

TECHNICAL EVALUATION REPORT

(As Per Rule 35 of PP Rules, 2004)

1. NAME OF PROCURING AGENCY : PAKISTAN NATIONAL SHIPPING CORPORATION (PNSC),
2. METHOD OF PROCUREMENT : SINGLE STAGE TWO ENVELOPS PROCEDURE, AS PER PPR RULE 36(b), OF PPR 2004,
3. TITLE OF PROCUREMENT : TENDER FOR PROCUREMENT/SUPPLY, INSTALLATION, CONFIGURATION AND IMPLEMENTATION OF HYPER CONVERGED INFRASTRUCTURE (HCI) SOLUTION FOR PNSC,
4. TENDER INQUIRY NO. : PRCD/HCI/PNSC/2025/408
5. PPRA REF. NO. (TSE) : *N/A (THROUGH PPRA EPADS System)*
6. DATE & TIME OF BID CLOSING : 22-07-2025 (11:00 A.M)
7. DATE & TIME OF BID OPENING : 22-07-2025 (11:30 A.M)
8. NO OF BIDS RECEIVED : TWO (02),
9. CRITERIA FOR BID EVALUATION : QUALIFIED FOR TECHNICAL EVALUATION CRITERIA,
10. DETAILS OF BID(S) EVALUATION: DETAILS ARE TABULATED HEREUNDER:

NAME OF BIDDERS	TECHNICAL MARKS (IF APPLICABLE)	RULE/REGULATION/SBD*/POLICY/ BASIS FOR TECHNICAL REJECTION / ACCEPTANCE AS PER RULE 35 OF PP RULES, 2004.
M/S. TELEC ELECTRONICS & MACHINERY (PVT.) LTD,	130/150 = (87 %)	TECHNICALLY QUALIFIED BIDDER
M/S. TRADE LINKERS ELECTRONIC & MACHINERY (PVT.) LTD	130/150 = (87 %)	TECHNICALLY QUALIFIED BIDDER

11. Any other additional / supporting information. **BIDDERS ELIGIBILITY CRITERIA / PERFORMANCE CRITERIA AND TECHNICAL EVALUATION REPORTS ARE ATTACHED.**

Signature:


ALI IMAM QADRI
General Manager (Procurement)

Official Stamp:

Standard Bidding Documents (SBD).

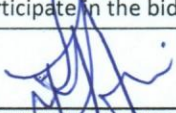
**Supply, Installation, Configuration and Implementation of Hyper Converged Infrastructure (HCI) Solution
along with Services for PNSC**

Tender # PRCD/HCI/PNSC/2025/408

DATE: 03/09/2025

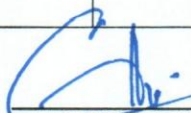
BIDDERS ELIGIBILITY CRITERIA

S#	Category	Comply (Yes/No)	
		Telec Electronics & Machinery (Pvt.) Ltd	Trade Linkers Electronics & Machinery (Pvt.) Ltd
1	Firms should be registered with taxation authorities, have valid National Tax Number (NTN), General Sales Tax (GST) Registration Number and should be enrolled/enlisted on Active Taxpayers List (ATL) of FBR (Valid copy to be attach).	YES	YES
2	Bidder should be Principal Authorized Distributor / Enterprise Partner / Tier One / Premier / Platinum / Gold Partner of the HCI Software & Servers (Valid copy to be attached).	YES	YES
3	Bidder should have minimum 02 OEM certified Engineers of HCI Solution (Copy of C.Vs and valid certificates to be attached).	YES	YES
4	Manufacturer Authorization letter is required from the HCI principal (Valid copy to be attached with date and Tender No).	YES	YES
5	Hyper-Converged Infrastructure Software must be listed in any of the 2021 or later Gartner Magic Quadrant for Hyper-Converged Infrastructure Software (documentary proof to be attached).	YES	YES
6	Bidder's local office must be in Karachi (Address to be shared for onsite support).	YES	YES
7	Quoted solution must have Original Equipment Manufacturer (OEM) presence in Pakistan (documentary proof to be attached).	YES	YES
8	Bidder must have Experience (minimum 02 Years) for Deployment of Virtualization Environment (Documentary Proof to be attached).	YES	YES
9	Bidder is required to submit last Five (05) Years' Bank statement / audited financial statements of the Firm / Company showing the financial stability.	YES	YES
10	OEM Must Have minimum 10 HCI Deployments in Pakistan with the required components i.e. Compute Virtualization, Storage Virtualization and Network Virtualization (Copies of POs / Invoices to be attached).	YES	YES
11	Bidder submits Affidavit of undertaking that firm(s) or it's affiliated/concerns is not blacklisted by PPRA/Government Ministries/Department or Public Sector entities would be eligible to participate in the bid.	YES	YES


