifications (Minimumm Technical Specificaitons for SAN Switch at DC/DRC) The fiber channel switch is required to be configured with 96 ports 32 Gbps at DC&DR locations and backward compatible to 4/8/16 Gbps.	The 32 Gbps SFP can have only 16/8 Gbps. Backward compatibility support as technology limitation across the industry. Please amend the point or include some 16 Gbps SFP in requirement to support backward 4 Gbps devices OR Can you please rephrase this point as follows, because the SAN switches can auto negotiate to n - 2 port speed levels only, "The fiber channel switch is required to be configured with 96 ports 32 Gbps at DC&DR locations and backward compatible to 32/16/8 Gbps."	The revised line item should be read as "The fiber channel switch is required to be configured with 92 ports 32 Gbps at DC&DR locations and backward compatible to 16/8 Gbps and 4 ports 16 Gbps at DC&DR locations and backward compatible to 8/4 Gbps"	Response /Clarificat ion
97	73	10.2 Appe ndix 2	10.2Appendix 2: Technical Specifications (Minimum Technical Specifications for SAN Switch at DC/DRC) 192 LC-LC cables and SFPs are required to be supplied for Primary and DR sites	Please provide the length of the LC-LC cables needed	Refer to Bill of Material, for cable length and other Structured cabling details	Response /Clarificat ion
98	73	10.2 Appe ndix 2 Repli catio n	The proposed storage must support Synchronous and Asynchronous replication across sites / storages for FC data on the storage. The proposed solution should support zero data loss feature with functionality to provide delta resync capability from surviving site in case of disaster. Storage is required to be configured with required redundant IP ports / FC ports / FCIP routers for the replication. The proposed storage must reduce OPEX costs and have an native / external option to preserve bandwidth by compressing the data being replicated to the DR site.	For Zero Data Loss and synchronous replication to work, typically has distance limitation between sites to up to 100-150 KM, while in proposed solution DC/ DR sites are quite far away (mumbai / hyderbad), So ZDL / sync replication may be challenge between mumbai and Hyderabad. Request to review the requirement of ZDL and synchronous replication.	Near DR is out of scope of the Bidder. Asysc repliaction between DC & DRC should be considered. However, the Bank may go for Near Site storage in year 2 or year 3, of contract period	Response /Clarificat ion

99	73	10.2 Appendix 2 SAN Switch	13. The fiber channel switch is required to support Smart Zoning such that the entries in the TCAM (Ternary Content Addressable Memory) is significantly reduced and therefore increasing the overall scalability of the SAN Fabric.	This is vendor specific. Usually the inititiator and target zoning is done at SAN fabric level and that's is supprted by all. We request you to make it a neutral specification in stead of any vendor specific. Can you please rephrase the point to, "*The fiber channel switch is required to support hardware and software based zoning*"	The revised clause should be read as "The fiber channel switch is required to support hardware and software based zoning"	Response /Clarificat ion
100	73	10.2 Appendix 2 SAN Switch	20. The fiber channel switch is required to be capable of connecting neighbouring Fiber Channel switches	Which vendor switches, these proposed SAN switches will be connected to? Interop mode is not supported by FC SAN. If you have certain vendor switches, then you have to take the SAN switches from same vendor if you want to connect through ISL and merge the Fabrics.	capability should be available, Bidder is not responsible for interop mode of different make switches	Response /Clarificat ion
101	73	Appendix 2 Leaf-48Port1& 10G Copper	6.4 Support Multicast Source Discovery Protocol (MSDP) (RFC 3618)	MSDP is the legacy protocol and its features are offered through latest version of PIM-SM and PIM-SSM, hence we request you to rephrase the point as "Support Multicast Source Discovery Protocol (MSDP) (RFC 3618) or PIM-SM and PIM-SSM"	The revised line item should be read as "Support Multicast Source Discovery Protocol (MSDP) (RFC 3618) or PIM-SM and PIM-SSM"	Response /Clarificat ion
102	73	Appendix 2 Leaf-48Port1& 10G Copper	8.4 Switch platform should support MAC Sec (802.1AE) encryption in hardware	MAC Sec is a resource intensive feature deployed on the WAN/MetroLAN network to secure traffic and is not a necessary requirement for data center switches. Hence considering this data center LAN switch requirement, we request you to rephrase this point to "Switch platform should support IEEE standard 802.1ae/802.1x i.e. WAN Sec or PEAP encryption in hardware"	The revised line item should be read as "Switch platform should support MAC Sec (802.1AE) / 802.1x i.e. WAN Sec or PEAP encryption in hardware"	Response /Clarificat ion
103	73	Appendix 2 Leaf-48Port10 &25G Fiber	6.4 Support Multicast Source Discovery Protocol (MSDP) (RFC 3618	MSDP is the legacy protocol and its features are offered through latest version of PIM-SM and PIM-SSM, hence we request you to rephrase the point as "Support Multicast Source Discovery Protocol (MSDP) (RFC 3618) or PIM-SM and PIM-SSM"	The revised line item should be read as "Support Multicast Source Discovery Protocol (MSDP) (RFC 3618) or PIM-SM and PIM-SSM"	Response /Clarificat ion

