NOTICE INVITING EOI FOR

Selection of System Integrator FOR

Installation of Servers and Other Essentials at DC Shimla and DR Bengaluru for Himachal Pradesh State Co-operative Bank Ltd on a rental/consumption/ as a service model.

EOI No: Ref: BDL/CHD/EOI/2K25/HPSCB/Servers/01 Date of Issue: 23.06.2025 Issued by: Sudhir Kumar Bharati, AM-NSU Chandigarh

ITI Limited

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1. Introduction

ITI Limited, a Public Sector Undertaking under the Department of Telecommunications, Ministry of Communications, is a leading Telecom equipment manufacturer and solution provider in India. The major customers are BSNL, BBNL, MTNL, Defense, Paramilitary forces, Railways, Banks, Central & State Govt departments, Institutions and research organizations like ISRO.

ITI Limited has been undertaking various projects in all fields of telecommunications and information technology and also continuously deploying new technologies in the field of Telecom, ICT, Networking, e-Governance etc. ITI has diversified its operation and has been executing projects in the field of Smart Infrastructure (Smart Cities, Safe Cities, Smart Energy Meters, Smart Classrooms, Smart Poles etc), Bharatnet etc. ITI has been executing projects in latest technologies like GPON, OLT, ONT, OFC, HDPE etc.

ITI Limited would like to address the opportunity for Selection of System Integrator for Installation of Servers and Other Essentials at DC Shimla and DR Bengaluru for Himachal Pradesh State Co-operative Bank Ltd on rental/consumption/ as a service model. In this connection ITI Limited, invites sealed Expression of Interest (EOI) from eligible bidders as a SI for addressing the above tender opportunity and implementing the project as per their scope of work finalized with ITI.

| Date of EOI Upload | 23.06.2025 |
|----------------------------------|--|
| Due Date for Submission of EOI | 07.07.2025, upto 03.00 PM |
| Technical Bid Opening | 07.07.2025 at 03:30 PM |
| Estimated Project Cost per annum | 4.5 Cr |
| EMD | Rs. 4.5 Lacs The applicability of the exemption of EMD to MSME firms is based on the prevailing GOI guidelines. For availing this exemption, a |
| | certified copy of the NSIC/MSME certificate and the GOI notification need to be enclosed along with the technical bid. |
| Documents Fee | Rs. 1000/- (excluding GST) Non-Refundable |
| ITI Bank Details | EMD should be submitted through portal. |
| Performance Guarantee | PBG will be charged 3% of the project value. |

2. Important Dates



| Duration of PBG required | 5 years +3 months |
|--------------------------|--|
| ITI Contact Person | Mr Sudhir Kumar Bharati AM-NSU Mob : +91 9465555127 Email: skbharati_nsu@itiltd.co.in <u>https://www.itiltd.in</u> |

3. Scope of Work

The scope of work shall include the following:

Selection of System Integrator for Installation of Servers and Other Essentials (new equipment as per the specifications) at DC Shimla and DR Bengaluru for Himachal Pradesh State Co-operative Bank Ltd on rental/consumption/ as a service model.

1. The end customer details

The DGM (IT) Himachal Pradesh State Cooperative Bank No.1, Bank Building, The Mall Shimla-171001

- 2. Bidder should submit the authorisation letter from OEM(s) in their standard format addressing to End customer i.e, **Himachal Pradesh State Cooperative Bank**, mentioning that ITI Limited is authorised to sell OEM branded products such as Servers, storage network and Backup solutions.
- **3.** The proposed IT infrastructure Hardware and software components should be integrated with existing HPE branded Blade Servers, HPE Storage and associated items currently installed at DC and DR locations.
- 4. All major IT infrastructure components such as Blade Servers, Rack Servers, SAN Storage, Switches, Purpose Built Backup appliance and Tape Library should be from same OEM for providing better after sales support services.
- 5. It is to inform that Bank wants to install 12 servers and other equipment each at Data Centre Shimla and Disaster Recovery site Bengaluru on rental/consumption/ as a service model. The broad specifications of these servers and other equipment is as under:



| | | | 1 | L |
|--|--|-----|---|---|
| Item | | Qty | Purpose | OS |
| 4P Platinum Processors (Intel Xeon-Platinum 8450H 2.0 GHz 28-core each | | 2 | For Data base Server(s) of CBS | Windows Data Centre Edition |
| 4P Gold Processors (Intel Xeon- Gold 6416H 2.2 GHz 18-core each or better) | | 1 | For Banksys and other Standby CBS Server | Windows Data Centre Edition |
| 2P Blade Server (Intel® Xeon® Processor with (32 Cores, 2.0 GHz) | | 3 | Allied Application | Microsoft Windows Standard Edition for 2P Blade server (64 cores) |
| 2P Blade Server (Intel® Xeon® Processor with (32 Cores, 2.0 GHz) | | 6 | CBS Application | Red Hat Enterprise Linux Server 2 Sockets or 2 Guests for 2 proc Blade server |
| SAN Storage with Fibre channels 100 Tb capacity | | 1 | Storage | NA |
| External Tape Library | | 1 | Backup | NA |
| Backup devices | 10 | 1 | For Backup of SAN Atorage | NA |
| SAN Switch 24 Ports | | 2 | For connection of SAN Storage with Servers | NA |
| 48 Port Layer 3 Network Switch | | 2 | For internal Connectivity | NA |
| Management Switch | | 1 | For management of servers | NA |
| Technical Specifications for Data Centre & Disaster Recovery Centre for Himachal Pardesh State Coopertaive Bank | | | | |
| | | B | lade Chassis | |
| Item | | | Description of H | Requirement |
| Blade Chassis | Proposed Blade chassis should support provisioning virtual, physical and container infrastrcture from pools of compute, storage and networking resources | | | |

| | It should support API to integrate into popular management tools such as Microsoft SystemsCenter, VMWare vCenter and into open source automation for DevOps tools such as Chef, Docker and OpenStack. |
|---------------------------|--|
| | It should support software defined templates to quickly make changes to the infrastrcture. Template should include server BIOS, firmware, boot order, RAID, storage configs and network config of the infrasructure required for workload |
| | Chassis to house the required number of blade servers in smallest number of enclosures. Should support full height and half height blades in the same enclosure, occupying a max of 10U rack height. |
| Blade Chassis | Chassis Should support six interconnect bays to configure 3+3 redundacy |
| Didde Chussis | The Chassis direct-connect midplane delivers a 16 Tb/s of bandwidth |
| | Should have technology built-in to every chassis for Auto-Discovery of resources |
| | Chassis should provide display port and USB port to connnect Laptop/Monitor locally |
| Interconnects support | Chassis should support internal FCoE, Ethernet, FC and SAS interconnect fabrics offering redundancy as a feature. Also should support internal network switch with 25/50Gb downlinks and 100G uplink to DC LAN switch & Supports internal SAN Switch with 32Gbps FC Uplinks to connect directly to SAN Switch. |
| Converged interconnect | Redundant Interconnect modules shall be integrated within the chassis such that uplinks from the chassis can be directly connected to core LAN/SAN switches |
| | Chassis should have sufficient number of redundant converged modules and ports to provide a minimum FCoE bandwidth of 100Gbps per blade server and 50Gbps sustained per blade server (with 1 module failure) for a fully populated chassis for converged Traffic and configured with Ethernet uplink of 12 x 10G to DC LAN switch and 4 x 32Gbps FC uplink to external SAN Switch in redundancy |
| | Each Converge Interconnect support at least six QSFP+ for external uplink to choose Ethernet and FC uplinks as needed |
| | Should support aggregation of multiple enclosures to consolidate data center network connections, reduce hardware and to scale network bandwidth across multiple enclosures. Atleast 60 servers should be supported per aggregation. Layer 2 network traffic should be switched within enclosure aggregation (without using top of the rack switch) |
| | When multiple chasssis aggregated, switching latency between enclosures should not exceed 1.0 micro second for Ethernet |