MR SYED AHMED ALI
Deputy Manager (MIS)
Member Tender Committee


MR REHAN AHMED
Act. Manager (Finance)
Member Tender Committee


MR DANISH MERAJ
Act. General Manager (MIS)
Member Tender Committee


MR ALI IMAM QADRI
General Manager (Procurement)
Chairman Tender Committee

Supply, Installation, Configuration and Implementation of Hyper Converged Infrastructure (HCI) Solution along with Services for PNSC

Tender # PRCD/HCI/PNSC/2025/408

DATE: 03/09/2025

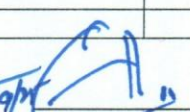
TECHNICAL EVALUATION/PERFORMANCE CRITERIA

S#	Description	Telec Electronics & Machinery (Pvt.) Ltd		Trade Linkers Electronics & Machinery (Pvt.) Ltd	
		Comply (Yes/No)	Marks	Comply (Yes/No)	Marks
1	OEM must have HCI Deployments in Pakistan (minimum 10) with the required components i.e. Compute Virtualization, Storage Virtualization and Network Virtualization (documentary proof to be attached).				
	1 - 9 Deployments (Non Compliance).....(0 Marks)	YES	20	YES	30
	10 - 15 Deployments.....(10 Marks)				
	16 - 25 Deployments.....(20 Marks)				
	26 and above Deployments.....(30 Marks)				
2	Bidder should have minimum 02 OEM certified Engineers of HCI Solution (Copy of C.Vs and valid certificates to be attached).				
	0 - 1 OEM Engineers (Non Compliance).....(0 Marks)	YES	20	YES	20
	2 - 3 OEM Engineers.....(10 Marks)				
	4 and above OEM Engineers.....(20 Marks)				
3	Hyper-Converged Infrastructure Software must be listed in any of the 2021 or later Gartner Magic Quadrant for Hyper-Converged Infrastructure Software (documentary proof to be attached).				
	Non Compliance.....(0 Marks)	YES	20	YES	20
	Compliance.....(20 Marks)				
4	Bidder must provide Clientele list where HCI solution has been deployed (including telephone Numbers, representative name, Email addresses etc.)				
	0 - 1 clients (Non Compliance).....(0 Marks)	YES	30	YES	20
	2 - 5 clients.....(10 Marks)				
	6 - 10 clients.....(20 Marks)				
	11 and above clients.....(30 Marks)				
5	Bidder must have Experience (minimum 02 Years) for Deployment of Virtualization Environment				
	0 - 1 Year (Non Compliance).....(0 Marks)	YES	20	YES	20
	2 - 3 Years.....(20 Marks)				
	4 and above Years.....(30 Marks)				
6	Quoted HCI must be compatible with any brand of Intel (x86) Architecture Hardware Servers (documentary proof to be attached).				
	Non Compliance.....(0 Marks)	YES	20	YES	20
	Compliance.....(20 Marks)				
TOTAL MARKS			150		150
MARKS OBTAINED			130		130
PERCENTAGE			87%		87%


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Member Tender Committee


MR ALI IMAM QADRI
General Manager (Procurement)
Chairman Tender Committee

TECHNICAL SPECIFICATION (PRIMARY SITE)


(Non-Compliance shall lead to the rejection of Bids)