104	73	Appe ndix 2 Leaf-48Po rt10 &25G Fiber	8.4 Switch platform should support MAC Sec (802.1AE) encryption in hardware	MAC Sec is a resource intensive feature deployed on the WAN/MetroLAN network to secure traffic and is not a necessary requirement for data center switches. Hence considering this data center LAN switch requirement, we request you to rephrase this point to "Switch platform should support IEEE standard 802.1ae/802.1x i.e. WAN Sec or PEAP encryption in hardware"	The revised line item should be read as "Switch platform should support MAC Sec (802.1AE) / 802.1x i.e. WAN Sec or PEAP encryption in hardware"	Response /Clarificat ion
105	13		Eligibility Criteria-POINT 1: Make in India preference clause, Non- Class 1 and non- class 2 bidders are also eligible to participate. In case bids are received from Class 1 or Class 2 local suppliers, purchase preference will be given to such bidders in-line with Government of India guidelines. If Class 1 and Class-2 Bidders are not available, other bidders will be considered. For further details, Please refer section no. 5.79	Please clarify, In case if Bidder & OEM are not same, then this criteria will be fulfilled by OEM only and will be accepted by the Bank.	Yes, in such case Criteria needs to be fulfilled by OEM (/Bidder - in case Bidder is OEM of the proposed product)	Response /Clarificat ion
106	13		Eligibility Criteria-POINT 2: If the bidder is from a country which shares a land border with India, the bidder should be registered with the Competent Authority	Please clarify if the Bidder/company is registered in India then Certificate of Incorporation from registrar of company is valid to be submitted here.	Yes; if the Bidder/company is registered in India then Certificate of Incorporation from registrar of company is valid to be submitted here.	Response /Clarificat ion
107	14		Eligibility Criteria-POINT 13: Bidder should have experience in supply, implementation and maintenance of DC & DRC Setup in at least one public sector bank/ scheduled commercial bank in India with minimum 1000 branches with order value of minimum INR 10 cr of product & services	We request to change this clause as below: *"Bidder should have experience in supply, implementation and maintenance of DC & DRC Setup in at least one public sector bank/ scheduled commercial bank/Public Sector Enterprise in India with Project order value of minimum INR 10 cr of product & services"*	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
108	13		Eligibility Criteria-POINT 7 : MAF from OEM as per Annexure 6	All OEM provide MAF as per their legal approved formats to the bidder. Kindly confirm MAF shared by OEM in their	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion

				legal approved formats will be accepted by Bank.		
109	13		Eligibility Criteria-Point 1 : Annexure 19 - Make In India Preference	All OEM provide Make in India undertaking/declaration/details as per their legal approved formats to the bidder. Kindly confirm if it will be accepted by the bank as per OEM legal approved format	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarification
110	13		Eligibility Criteria-Point 2 : Annexure 15 - Land Border clause Annexure	All OEM provide Land border clause/undertaking/declaration/details as per their legal approved format to the bidder. Kindly confirm if it will be accepted by the bank as per OEM legal approved format	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarification
111	13		Eligibility Criteria-POINT 7 : MAF from OEM as per Annexure 6	All OEM provide MAF Letters as per their legal approved formats to the bidder. Kindly confirm if shared by OEM in their legal approved formats it will be accepted by Bank.	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarification
112	14		Eligibility Criteria-POINT 14 : ISO 9001 or latest ISO standard certification holder company	We request to kindly add Bidder's CMMI Level 5 certificate along with ISO 9001.	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarification
113	82		Annexure 8: Letter from OEM's	All OEM provide these support Letters as per their legal approved formats to the bidder. Kindly confirm if shared by OEM in their legal approved formats it will be accepted by Bank.	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarification
114	112		ANNEXURE 19 - Make in India purchase preference	In case if OEM local % is Zero (0) than undertaking/declaration from OEM on the letter head will be accepted by the bank without any certificate from statutory auditor/cost auditor/chartered accountant. Certificate is only required in case if the OEM is falling under Class 1 or 2 under Make in in India preference. Please confirm for clarity.	Refer to Eligibility Criteria	Response /Clarification
115	64		Payment Terms	Please confirm how and who be doing the acceptance to the Delivery, installation, implementation at the DC & DR site at Hyderabad and Navi Mumbai which is managed by Central bank of India for the payments.	Invoice to be raised to RRBs, and the payment will be done by the RRBs; however, parent bank will extend their support during acceptance of Hardware & software at DC and DRC	Response /Clarification