| | Should support Multi-module link aggregation (MLAG) for resiliency against interconnect failure |
|---------------------------------------|--|
| Power Supply | The enclosure should be populated fully with power supplies. Power supplies should support N+N as well as N+1 redundancy configuration, where N is greater than 1. Should offer a single phase power subsystem enabled with technologies for lower power consumption and offering Platinum energy efficiency. Vendors should provide documents certifying the claims. |
| Cooling | Each blade enclosure should have a cooling subsystem consisting of redundant hot pluggable fans or blowers enabled with technologies for improved power consumption and acoustics |
| Warranty | 3 years comprehensive warranty |
| System Software | Management/controlling softwares have to be from the OEM. |
| Chassis management capabilities | Soultion should configured with redundant physical management appliances within an enclosure or on multiple connected enclosures with failover and high-availability. It should have separate management network from production network Should support auto-discovery of Compute, Memory, Storage and Fabrics within an enclosure or on multiple connected enclosures. Should support activity, Health and Power LEDs for immediate status Should support software-defined intelligence for configuring profiles to provision compute, storage, fabrics and images Should support Firmware and OS Driver updates for the servers using profile templates to monitor, flag, and remediate Should offer collaborative user interface which support logical resources to physical resources mapping, Smart Search, Activity Log, HTML5 mobile access, and Customizable Dashboard Should provide a dedicated 10GbE or higher management network for multi-enclosure communications, separate from data plane Should support frictionless Firmware and OS Driver updates using profile templates to 'monitor, flag, and remediate Should support frictionless Firmware and OS Driver updates using profile templates to 'monitor, flag, and remediate Should support reporting capabilities for 1) asset and inventory information for the devices in the enclosures 2) thermal and power information, including real-time actual power usage per server and per enclosure Reports should be exportable to csv or Microsoft Excel format |
| Integration with | Should support integration with popular virtualization offerings VMware |
| virtualization and | vCenter and Microsoft system cetner |
| open source software | Should support integration with open source automation and DevOps tools such as Chef, Docker, and OpenStack |

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| Rack Server 4P with Intel Platinium CPUs | | | |
|--|---|--|--|
| Item | Description of Requirement | | |
| Chassis | 2U Rack Mountable | | |
| CPU | Four numbers of 4th Generation Intel Xeon-Platinum 8450H | | |
| | 2.0GHz 28-core each | | |
| Chipset | Intel® C741 Chipset or Equivalent | | |
| Memory | 64DIMM slots. | | |
| | 1TB DDR5 RAM scalable upto 16.0 TB using DDR5 RAM. | | |
| | Memory RAS – Advanced ECC, online spare, mirroring, and | | |
| | Fast Fault Tolerant Memory (ADDDC) | | |
| Bus Slots | Server should have six PCI-Express 5.0 slots. | | |
| | Additional two OCP slots | | |
| HDD Bays | Populated with 2 x 1.6TB NVMe Mix Use SSD in RAID1, | | |
| | 8SFF Cage. | | |
| Controller | Embedded / PCIe based RAID controller with 4GB Flash | | |
| | backed write cache supporting RAID 0, 1, 5, 6, 10, 50, 60 s | | |
| | Must support mix-and-match SAS, SATA, and NVMe drives | | |
| | to the same controller. Controller must support 6G SATA, | | |
| | 12G SAS, 16G NVMe. | | |
| Networking features | Server should have below networking cards: | | |
| | 1. IGb 4-port network adaptors | | |
| | 2. 2 x Dual Port 10/25G SFP+ Ethernet adaptor with 25G | | |
| | SFP's | | |
| Interference | 3. 2 X Dual Port 32 Gbps FC HBA | | |
| Interfaces | USB support with Up to total: 1 front, 2 rear, 2 internal. | | |
| Derror Complex | Goe Dedicated management port | | |
| Power Suppry | should support not plug redundant low halogen power | | |
| Fong | Pedundant hat plug system fons | | |
| Tails | A CDL 6.2 Compliant | | |
| Industry Standard Compliance | ACPI 0.5 Compliant | | |
| | WOL Support | | |
| | Microsoft® Logo certifications | | |
| | PXF Support | | |
| | Fnergy Star | | |
| | SMBIOS 3 2 | | |
| | UEFI 2.7 | | |
| | Redfish API | | |
| | IPMI 2.0 | | |
| | Secure Digital 4.0 | | |
| | Advanced Encryption Standard (AES) | | |
| | Triple Data Encrytion Standard (3DES) | | |
| | SNMP v3 | | |
| | TLS 1.2 | | |