S#	Technical Description	Telec Electronics & Machinery (Pvt.) Ltd		Trade Linkers Electronics & Machinery (Pvt.) Ltd	
		Comply (Yes/No)	Ref. / Page No	Comply (Yes/No)	Ref. / Page No
ITEM No. 01 - VIRTUALIZATION MANAGEMENT LICENSE FOR HCI (QTY: 02 Instance)					
1	Must provide High Availability / Redundancy for Virtualization Management Platform on DR Site in case of any disaster.	YES	B-1, Page#7	YES	B-1, Page#7
2	Must Support Management for Existing Virtual Machines on VMware Platform for single window management.	YES	B-2, Page#562	YES	B-2, Page#562
3	Must support to create and manage local Users with Role Based Access and Permission Control.	YES	B-2, Page#521	YES	B-2, Page#521
4	Must provide Web Bowser based Web Management.	YES	B-2, Page#156	YES	B-2, Page#156
5	Must provide complete visibility and centralized management / control of the Virtualization Platform.	YES	B-2, Page#17	YES	B-2, Page#17
6	Must provide capability to scale up to 64 nodes or better.	YES	B-2, Page#93	YES	B-2, Page#93
ITEM No. 02 - VIRTUALIZATION HYPERVISOR (QTY: 06 Sockets)					
1	Should be highly redundant providing capability for the VMs to restart on another node in case of any Node failure in the Cluster.	YES	B-2, Page#21	YES	B-2, Page#21
2	Must provide VM Snapshot capability to revert back to previous point in time in case a failure or system error occurs.	YES	B-2, Page#242	YES	B-2, Page#242
3	Must provide VM Clone capability for creating cloned instances from source VM for testing or any other purposes.	YES	B-2, Page#189	YES	B-2, Page#189
4	Must provide VM vMotion / Live Migration capability to Live migrate VMs to any nodes in the Cluster without any downtime.	YES	B-2, Page#230	YES	B-2, Page#230
5	Must provide the capability to automatically hot-add resources including vCPUs and Memory real-time based on VM contention.	YES	B-2, Page#555	YES	B-2, Page#555
6	Must provide automated Resource Scheduling and Load Balancing capability for balanced performance on all nodes across the cluster.	YES	B-2, Page#122	YES	B-2, Page#122
7	Must provide Distributed Switch capability to configure and administer switching for the entire Cluster.	YES	B-1, Page#7	YES	B-1, Page#7
8	Must provide Hardware Health Check capability to Monitor CPU, Memory, Network Interface Card, Hard Drive and RAID Controller etc.	YES	B-2, Page#430	YES	B-2, Page#430
9	Must support SNMP and Web API Services.	YES	B-2, Page#583 & 602	YES	B-2, Page#583 & 602
10	Must support patch update, rollback feature.	YES	B-2, Page#510	YES	B-2, Page#510
ITEM No. 03 - STORAGE VIRTUALIZATION (QTY: 06 Sockets)					
1	Must be from the same Vendor as the Hypervisor.	YES	B-1, Page#7	YES	B-1, Page#7

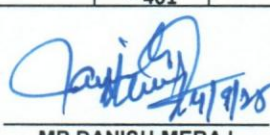
TECHNICAL SPECIFICATION (PRIMARY SITE)

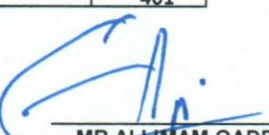
(Non-Compliance shall lead to the rejection of Bids)

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		Comply (Yes/No)	Ref. / Page No	Comply (Yes/No)	Ref. / Page No
3	Proposed Solution should be licensed in a manner to take backups of every VM in the Cluster regardless on which physical Node it resides on.	YES	B-2, Page#450	YES	B-2, Page#450
4	Must provide Automated Scheduling for Backups based on Hourly, Daily, weekly etc. scheduling.	YES	B-2, Page#445, 447	YES	B-2, Page#445, 447
5	Must support to configure Internal Virtual Storage, External SAN or NAS to be Backup repository for Storing Virtual Machine Backups.	YES	B-2, Page#445	YES	B-2, Page#445
6	Must support Industry's common storage protocols such as iSCSI, FC or Network File Sharing (NFS).	YES	B-2, Page#391 ~ 401	YES	B-2, Page#391 ~ 401


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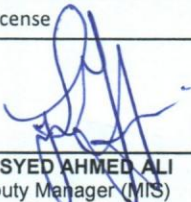

MR DANISH MERAJ
 Act. General Manager (MIS)
 Member Tender Committee


MR ALIMAM QADRI
 General Manager (Procurement)
 Chairman Tender Committee


HCI HARDWARE SERVER FOR PRIMARY SITE (QTY: 03 NOS.)