				Will it be done by RRB's or Central Bank of India at site.		
116	64		Payment Terms	Please confirm who will be approving the Payment invoices and how the ratio of 90:10 will be clarify to the bidder while submission of Invoices for payments.	Payments will be approved by the respective RRBs, however bank may assist them for the same	Response /Clarificat ion
117	24		Section 5.15 Prices : The bank shall have the right to withhold any payment due to the successful bidder, in case of delays or defaults on the part of the successful bidder. Such withholding of payment shall not amount to a default on the part of the bank.	Payment term is to be defined and Bank cant held the payment without any valid reason. Delay in payment should attract interest	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
118	28		Section : 5.22 Execution of Contract, SLA and NDA Point iii. The bidder should execute the contract, SLA and NDA within 30 (thirty) days from the date of acceptance of the Purchase Order.	Please clarify if Contract needed Registration, who will be paying Duty and Registration Charges	The Bidder has to pay registration and duty charges for Contract / NDA/ SLA	Response /Clarificat ion
119	45		Section-Termination for Convenience: The Bank, by written notice sent to the Service Provider, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Bank's convenience, the extent to which performance of the Service Provider under the Contract is terminated, and the date upon which such termination	The Right to terminate the contract by convenience should also be available to SI	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion

120	33		5.31(4) Request to add certain exclusions for indemnification	Provided that the Bidder shall not be liable for indemnity in the event liability arise due to (i) specifications provided by the Bank; (ii) combination of the hardware, software supplied by the Bidder with third party components not provided by the Bidder; (iii) modification of the hardware or software by the Bank or (iv) any act or omission solely attributable to Bank.	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
121	45		5.63(3) Termination-Key terms and conditions	The Bidder should be allowed to terminate in the event Bank is unable to pay the dues of the Bidder for 30 days after the due date	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
122	45		5.63(4) Termination for convenience	The Bank should be able to terminate only after 60 days' notice to the Bidder for convenience. In such an event, the costs incurred by Bidder with third parties on behalf of Bank should be paid back on pro rata basis. Further, the termination for convenience right should be available to Bidder also.	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
123	48		5.69(Liquidated damages)	Liquidated damages should be levied at 0.5 % of delayed value of goods or services and not the entire value of Purchase Order.	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
124			Structured cabling	Please confirm if you require fiber shelf, MPO trunk & Module for rack to rack connectivity. If yes,please help to understand the design/ connectivity.	Structure cabling is limited to the details mentioned in Bill of Material	Response /Clarificat ion
125	16		Successful bidder is required to co-ordinate with the existing CBS SI for migration of data from existing Storage to new storage. Migration of data from old storage to new storage, is required to be done by the bidder. Migration tool needs to provided by the bidder at no additional cost to the Bank	For successful migration of data from Old storage to new storage, we will need to know the existing/old storage model and associated deployment to plan the deployment and migration efforts.Also need to know the current tools bank is using for migration of data.	EMC DELL SC 9000 Usable Gapacy is 100 TB at DC and DRC repectively at each site With Unix, Linux and MS windows confihured in in HA and Non-HA environment Oracle DB and MS SQL DB The Bidder is required to provide the necessary tools for Migration	Response /Clarificat ion
126	18		All the equipment (hardware, software) supplied as part of solution should be	Can you please elaborate which all protocols are expected to support by the proposed SAN storage,	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion

			IPV4 as well as IPV6 compliant from day one and should support all the protocols.	SAN switches and Network Switches?		
127	Appen dix 2		12. The proposed storage must offer 2,50,000 IOPS for DC/DRC Storage at 4K Block Size, 50:50 R:W ratio under sub-millisecond latency from day one. This is the minimum requirement however Bidder is required propose the sizing as per application requirement considering the future growth till the end of the contract.	Can you please share the future growth % expected in the span of 5 years from the date of initial deployment?	No Change, as the requirement is clearly given in Minimum Technical Spification sheet for Storage	Response /Clarificat ion
128	Appen dix 2		16. The storage is required to have minimum 512 GB for DC/DRC storage usable Data cache / memory available across the pair of controller post write mirroring / protection overheads. The cache memory architecture and the proposed cache is required to be explained in the proposal.	Can you please rephrase this point to, "The storage is required to have minimum 384 GB for DC/DRC storage usable Data cache / memory available across the pair of controllers and should allow dynamic cache allocation depending on the workload. The cache memory architecture and the proposed cache is required to be explained in the proposal."	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
129	Appen dix 2		27. The proposed storage must provide multiple snapshots & full copy clones with minimal impact to source. Snapshots & full copy clones to be taken without affecting the storage performance.	Can you please rephrase this point to, "The proposed storage must provide multiple snapshots & full copy clones or Thin Clones with minimal impact to source. Snapshots & full copy clones or Thin Clones to be taken without affecting the storage performance."	The revised clause should be read as "The proposed storage must provide multiple snapshots & full copy clones or equivalent with minimal impact to source. Snapshots & full copy clones or Thin Clones to be taken without affecting the storage performance."	Response /Clarificat ion
131			Additional Query	Please also highlight the design CBI is using for this network as it is critical to understand for overall solution.	Will be shared with the successful bidder	Response /Clarificat ion
132	Appen dix 2: Techni cal Specifi cations - Storag e		**Point 4 :** Storage must be configured with FC,SMB,iSCSI, NFS and FTP protocols. Storage must support QoS. **Request clause to be changed to read as** - "Storage must be configured with native FC,SMB,iSCSI	**Point 4 :** Storage must be configured with FC,SMB,iSCSI, NFS and FTP protocols. Storage must support QoS. **Request clause to be changed to read as** - "Storage must be configured with native FC,SMB,iSCSI and NFS protocols. Storage must	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion

			and NFS protocols. Storage must support QoS". **Justification :** With the advent of frequent ransomware, hacking & phishing attacks on NAS/File Shares, having ftp server enabled on the storage opens up the data to unsecured implementation of file transfer protocols. To provide better security in shared environments like bank, we have removed ftp server from our storage systems. To provide better security, we recommend that the Bank have a separate security hardened deployment of secure file transfer Linux/windows server or secure client tools which can be configured to transfer data securely from the proposed storage thus achieving the objective of data transfer without compromising the security of the entire storage system.	support QoS". **Justification :** With the advent of frequent ransomware, hacking & phishing attacks on NAS/File Shares, having ftp server enabled on the storage opens up the data to unsecured implementation of file transfer protocols. To provide better security in shared environments like bank, we have removed ftp server from our storage systems. To provide better security, we recommend that the Bank have a separate security hardened deployment of secure file transfer Linux/windows server or secure client tools which can be configured to transfer data securely from the proposed storage thus achieving the objective of data transfer without compromising the security of the entire storage system.			
133	Appen dix 2: Techni cal Specifi cations - Storag e		**Point 06 :** Storage is required to be proposed with minimum 2 controllers. Minimum 16 x 16 Gbps or 8 x 32 Gbps FC Front end ports; and minimum of 4 x 10GbE Ports. Front end ports is required to be evenly distributed across controllers. **Request Clarification** : 10GbE Ports mentioned is 10GbE BASE-T ports or 10GbE SFP+ ports		The revised line item should be read "Storage is required to be proposed with minimum 2 controllers. Minimum 16 x 16 Gbps or 8 x 32 Gbps FC Front end ports; and minimum of 4 x 10GbE Ports Fiber (SFP). Front end ports is required to be evenly distributed across controllers.	Response /Clarificat ion
134	Appen dix 2: Techni cal Specifi cations - Storag e		**Point 16 :** The storage is required to have minimum 512 GB for DC/DRC storage usable Data cache / memory available across the pair of controller post write mirroring /		There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion

| | | | protection overheads. The cache memory architecture and the proposed cache is required to be explained in the proposal.

Request clause to be changed to read as: - "The storage is required to have minimum 1024 GB for DC/DRC storage usable Data cache / memory available across the pair of controller post write mirroring / protection overheads. The cache memory architecture and the proposed cache is required to be explained in the proposal."

Justification : In Modern Storage architectures the cache on the storage system has increased manyfold and for critical banking applications minimum 1024 GB usable data cache is recommended to enable high end platforms from all OEMs. | | | | |
|---|---|---|---|---|---|---|---|
| 135 | Appen dix 2: Techni cal Specifi cations - Storag e | | **Point 20 :** The proposed storage must support Synchronous and Asynchronous replication across sites / storages for FC data on the storage. The proposed solution should support zero data loss feature with functionality to provide delta resync capability from surviving site in case of disaster. Storage is required to be configured with required redundant IP ports / FC ports / FCIP routers for the replication. The proposed storage must reduce OPEX costs and have an native / external | | Bidder is required to provide Synchronous & Asynchronous replication feature & License from Day 1