Date: 23.06.2025

| | DMTF Systems Management Architecture for Server Hardware Command Line Protocol (SMASH CLP) |
|-------------------------------|---|
| | Active Directory V1.0 ASHRAE A3/A4 |
| System Security | UEFI Secure Boot and Secure Start support |
| | Tamper-free updates - components digitally signed and |
| | verified |
| | Immutable Silicon Root of Trust |
| | Ability to rollback firmware |
| | FIPS 140-2 validation |
| | Secure erase of NAND/User data IPM (Trusted Platform |
| | Module) 1.2 option TDM (Trusted Distform Medule) 2.0 |
| | A dyanged Energy tion Standard (AES) and Triple Date |
| | Encryption Standard (3DES) on browser |
| | Bezel Locking Kit ontion |
| | Support for Commercial National Security Algorithms |
| | (CNSA) |
| | Chassis Intrusion detection option |
| | Secure Recovery - recover critical firmware to known good |
| | state on detection of compromised firmware |
| Operating Systems and | Windows Server. |
| Virtualization Software | Red Hat Enterprise Linux (RHEL) |
| (Certified on OS OEM website) | SUSE Linux Enterprise Server (SLES) |
| | VMware ESXi. |
| | Canonical Ubuntu |
| Firmware security | 1. For firmware security, system should support remote |
| | management chip creating a fingerprint in the silicon, |
| | metabos the fingerprint. This feature should be immutable |
| | 2 Should maintain repository for firmware and drivers recipes |
| | to aid rollback or patching of compromised firmware. Should |
| | also store Factory Recovery recipe preloaded to rollback to |
| | factory tested secured firmware |
| Embedded Remote | 1. System remote management should support browser based |
| Management and firmware | graphical remote console along with Virtual Power button, |
| security | remote boot using USB/CD/DVD Drive. It should be capable |
| | of offering upgrade of software and patches from a remote |
| | client using Media/image/folder; It should support server |
| | power capping and historical reporting and should have |
| | support for multifactor authentication |
| | 2. Server should have dedicated IGbps remote management |
| | pull 3. Server should have storage space cormorized to be used as a |
| | s. Server should have slorage space earmarked to be used as a repository for firmware, drivers and software components. The |
| | repository for minimale, unvers and software components. The |

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| | components can be organized in to install sets and can be used to rollback/patch faulty firmware 4. Server should support agentless management using the out- of-band remote management port 5. The server should support monitoring and recording changes in the server hardware and system configuration. It assists in diagnosing problems and delivering rapid resolution when system failures occur 6. Two factor Authentication 7. Local or Directory-based user accounts with Role based access control 8. Remote console sharing upto 6 users simultaneously during pre-OS and OS runtime operation, Console replay - Console Replay captures and stores for replay the console video during a server's last major fault or boot sequence. Microsoft Terminal Services Integration, 128 bit SSL encryption and Secure Shell Version 2 support.Should provide support for AES and 3DES on browser.Should provide remote firmware update functionality.Should provide support for Java free graphical remote console. 9. Should support managing multiple servers as one via Group Power Control Group Power Control Group Virtual Media and Encrypted Virtual Media Group License Activation 10. Should support embedded remote support to transmit hardware events directly to OEM or an authorized partner for automa |
|-------------------|---|
| Server Management | Software should support dashboard view to quickly scan the managed resources to assess the overall health of the data |
| | center. It should provide an at-a-glance visual health summary of the resources user is authorized to view. |

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| The Dashboard minimum should display a health summary of the following: |
|---|
| Server Profiles |
| Server Hardware |
| Appliance alerts |
| The Systems Management software should provide Role-based |
| access control |
| Management software should support integration with popular |
| virtualization platform management software like Vmware |
| vCenter & vRealize Operations, and Microsoft System Center |
| & Admin Center |
| Should help provide proactive notification of actual or |
| impending component failure alerts on critical components |
| like CPU, Memory and HDD. |
| Should help to proactively identify out-of-date BIOS, drivers, |
| and Server Management agents and enable the remote update |
| of system software/firmware components. |
| Should have dashboard for firmware baselines while |
| performing minimum required firmware checks and |
| highlighting out-of-compliance devices for updates with the |
| selected firmware baseline |
| The Server Management Software should be of the same brand |
| as of the server supplier. |