Type	Description	Qty	Telec Electronics & Machinery (Pvt.) Ltd		Trade Linkers Electronics & Machinery (Pvt.) Ltd	
			Comply (Yes/No)	Ref. / Page No	Comply (Yes/No)	Ref. / Page No
Hardware	2U Chassis with 12 x 2.5" / 3.5" + 2 x 2.5" / 3.5" Disk Slots or better	1	YES	T-1, B-4	YES	TL-1, B-4
	Intel Xeon Gold 6530 2.1GHz, 32C/64T or better	2	YES	T-1, B-4	YES	TL-1, B-4
	64GB DDR5 5600MHz. RDIMMs or better	24	YES	T-1, B-4	YES	TL-1, B-4
	480GB SSD or better with Raid 1 (OS Installation)	2	YES	T-1, B-4	YES	TL-1, B-4
	7.68 TB Enterprise Grade SSD, 3D NAND TLC SSD 2.5", SATA 3.0 6Gbps SSD or better (Data Storage)	7	YES	T-1, B-4	YES	TL-1, B-4
	10G Ethernet Optical Ports with SFP Modules (Multimode Optical Transceiver) or better	6	YES	T-1, B-4	YES	TL-1, B-4
	LC-LC, Multi mode, 3 meters Optical cables or better	6	YES	T-1, B-4	YES	TL-1, B-4
	1G Ethernet Copper Ports or better	4	YES	T-1, B-4	YES	TL-1, B-4
	Raid Card with Pass-through (JBOD) mode supported	1	YES	T-1, B-4	YES	TL-1, B-4
	750W Power Supply or better	2	YES	T-1, B-4	YES	TL-1, B-4
	Embedded Server Management Software for Remote Management	1	YES	T-1, B-4	YES	TL-1, B-4
	Complete Rail Kit for Rack Mounting	1	YES	T-1, B-4	YES	TL-1, B-4
	Front Bezel (front cover or faceplate)	1	YES	T-1, B-4	YES	TL-1, B-4
Warranty	05 Years Comprehensive OEM Backed Replacement Warranty with Support & Services (for business continuity)		YES	T-1, B-4	YES	TL-1, B-4

Description	Qty	Comply (Yes/No)	Ref. / Page No	Comply (Yes/No)	Ref. / Page No
Windows Server 2025 Standard – 16 Cores License Pack OLP with 5 Cals per license	15	YES	T-4, B-7	YES	TL-4, B-7


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MR ALLIMAM QADRI
 General Manager (Procurement)
 Chairman Tender Committee

TECHNICAL SPECIFICATION (DR SITE)


(Non-Compliance shall lead to the rejection of Bids)