Also Bidder is required to provide Synchronous & Asynchronous replication required for both SAN and NAS protocol from Day 1 | Response /Clarificat ion |

			option to preserve bandwidth by compressing the data being replicated to the DR site. **Request Clarification :-** The proposed storage supports replication however the license for replication is not included, please clarify if, 1. Synchronous & Asynchronous replication feature & License is required from Day 1 or bank will buy the license later? 2. Synchronous & Asynchronous replication required for both SAN and NAS protocol from Day 1 or only SAN or NAS replication license need to be offered?			
136	RFP Document: Introduction		**Point 1.4 - Existing IT-Setup :** Currently, the Storage deployed enterprise class storage at DC and DRC. **Request for Clarification** 1. Make and model number of current storage deployed		Will be shared with the sucessful bidder	Response /Clarification
137	RFP Document: Introduction		**Point 1.4 - Existing IT-Setup:** In the existing setup at DC and DRC, Bank CBS application is running on IBM Power series and other surrounding applications running on Dell x86 Server. **Request for Clarification** 1. OS version and edition running on IBM Power Series 2. File system used by CBS Database on IBM Power Series 2. OS version and edition running on Dell x86 Server		Will be shared with the sucessful bidder	Response /Clarification

138	RFP Document: Detailed Scope of Work		**Point 3.1 - General:** Successful bidder is required to co-ordinate with the existing CBS SI for migration of data from existing Storage to new storage. Migration of data from old storage to new storage, is required to be done by the bidder. Migration tool needs to provided by the bidder at no additional cost to the Bank **Request for Clarification** 1. The current used capacity in existing storage. 2. Size of Data to be migrated in TB from old storage		Usable capacity of 100 TB Storage at DC and DRC at each location	Response /Clarificat ion
139	RFP Document: Detailed Scope of Work		**Point 3.2: Storage at DC and DR:** For its existing and future business needs, Bank envisages procurement of All Flash Storage at DC and DRC. Refer to Appendix 2 – Minimum Technical Specification for Storage requirements. Bidder is required to supply, install, implement, integrate, Data migration, replication setup. **Request for Clarification** It was mentioned that current replication of Oracle using Native oracle replication tool . Is there any other application or database used the native replication tool or rest will be replicated using storage base replication.		For CBS Oracle native feature is used for DC-DRC replicaiton and for other applications MS SQL log shipping is used for replication	Response /Clarificat ion

140	RFP Document: Detailed Scope of Work		**Point 3.6: 3.6 Installation and Configuration - DC &-DR replication:** Asynchronous replication Oracle Native replication between DC and DR. **Request for Clarification** 1. Current version of Oracle DB 2. Current version of Cluster aware 3. Database Size		Will be shared with the sucessful bidder	Response /Clarificat ion
141	Appen dix 2 Leaf- 48 Port 1&10G Copper		The Switch should support intelligent buffer management with a minimum buffer of 30MB	Request bank to consider 32 MB of buffer for better performance in the DC network	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
142	Appen dix 2 Leaf- 48 Port 1&10G Fiber		The Switch should support intelligent buffer management with a minimum buffer of 30MB	Request bank to consider 32 MB of buffer for better performance in the DC network	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
143		RFP Docu ment : Intro ducti on		**Point 1.4 - Existing IT- Setup :** Currently, the Storage deployed enterprise class storage at DC and DRC. **Request for Clarification** 1. Make and model number of current storage deployed	Will be shared with the sucessful bidder	Response /Clarificat ion
144		RFP Docu ment : Intro ducti on		**Point 1.4 - Existing IT- Setup:** In the existing setup at DC and DRC, Bank CBS application is running on IBM Power series and other surrounding applications running on Dell x86 Server. **Request for Clarification** 1. OS version and edition running on IBM Power Series 2. File system used by CBS Database on IBM Power Series 2. OS version and edition running on Dell x86 Server	Will be shared with the sucessful bidder	Response /Clarificat ion