| Rack Server 4P with Intel Gold CPUs | | |
|-------------------------------------|--|--|
| Item | Description of Requirement | |
| Chassis | 2U Rack Mountable | |
| CPU | Four numbers of 4th Generation Intel Xeon-Gold 6416H 2.2GHz 18- | |
| | core each or better | |
| Chipset | Intel® C741 Chipset or Equivalent | |
| Memory | 64DIMM slots. | |
| | 1TB DDR5 RAM scalable upto 16.0 TB using DDR5 RAM. | |
| | Memory RAS – Advanced ECC, online spare, mirroring, and Fast Fault | |
| | Tolerant Memory (ADDDC) | |
| Bus Slots | Server should have six PCI-Express 5.0 slots. | |
| | Additional two OCP slots | |
| HDD Bays | Populated with 2 x 1.6TB NVMe Mix Use SSD in RAID1, 8SFF Cage. | |
| Controller | Embedded / PCIe based RAID controller with 4GB Flash backed write | |
| | cache supporting RAID 0, 1, 5, 6, 10, 50, 60 s | |
| | Must support mix-and-match SAS, SATA, and NVMe drives to the same | |
| | controller. Controller must support 6G SATA, 12G SAS, 16G NVMe. | |
| | | |

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| Networking | Server should have below networking cards: |
|-------------------|--|
| features | 1. 1Gb 4-port network adaptors |
| | 2. 2 x Dual Port 10/25G SFP+ Ethernet adaptor with 25G SFP's |
| | 3. 2 x Dual Port 32 Gbps FC HBA |
| Interfaces | USB support with Up to total: 1 front, 2 rear, 2 internal. |
| | 1GbE Dedicated management port |
| Power Supply | Should support hot plug redundant low halogen power supplies with |
| 11.5 | minimum 94% efficiency |
| Fans | Redundant hot-plug system fans |
| Industry Standard | ACPI 6.3 Compliant |
| Compliance | PCIe 5.0 Compliant |
| 1 | WOL Support |
| | Microsoft [®] Logo certifications |
| | PXE Support |
| | Energy Star |
| | SMBIOS 3.2 |
| | UEFI 2.7 |
| | Redfish API |
| | IPMI 2.0 |
| | Secure Digital 4.0 |
| | Advanced Encryption Standard (AES) |
| | Triple Data Encrytion Standard (3DES) |
| | SNMP v3 |
| | TLS 1.2 |
| | DMTF Systems Management Architecture for Server Hardware |
| | Command Line Protocol (SMASH CLP) |
| | Active Directory v1.0 |
| | ASHRAE A3/A4 |
| System Security | UEFI Secure Boot and Secure Start support |
| | Tamper-free updates - components digitally signed and verified |
| | Immutable Silicon Root of Trust |
| | Ability to rollback firmware |
| | FIPS 140-2 validation |
| | Secure erase of NAND/User dataTPM (Trusted Platform Module) 1.2 |
| | option |
| | TPM (Trusted Platform Module) 2.0 |
| | Advanced Encryption Standard (AES) and Triple Data Encryption |
| | Standard (3DES) on browser |
| | Bezel Locking Kit option |
| | Support for Commercial National Security Algorithms (CNSA) |
| | Chassis Intrusion detection option |
| | Secure Recovery - recover critical firmware to known good state on |
| | detection of compromised firmware |



| Operating | Windows Server. |
|-------------------|---|
| Systems and | Red Hat Enterprise Linux (RHEL) |
| Virtualization | SUSE Linux Enterprise Server (SLES) |
| Software | VMware ESXi. |
| (Certified on OS | Canonical Ubuntu |
| OEM website) | |
| Firmware security | 1. For firmware security, system should support remote management chip |
| | creating a fingerprint in the silicon, preventing servers from booting up |
| | unless the firmware matches the fingerprint. This feature should be |
| | immutable |
| | 2. Should maintain repository for firmware and drivers recipes to aid |
| | rollback or patching of compromised firmware. Should also store Factory |
| | Recovery recipe preloaded to rollback to factory tested secured firmware |
| Embedded | 1. System remote management should support browser based graphical |
| Remote | remote console along with Virtual Power button, remote boot using |
| Management and | USB/CD/DVD Drive. It should be capable of offering upgrade of |
| firmware security | software and patches from a remote client using Media/image/folder; It |
| | should support server power capping and historical reporting and should |
| | have support for multifactor authentication |
| | 2. Server should have dedicated 1Gbps remote management port |
| | 3. Server should have storage space earmarked to be used as a repository |
| | for firmware, drivers and software components. The components can be |
| | organized in to install sets and can be used to rollback/patch faulty |
| | firmware |
| | 4. Server should support agentless management using the out-of-band |
| | remote management port |
| | 5. The server should support monitoring and recording changes in the |
| | server hardware and system configuration. It assists in diagnosing |
| | problems and delivering rapid resolution when system failures occur |
| | 0. Two factor Authentication |
| | 7. Local of Directory-based user accounts with Role based access control |
| | os runtimo operation. Consolo renley. Consolo Renley conturos and |
| | os funtime operation, Console replay - Console Replay captures and |
| | boot sequence. Microsoft Terminal Services Integration, 122 bit SSI |
| | encryption and Secure Shell Version 2 support Should provide support for |
| | AES and 3DES on browser Should provide remote firmware undate |
| | functionality Should provide support for Java free graphical remote |
| | console |
| | 9 Should support managing multiple servers as one via |
| | Group Power Control |
| | Group Power Canning |
| | Group Firmware Undate |
| | |
| | Group Configuration |