S#	Technical Description	Telec Electronics & Machinery (Pvt.) Ltd		Trade Linkers Electronics & Machinery (Pvt.) Ltd	
		Comply (Yes/No)	Ref. / Page No	Comply (Yes/No)	Ref. / Page No
ITEM No. 01 - VIRTUALIZATION HYPERVISOR (QTY: 04 Sockets)					
1	Should be highly redundant providing capability for the VMs to restart on another node in case of any Node failure in the Cluster.	YES	B-2, Page#21	YES	B-2, Page#21
2	Must provide VM Snapshot capability to revert back to previous point in time in case a failure or system error occurs.	YES	B-2, Page#242	YES	B-2, Page#242
3	Must provide VM Clone capability for creating cloned instances from source VM for testing or any other purposes.	YES	B-2, Page#189	YES	B-2, Page#189
4	Must provide VM vMotion/Live Migration capability to Live migrate VMs to any nodes in the Cluster without any downtime.	YES	B-2, Page#230	YES	B-2, Page#230
5	Must provide the capability to automatically hot-add resources including vCPUs and Memory real-time based on VM contention.	YES	B-2, Page#555	YES	B-2, Page#555
6	Must provide automated Resource Scheduling and Load Balancing capability for balanced performance on all nodes across the cluster.	YES	B-2, Page#122	YES	B-2, Page#122
7	Must provide Distributed Switch capability to configure and administer switching for the entire Cluster.	YES	B-1, Page#7	YES	B-1, Page#7
8	Must provide Hardware Health Check capability to Monitor CPU, Memory, Network Interface Card, Hard Drive and RAID Controller etc.	YES	B-2, Page#430	YES	B-2, Page#430
9	Must support SNMP and Web API Services.	YES	B-2, Page#583 & 602	YES	B-2, Page#583 & 602
10	Must support patch update, rollback feature.	YES	B-2, Page#510	YES	B-2, Page#510
ITEM No. 02 - STORAGE VIRTUALIZATION (QTY: 04 Sockets)					
1	Must be from the same Vendor as the Hypervisor.	YES	B-1, Page#7	YES	B-1, Page#7
2	Must provide both "2 Copies" and "3 copies" options for data redundancy to be selected from while initial configuration of Virtual Storage.	YES	B-1, Page#7 B-2, Page#24	YES	B-1, Page#7 B-2, Page#24
3	Must provide Data Striping capability with flexible stripe width.	YES	B-2, Page#23	YES	B-2, Page#23
4	Must provide Data-At-Rest Encryption (In-Built) for VM Data Security without using any specialized Hardware such as Self-Encrypting Drives (SEDs).	YES	B-2, Page#577	YES	B-2, Page#577
5	Must provide SSD based Read Caching and Write Buffer capability to improve the performance of the I/O.	YES	B-1, Page#7	YES	B-1, Page#7
6	Must provide Data Balancing capability to more evenly distribute the data across the devices to achieve a balanced distribution of resources.	YES	B-2, Page#355	YES	B-2, Page#355


TECHNICAL SPECIFICATION (DR SITE)


(Non-Compliance shall lead to the rejection of Bids)

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		Comply (Yes/No)	Ref. / Page No	Comply (Yes/No)	Ref. / Page No
1	Must be fully Compatible with Compute Hypervisor.	YES	B-1, Page#7	YES	B-1, Page#7
2	Must support Replication without any agent installation in the VM (Agentless) i.e. through the Hypervisor layer.	YES	B-2, Page#467	YES	B-2, Page#467
3	Must support to achieve RPO in seconds.	YES	B-1, Page#7	YES	B-1, Page#7
4	Must support to replicate 100+ Virtual Machines for future perspective.	YES	B-2, Page#308	YES	B-2, Page#308
5	Must support Compression Technology to minimize actual Data Transfer across the Network between Sites.	YES	B-2, Page#445	YES	B-2, Page#445
6	Must support 1 Click DR Site Failover and 1 Click Production Site Failback for Planned and Unplanned DR testing Scenarios.	YES	B-1, Page#7	YES	B-1, Page#7
7	Must support to migrate only incremental Data in case of Failback from DR Site to Production Site rather than migrating back complete VM Data.	YES	B-3	YES	B-3


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MR ALI IMAM QADRI
 General Manager (Procurement)
 Chairman Tender Committee


HCI HARDWARE SERVER FOR DR SITE (QTY: 02 NOS.)