145		RFP Document : Detailed Scope of Work		**Point 3.6: 3.6 Installation and Configuration - DC &-DR replication:** Asynchronous replication Oracle Native replication between DC and DR. **Request for Clarification** 1. Current version of Oracle DB 2. Current version of Cluster aware 3. Database Size	Will be shared with the sucessful bidder	Response /Clarification
146		Page No 19 - Point No 3 Details of Scope of Work 3.1 General	Bidder willing to participate in this RFP shall submit duly stamped Integrity Pact on a stamp paper of INR 1000, as per Annexure 8 attached with this RFP. Integrity pact shall be submitted by all the prospective Bidders at the time of Bid submission or as per Bank's satisfaction. Non – submission of Integrity Pact as per time scheduled prescribed by Bank may be relevant ground for Bidder's disqualification to participate in the Bid process. Bank has appointed Independent External Monitor (hereinafter referred to as IEM) for this pact, whose name and e-mail ID are as follows:	There is conflict between given clause no 3 at page 19 and Clause no 5 at page 34 toward submission of Integrity Pact as per Annexure 8 or Annexure 9. We request you to please clarify annexure 8 (Integrity Pact) is not available in the RFP. Also confirm Amount of Stamp paper to be used for Integrity pact	Refer to Annexure 9 for Integrity Pact of the RFP	Response /Clarification
147		Page No 34 5 General Terms Conditions Point No 5.32 Integrity Pact	Each Participating bidder/s shall submit Integrity Pact as per attached Annexure-9 on duly stamped of Rs 1000. Integrity pact should submit by all participating bidders at the time of submission of bid documents or as per satisfaction of the Bank. The Non-submission of Integrity Pact as per time scheduled prescribed by Bank shall be relevant ground of disqualification to participating in Bid process.	There is conflict between given clause no 3 at page 19 and Clause no 5 at page 34 toward submission of Integrity Pact as per Annexure 8 or Annexure 9. We request you to please clarify annexure 8 (Integrity Pact) is not available in the RFP. Also confirm Amount of Stamp paper to be used for Integrity pact.	Refer to Annexure 9 for Integrity Pact of the RFP	Response /Clarification

148		Page No 64 Payment Terms	Payment Terms	We have suggested payment terms as per following: 1. 80% Payment of Delivery of Hardware 2. 20% Payment Installation & Commissioning of Hardware AMC Payment Terms: AMC shall commence on completion of warranty period and will be paid quarterly in arrears..	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
149	18	3.1	All the equipment (hardware, software) supplied as part of solution should be IPV4 as well as IPV6 compliant from day one and should support *all the protocols.*	Can you please elaborate which all protocols are expected to support by the proposed SAN storage, SAN switches and Network Switches?	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
150	20	3.6.5	The bidder shall ensure compatibility of the hardware, software and other equipment that they supply with the hardware and software systems being used in the Bank.	Can you please let us know the details of the hardware and software systems being used in the bank with which we need to ensure the compatibility?	Will be shared with the sucessful bidder	Response /Clarificat ion
151	Appen dix 2	SAN Switc h	14. Inter-fiber channel switch links is required to support the transport of multiple Virtual Fabrics between fiber channel switches, whilst preserving the security between Virtual Fabrics.	Are you going to implement Virtual Fabric? How many VF do you want to create?	Virtual Fabric feature should be avaliable for future use	Response /Clarificat ion
152	Appen dix 2	SAN Switc h	15. The fiber channel switch is required to support routing between Virtual Fabric instance in hardware.	1. Are you going to implement Virtual Fabric? 2. How many VF do you want to create? 3. Do you want to create an Inter Fabric Link between the Virtual Fabrics?	Virtual Fabric feature should be avaliable for future use	Response /Clarificat ion
153	Appen dix 2	SAN Switc h	20. The fiber channel switch is required to be capable of connecting neighboring Fiber Channel switches	Which vendor switches, these proposed SAN switches will be connected to? Interop mode is not supported by FC SAN. If you have certain vendor switches, then you have to take the SAN switches from same vendor if you want to connect through ISL and merge the Fabrics.	In existing setup Bank has Brocade switches	Response /Clarificat ion

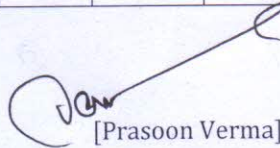|						
154	Appendix 2	Storage-DC-DRC	16. The storage is required to have minimum 512 GB for DC/DRC storage usable Data cache / memory available across the pair of controller post write mirroring / protection overheads. The cache memory architecture and the proposed cache is required to be explained in the proposal.	Can you please rephrase this point to, "The storage is required to have minimum **384 GB** for DC/DRC storage usable Data cache / memory available across the pair of controllers and should allow dynamic cache allocation depending on the workload. The cache memory architecture and the proposed cache is required to be explained in the proposal."	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarification
155	Appendix 2	Storage-DC-DRC	21. The proposed storage is required to be compatible with major hypervisors like VMware, RHEV, AHV and Hyper-V etc. and upgrades.	Can you please rephrase this point to by removing AHV from it. Because as per following KB article from Nutanix, it is not recommended to connect external storage to Nutanix system/AHV. https://portal.nutanix.com /page/documents/kbs/det ails?targetId=kA00e00000 0CtelCAC *"**The proposed storage is required to be compatible with major hypervisors like VMware, RHEV and Hyper-V etc. and upgrades.**"*	The proposed storage is required to be compatible with major hypervisors like VMware, RHEV, and Hyper-V etc. and upgrades.	Response /Clarification
156	20		Bidder shall conduct preventive maintenance (including but not limited to inspection, testing, satisfactory execution of all diagnostics, cleaning and removal of dust and dirt of the Equipment and necessary repairing of the Equipment) at specified intervals as may be necessary from time to time to ensure that the equipment is in efficient running condition so as to ensure trouble free functioning.	Please clarify the preventive maintenance frequency i.e. Quaterly, Half-yearly, yearly.	Preventive maintenance should be done on quaterly, basis.	Response /Clarification
157		21/DC &-DR Replication	Asynchronous replication Oracle Native replication between DC and DR	Please calrify the replication software required for Oracle native replication will be provided by Bank.	yes, understanding is correct oracle native feature is used for replication	Response /Clarification