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|----------------------|--|--|
| | Group License Activation 10. Should support RESTful API integration 11. System should support embedded remot events directly to OEM or an authorized par home support 12. Server should have security dashboard : important security features, the Overall Secu- the current configuration for the Security Sta Lock features. 13. One-button Secure Erase designed to def 14. NVMe wear level display 15. Workload Performance Advisor - Provide recommendations to improve server perform | n e support to transmit hardware rtner for automated phone displaying the status of urity Status for the system, and ate and Server Configuration commission/repurpose servers des server tuning nance |
| Server Management | Software should support dashboard view to quickly scan the managed resources to assess the overall health of the data center. It should provide an at-a-glance visual health summary of the resources user is authorized t view. The Dashboard minimum should display a health summary of the following: Server Profiles Server Hardware Appliance alerts | |
| | The Systems Management software should p control Management software should support integr virtualization platform management softwar vRealize Operations, and Microsoft System Should help provide proactive notification of component failure alerts on critical component | provide Role-based access ration with popular re like Vmware vCenter & Center & Admin Center of actual or impending ents like CPU, Memory and |
| | HDD. Should help to proactively identify out-of-da Management agents and enable the remote u software/firmware components. Should have dashboard for firmware baselin minimum required firmware checks and hig devices for updates with the selected firmware The Server Management Software should be | ate BIOS, drivers, and Server update of system hes while performing hlighting out-of-compliance are baseline e of the same brand as of the |
| | server supplier. | |

| Blade Server | | |
|---------------------------------|--|--|
| Item Description of Requirement | | |
| CPU | Two numbers of 5th Generation Intel® Xeon® Processor with (32 Cores, 2.0 GHz) each | |
| Chipset | Intel C741 Chipset | |

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| Memory | 1TB RAM scalable upto 4.0 TB using DDR5 Registered DIMM operating at 4800 MT/s or above Memory RAS – Advanced ECC, online spare, mirroring, and Fast Fault Tolerant Memory (ADDDC), 32 DIMM Slots | | |
|---|---|--|--|
| Hard disk drive with carrier | ¹ 2 x 1.92TB hot plug SSD drives. | | |
| Storage Controller | Server should offered with Onboard or PCIe based 12G SAS Controller with 4GB Cache | | |
| Interfaces | 1* internal USB 3.0 port. | | |
| Connectivity features | Dual port 25G (50GbE per blade bandwidth) Ethernet Adaptor. Dual Port 32G (64 Gbps per blade bandwidth) should be provided to SAN. OR In case the bidder decides to provide converge architecture instead of separate network and FC ports, server should provide a minimum of 100 Gbps of bandwidth with Converged network adapter ports across two or more Ports. | | |
| Bus Slots | Minimum of 3 Nos of x16 PCIe 5.0 based mezzanine slots and all the 3 no. of x16 PCIe slots supporting Converged Ethernet, Ethernet, FC adapters and SAS adaptors | | |
| TPM 2.0 SupportAdvanced Encryption Standard (AES)Triple Data Encryption Standard (3DES)SNMP v3SSL 2.0Industry StandardOmplianceComplianceCommand Line Protocol (SMASH CLP)Active Directory v1.0PCIe 5.0 CompliantUEFI (Unified Extensible Firmware Interface Forum)Redfish API | | | |
| Embedded systemShould support integration with management software to de 'composable infrastructure' with a view of resources. Should support Gigabit out of band management port to mo servers for ongoing management, service alerting and report Should support UEFI to configure and boot the servers secu System should support RESTful API integration System management should support provisioning servers by discovering and deploying 1 to few servers with embedded Provisioning tool System should support embedded remote support to transmi events directly to OEM or an authorized partner for automat home support | | | |