Type	Description	Qty	Telec Electronics & Machinery (Pvt.) Ltd		Trade Linkers Electronics & Machinery (Pvt.) Ltd	
			Comply (Yes/No)	Ref. / Page No	Comply (Yes/No)	Ref. / Page No
Hardware	2U Chassis with 12 x 2.5" / 3.5" + 2 x 2.5" / 3.5" Disk Slots or better	1	YES	T-2, B-4	YES	TL-2, B-4
	Intel Xeon Gold 6530 2.1GHz, 32C/64T or better	2	YES	T-2, B-4	YES	TL-2, B-4
	64GB DDR5 5600MHz. RDIMMs or better	24	YES	T-2, B-4	YES	TL-2, B-4
	480GB SSD or better with Raid 1 (OS Installation)	2	YES	T-2, B-4	YES	TL-2, B-4
	7.68 TB Enterprise Grade SSD, 3D NAND TLC SSD 2.5", SATA 3.0 6Gbps SSD or better (Data Storage)	7	YES	T-2, B-4	YES	TL-2, B-4
	10G Ethernet Optical Ports with SFP Modules (Multimode Optical Transceiver) or better	6	YES	T-2, B-4	YES	TL-2, B-4
	LC-LC, Multi mode, 3 meters Optical cables or better	6	YES	T-2, B-4	YES	TL-2, B-4
	1G Ethernet Copper Ports or better	4	YES	T-2, B-4	YES	TL-2, B-4
	Raid Card with Pass-through (JBOD) mode supported	1	YES	T-2, B-4	YES	TL-2, B-4
	750W Power Supply or better	2	YES	T-2, B-4	YES	TL-2, B-4
	Embedded Server Management Software for Remote Management	1	YES	T-2, B-4	YES	TL-2, B-4
	Complete Rail Kit for Rack Mounting	1	YES	T-2, B-4	YES	TL-2, B-4
	Front Bezel (front cover or faceplate)	1	YES	T-2, B-4	YES	TL-2, B-4
Warranty	05 Years Comprehensive OEM Backed Replacement Warranty with Support & Services (for business continuity)		YES	T-2, B-4	YES	TL-2, B-4


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 Chairman Tender Committee

TECHNICAL SPECIFICATION

(Non-Compliance shall lead to the rejection of Bids)

ANNEX - B5

24 PORT FIBER OPTIC NETWORK 10G SWITCH (QTY: 02 NOS)

Type	Description	Telec Electronics & Machinery (Pvt.) Ltd		Trade Linkers Electronics & Machinery (Pvt.) Ltd	
		Comply (Yes/No)	Ref. / Page No	Comply (Yes/No)	Ref. / Page No
Requirement	Must have 24 × SFP+ ports (Loaded with 15 x Multimode Short Range (300 meter) 10G SFP+ Transceiver modules & 1 x 10G DAC Cable 1.2meter).	YES	B-5	YES	B-5
	Switch console cable must be included.	YES	B-5	YES	B-5
	SFPs must be of the same OEM Brand that of quoted Switch	YES	B-5	YES	B-5
	Must have 6 × 100G QSFP28 ports	YES	B-5	YES	B-5
	Must have 1.67Tbps or more switching capacity	YES	B-5	YES	B-5
	Forwarding rate Must be more than 599 Mpps or more	YES	B-5	YES	B-5
	Quoted switch must have redundant Power supplies and 3 Hot-swappable fans at least	YES	B-5	YES	B-5
	Must be a Manageable Switch with Layer-3 features such as RIP, RIPng, OSPF & OSPFv3, BGP, BGP4+, Equal-cost multi-path routing (ECMP), IS-IS, PBR and VRRP	YES	B-5	YES	B-5
	Quoted switch must support L2, L3 VXLAN	YES	B-5	YES	B-5
	Switch CPU must be 4Core, 2.0GHz or higher	YES	B-5	YES	B-5
	Quoted switch must support MPLS, MCE and MPLS VPN	YES	B-5	YES	B-5
	Quoted switch must support IGMP Snooping. MVRP, PIM and IPv6 PIM must also be supported	YES	B-5	YES	B-5
	Must support Spanning Tree Protocol, 802.1D STP, 802.1W RSTP & 802.1S MSTP	YES	B-5	YES	B-5
	Must support Stacking of local and remote devices through standard Ethernet interfaces. Must support stacking of 9 switches or more.	YES	B-5	YES	B-5
	Switch RAM must be 4GB or higher	YES	B-5	YES	B-5
	Switch Flash must be 1GB or higher	YES	B-5	YES	B-5
	Must Support Link Aggregation Protocol and M-LAG	YES	B-5	YES	B-5
	Must have 4K or more VLANs support and at least 128K MAC address entries	YES	B-5	YES	B-5
	Must support IPv6 routing entries 32K or higher	YES	B-5	YES	B-5
	Must support RDMA, RoCE, Open flow 1.3	YES	B-5	YES	B-5
	Must support local and remote Port Mirroring, gRPC, ERSPAN	YES	B-5	YES	B-5
	Must Support Ingress ACL 2K or more	YES	B-5	YES	B-5
	Must support SNMP v1, 2 & 3, SSL and SSH 2.0	YES	B-5	YES	B-5
	Must support IPv4 routing entries 64K or higher	YES	B-5	YES	B-5
	Must support security features like IP Source Guard, RADIUS, HWTACACS, 802.1x	YES	B-5	YES	B-5
	Must Support Jumbo Frame	YES	B-5	YES	B-5
	QoS Support Flexible Queues Per Port, strict priority (SP), WFQ, SP + WFQ, WRED, CAR, COPP	YES	B-5	YES	B-5
	Software updates, patches (whenever available during support period)	YES	B-5	YES	B-5
	Operating temperature: 0°C to 45°C	YES	B-5	YES	B-5
Software	Network Monitoring Software (same OEM)	YES	B-5	YES	B-5