158		Gene ric	Infra Requirement	Please clarify, rack, space, power, cooling, earthling and any additional trans receiver modules, connectors, cables etc. will not be in scope of bidder.	Space, Power, cooling Environment will be provided by the Bank along with RACK. However for cabling details refer Bill of Material.	Response /Clarificat ion
159	13		2. Eligibility Criteria Bidder should have an annual turnover of atleast INR 100 crores in the last three financial years (i.e. 2017-18, 2018-19 and 2019-20)	Request to modify the clause to : Bidder or Bidder's parent company (incase bidder is wholly owned subsidiary of parent company) should have an annual turnover of at least INR 100 crores in the last three financial years (i.e. 2017-18, 2018-19 and 2019-20)	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
160	13		The bidder should have a positive net worth in two out of last three financial (i.e. 2017-18, 2018-19 and 2019-20).	Request to modify the clause to : Bidder or Bidder's parent company (incase bidder is wholly owned subsidary of parent company) have a positive net worth in two out of last three financial (i.e. 2017-18, 2018-19 and 2019-20).	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
161	13		The bidder should be a net-profit-making company in two out of last three financial years (i.e. 2017-18, 2018-19 and 2019-20).	Request to modify the clause to : Bidder or Bidder's parent company (in case bidder is wholly owned subsidiary of parent company) should be a net-profit-making company in two out of last three financial years (i.e. 2017-18, 2018-19 and 2019-20).	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
162	14		Bidder should have experience in supply, implementation and maintenance of DC & DRC Setup in at least one public sector bank/scheduled commercial bank in India with minimum 1000 branches with order value of minimum INR 10 cr of product & services	Request to modify the clause to : Bidder or Bidder's parent company (incase bidder is wholly owned subsidiary of parent company) should have experience in supply, implementation and maintenance of DC & DRC Setup in at least one public sector bank/scheduled commercial bank in India with minimum 1000 branches with order value of minimum INR 10 cr of product & services	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
163	64		8. Payment Terms Hardware Cost (Storage/LAN & SANS Switches / Structured Cabling, etc.) part of Appendix 1- Bill of Material 70%-------Delivery of Hardware 30%--------Installation & Commissioning of Hardware	Request to modify the clause as : 80%-------Delivery of Hardware 20%--------Installation & Commissioning of Hardware AMC------Yearly in advance [As OEM charges AMC yearly in advance)	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion

			AMC------Quarterly in arrears			
164	RFP Document: Introduction		**Point 1.4 - Existing IT-Setup :** Currently, the Storage deployed enterprise class storage at DC and DRC.	Request for Clarification 1. Make and model number of current storage deployed	Will be shared with the successful bidder	Response /Clarification
165	RFP Document: Introduction		**Point 1.4 - Existing IT-Setup:** In the existing setup at DC and DRC, Bank CBS application is running on IBM Power series and other surrounding applications running on Dell x86 Server.	Request for Clarification 1. OS version and edition running on IBM Power Series 2. File system used by CBS Database on IBM Power Series 2. OS version and edition running on Dell x86 Server	Will be shared with the successful bidder	Response /Clarification
166	RFP Document: Detailed Scope of Work		**Point 3.1 - General:** Successful bidder is required to co-ordinate with the existing CBS SI for migration of data from existing Storage to new storage. Migration of data from old storage to new storage, is required to be done by the bidder. Migration tool needs to provided by the bidder at no additional cost to the Bank	Request for Clarification 1. The current used capacity in existing storage. 2. Size of Data to be migrated in TB from old storage	Usable capacity of 100 TB Storage at DC and DRC at each location	Response /Clarification
167	RFP Document: Detailed Scope of Work		**Point 3.6: 3.6 Installation and Configuration - DC &-DR replication:** Asynchronous replication Oracle Native replication between DC and DR.	Request for Clarification 1. Current version of Oracle DB 2. Current version of Cluster aware 3. Database Size	Will be shared with the sucessful bidder	Response /Clarification
168	11.1Annexure 1: Technical Proposal Format		Gross revenue of the bidder (not of the group of companies) & Profit of the bidder (not of the group)	Request to consider credentials of parent company since bidder is wholly owned subsidary of the parent company operational in Feb 2021	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarification
169	Appendix 2 Leaf-48 Port 1&10G Copper		The Switch should support intelligent buffer management with a minimum buffer of 30MB	Request bank to consider 32 MB of buffer for better performance in the DC network	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarification

170	Appen dix 2 Leaf-48 Port 1&10G Fiber		The Switch should support intelligent buffer management with a minimum buffer of 30MB	Request bank to consider 32 MB of buffer for better performance in the DC network	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
171	73		10.2Appendix 2: Technical Specifications (Minimumm Technical Specificaitons for Storage at DC/DRC/NDR) Point 4. Storage must be configured with FC,SMB,iSCSI, NFS and FTP protocols. Storage must support QoS.	CBS Storage solution generally do not require file protocols like NFS/SMB/FTP. As per our brief understanding of the current setup, the existing storage systems are also pure block only. Kindly share the exact usecase for these file protocols and remove if unncessary as not all OEM have a unified storage appliance and some OEM prefer to have file services as an independent solution on dedicated additional storage controllers. If these are mandatory, please provide the capacity of the file services that bank intends to consume on the storage at each site	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
172	73		10.2Appendix 2: Technical Specifications (Minimum Technical Specifications for Storage at DC/DRC/NDR) Point 9. All the storage drives and backend connectivity is required to be based on minimum 12 Gbps SAS. Minimum 8 x 12Gb/s backend ports to be provided.	The physical backend ports vary across every OEM based on internal 12 Gb SAS LANE's inside each physical SAS port. Minimum 4 X 12 Gb/s are typical specifications with most of the OEM's hence requesting you to modify.	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
173	73		10.2Appendix 2: Technical Specifications (Minimum Technical Specifications for Storage at DC/DRC/NDR) Point 14. Bidder should propose Storage for Data Centres – Usable Capacity DC- 250 TB , DR 180 TB on maximum 7.6TB SSDs. Once the Flash Storage Device reaches the write endurance limits or	The SSD/Flash module sizes vary across OEM's basis on their investment on R&D and the decision should be left to OEM to decide the best for achieving the required performance. Please extend the condition of maximum drive size to 20 TB. Also higher SSD/Flash drive will ensure low datacenter footprint saving both power/cooling.	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion

			service life, same needs to be			
174	12		Pre-Bid Meeting: Bidders, who have purchased the RFP document, will only be eligible to attend pre-bid meeting on a scheduled date.	Please also allow OEM to participate for prebid meeting/discussion	NA	Response /Clarificat ion
175	14		2. Eligibility Criteria: Bidder should have its own Support center in Mumbai/Navi Mumbai & Hyderabad for onsite, Telephonic and Remote Assistance Services	Please amended by adding Bidder/OEM should have its own Support center in Mumbai/Navi Mumbai & Hyderabad for onsite, Telephonic and Remote Assistance Services	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
176	14		2. Eligibility Criteria: point 13.Bidder should have experience in supply, implementation and maintenance of DC & DRC Setup in at least one public sector bank/scheduled commercial bank in India with minimum 1000 branches with order value of minimum INR 10 cr of product & services	requesting bank to consider order value of minimum INR 4 cr of product & services	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
177	64		8. payment terms	Requesting bank to amend the Terms to 90% on delivery and 10% on Installation and Sign Off.	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
178	64		AMC Payment : Quarterly in arrears	Kindly amend the payment terms to Quarterly in Advance	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
179	49		5.72 Penalty Clause	requesting bank to amend delivery delay clause to 1% to 0.1% and Maximum cap from 10% to 1%	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
180	67		If any hardware component fails..	requesting bank to amend the penalties to 0.1% of monthly product and services cost for every 4 hours of delay	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
181	67		If any hardware component in High Availability (HA) mode fails..	requesting bank to amend the penalties to 0.1% of monthly product and services cost for every 6 hours of delay	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
182	68		For three (3) downtime occurrences within a stipulated time window of a calendar month..	Kindly remove this panlty clause	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
183	69		Down time for servicing..	Requesting bank to amend this clause from 30 min to 2 hrs	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion

184	70		Bank expects the Bidder to complete scope of the project...	requesting bank to amend clause to 1% to 0.1% and Maximum cap from 10% to 1%	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion
185			Other	Please let us know if Hardware is not installed within 60 days due to hold from bank for some reason.	There is no change in the requirement; the requirement stand as it is (as per RFP)	Response /Clarificat ion

[Prasoon Verma]
Chief Manager-GAD