| System Security | Power-on password Administrator's password Keyboard password (QuickLock) On System Management Chipset with SSL encryption, Secure Shell version 2, XML scripting interface, AES and RC4 encryption of video External USB port enable/disable Network server mode | | |
|-------------------|---|--|--|
| | Serial interface controlTPM (Trusted Platform Module) 2.0 supportIntel® Advanced Encryption Standard-New Instructions (AES-NI) | | |
| OS Support | Microsoft Windows Server Red Hat Enterprise Linux (RHEL) SUSE Linux Enterprise Server (SLES) Vmware | | |
| Provisioning | Should support tool to provision server using RESTful API to discover and deploy servers at scale Provision one to many servers using own scripts to discover and deploy with Scripting Tool (STK) for Windows and Linux or Scripting Tools for Windows PowerShell | | |
| Firmware security | For firmware security, system should support remote management chip creating a fingerprint in the silicon, preventing servers from booting up unless the firmware matches the fingerprint. This feature should be immutable Should maintain repository for firmware and drivers recipes to aid rollback or patching of compromised firmware. Should also store Factory Recovery recipe preloaded to rollback to factory tested secured firmware Server Configuration Lock - Protecting Systems in Transit and when Deployed in remote Locations One-Button Secure Erase - Making server retirement and redeployment simpler. Security Dashboard for Server to detect possible security vulnerabilities. | | |



| Embedded Remote Management and firmware security | System remote management should support browser based graphical remote console along with Virtual Power button, remote boot using USB/CD/DVD Drive. It should be capable of offering upgrade of software and patches from a remote client using Media/image/folder; It should support server power capping and historical reporting and should have support for multifactor authentication Server should have dedicated remote management port Remote management port should have storage space earmarked to be used as a repository for firmware, drivers and software components. The components can be organized in to install sets and can be used to rollback/patch faulty firmware Server should support agentless management using the out-of-band remote management port The server should support monitoring and recording changes in the server hardware and system configuration. It assists in diagnosing problems and delivering rapid resolution when system failures occur Two factor Authentication and Local or Directory-based user accounts with Role based access control Remote console sharing upto 6 users simultaneously during pre-OS and OS runtime operation, Console replay - Console Replay captures and stores for replay the console video during a server's last major fault or boot sequence. Microsoft Terminal Services Integration, 128 bit SSL encryption and Secure Shell Version 2 support.Should provide support for AES and 3DES on browser.Should provide remote firmware update functionality.Should provide support for Java free graphical remote console. Should support RESTful API integration | | |
|--|---|--|--|
| | Software should support dashboard view to quickly scan the managed resources to assess the overall health of the data center. It should provide an at-a-glance visual health summary of the resources user is authorized to view. | | |
| Server Management | The Dashboard minimum should display a health summary of the following: • Server Profiles • Server Hardware • Appliance alerts | | |
| | The Systems Management software should provide Role-based access control | | |
| | Management software should support integration with popular virtualization platform management software like vCenter, and SCVMM | | |

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| Should help provide proactive notification of actual or impending component failure alerts on critical components like CPU, Memory and HDD. |
|---|
| Should help to proactively identify out-of-date BIOS, drivers, and |
| Server Management agents and enable the remote update of system |
| software/firmware components. |
| The Server Management Software should be of the same brand as of |
| the server supplier. |

| SAN Storage | | |
|-------------|--|--|
| Sr. No | Paramater | Specifications |
| 1 | Capacity & Scalability | 1. Offered Storage array shall be supplied minimum with 100 TB usable with encrypted NVMe drives and shall be configured in Raid 6. Vendor shall not use more than 10D+2P while sizing the array. |
| | | 2. Offered Storage shall be able to protect against at- least 2 drives failure simultaneously within a given raid group. |
| 2 | Data Availability and All Flash | Offered storage shall be an array which can provide enterprise class resiliency & 100% data availability guaranteed architecture along with all NVMe controllers. 100% data availability guaranty shall be clearly mentioned on vendor web site for the offered model. If vendors are not supporting the 100% data availability as per their web site then vendor shall quote additional Controller and 10% additional capacity as cold spare along with array for mitigating the failure situations. |
| 3 | Operating System & Clustering Support | The storage array should support industry-leading Operating System platforms & clustering including Windows Server 2019 / 2022, VMware ESX 8.x hypervisor, HPE VM essential hypervisor. Red hat enterprise Linux and SUSE Enterprise Server (SLES) etc. |