TECHNICAL SPECIFICATION

(Non-Compliance shall lead to the rejection of Bids)

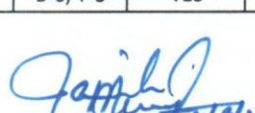
ANNEX - B6

RACKMOUNT NAS STORAGE (QTY: 02 NOS.)

Type	Description	Telec Electronics & Machinery (Pvt.) Ltd		Trade Linkers Electronics & Machinery (Pvt.) Ltd	
		Comply (Yes/No)	Ref. / Page No	Comply (Yes/No)	Ref. / Page No
Brand	Synology NAS Server 12 Bay Rack Station RS3618xs or equivalent	YES	B-6, T-3	YES	B-6, TL-3
Processor	Intel Xeon Quad Core 2.4 GHz Processor D-1521 (Turbo up to 2.7 GHz)	YES	B-6, T-3	YES	B-6, TL-3
RAM	16GB DDR4 ECC RAM (Expandable up to 64GB)	YES	B-6, T-3	YES	B-6, TL-3
Storage	5 x 16TB Synology HAT3310 Plus Series Hard Drives or equivalent.	YES	B-6, T-3	YES	B-6, TL-3
Adapter card for NVMe SSDs	2 x 500GB Synology SNV3410 Enterprise SSD (for Cache) or equivalent or above	YES	B-6, T-3	YES	B-6, TL-3
Ports	2 x USB 3.0 Ports, 4 x RJ45 1GbE Ports	YES	B-6, T-3	YES	B-6, TL-3
	2 x PCIe Expansion Ports Gen3 x8 slots	YES	B-6, T-3	YES	B-6, TL-3
	2 x 10GbE SFP+ ports via E10G30-F2 Adapter Card	YES	B-6, T-3	YES	B-6, TL-3
No. of Bays	12 (Expandable up to 36 bays via Expansion units)	YES	B-6, T-3	YES	B-6, TL-3
Raid support	Basic, JBOD, RAID 0, 1, 5, 6, 10, Synology RAID F1	YES	B-6, T-3	YES	B-6, TL-3
File Protocol	CIFS/AFP/NFS/FTP/WebDAV	YES	B-6, T-3	YES	B-6, TL-3
Max Concurrent Connections	2000 / 10000 with Ram expansion	YES	B-6, T-3	YES	B-6, TL-3
Max Local User Accounts	16000	YES	B-6, T-3	YES	B-6, TL-3
Maximum Shared Folders	512	YES	B-6, T-3	YES	B-6, TL-3
Form factor	2U Rackmount Chassis	YES	B-6, T-3	YES	B-6, TL-3
Power Supply	500W	YES	B-6, T-3	YES	B-6, TL-3
Rail Kit	Rail Kit Pair for 2U Rack mount NAS RKS-02	YES	B-6, T-3	YES	B-6, TL-3
Other	All related Accessories.	YES	B-6, T-3	YES	B-6, TL-3
Warranty	5 Years Comprehensive Warranty	YES	B-6, T-3	YES	B-6, TL-3


MR SYED AHMED ALI
 Deputy Manager (MIS)
 Member Tender Committee


MR REHAN AHMED
 Act. Manager (Finance)
 Member Tender Committee


MR DANISH MERAJ
 Act. General Manager (MIS)
 Member Tender Committee


MR ALI IMAM QADRI
 General Manager (Procurement)
 Chairman Tender Committee