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| 4 | Memory and CPU Processing Power | 1. Offered Storage array should have at-least 512GBmemoryacrossbothcontrollers. |
|---|------------------------------------|--|
| | | 2. After a complete power failure, the host acknowledged writes must be restored without the need for battery backed mirrored write caches. |
| | | 3. Offered storage controller shall be based upon at- least PCI 4.0 technology and storage shall be offered with at-least 32 number of CPU cores. |
| | Disk Enclosures | 1. Vendor shall ensure that all additional drive enclosures required within the given solution or achieving 2PB raw capacity shall be directly connected to offered controllers using dedicated 100Gbps NVMe-OF redundant links. |
| 5 | | 2. Vendor shall also ensure that each additional drive enclosure shall have dual node or dual controller where each node or controller shall have dedicated CPU and at least 64GB of memory. |
| | | 3. If vendor doesn't support 64GB memory at each controller of drive enclosure, then vendor shall supply additional 512GB memory across main storage controllers. |
| | Storage Encryption | 1. Vendors shall offer only encrypted drives with appropriate encryption licenses. Vendor shall not offer any controller based or Software based encryption. |
| 6 | | 2. The offered Storage array shall support at-least external key managers from Utimaco ESKM and Thales Cipher Trust Manager. Vendor shall also offer internal Key manager engine for key management. |
| 7 | No. of Controllers | Offered Storage array shall be offered with at-least dual controllers. |



| 8 | Architecture & Processing Power | Offered storage array shall be true Active-active so that every logical disk is striped across all offered drives and all drives shall be able to contribute the IOs to both controllers simultaneously. Offered storage array shall have native virtualization support so that Raid can be carved out from a logical space instead of dedicating separate physical disks for each application. |
|----|---|---|
| 9 | No Single point of Failure | Offered Storage Array shall be configured in a No Single Point of failure configuration including Array Controller card, Cache memory, FAN, Power supply etc. |
| 10 | Cloud Native data console Management | a. Common Dashboard for all managing multiple arrays through a single cloud native data console. b. Main Dashboard shall provide the information of Total number of Arrays, Volumes, hosts, Capacity and performance information of top Arrays and Volumes. c. Common role-based access control for managing multiple arrays through a single data console instead of creating users and assigning roles individually at each array. d. Common Audit management for all arrays e. Shall have capability for tagging the Storage volume to given host applications so that performance for easy management and troubleshooting. f. Offered console shall advise about Placement of application on best fit system based on workload after application as a service instead of controlling, patching, and upgrading the management application by onsite team. |



| Cloud Enabled - Monitoring and Analytics | Cloud Enabled Monitoring and analytics engine shall have capability to provide following: a. Providing Firmware update path, previous version, readiness check before applying the update to production environment and severity level for required firmware update. | |
|--|---|---|
| | | b. Dashboard shall clearly highlight whether there is any issue with array and shall provide the detailed information about the issue. |
| | | c. The dashboard shall provide consumption and capacity forecast trend for overall capacity planning. |
| 11 | | d. Providing granular near real time performance analysis, at-least at an interval of 5 minutes. It shall allow to create custom reports in csv and PDF format without the need for enabling extra logging, installing any appliances (physical or virtual), or installing any software. |
| | | e. Providing overall headroom utilization of the array while combining and analyzing various parameters like IOPS, MB/sec, Block size, Latency etc. |
| | | f. Headroom utilization shall clearly provide the breakup of headroom consumed by the Volumes or tagged application at storage array |
| | | g. Providing the status of at-least top 5 volumes where latency is extremely high. It shall also provide shading functionality so that more severe hotspot can be easily identified. |



| 12 | Resource Planner | The offered Cloud native dashboard shall also provide the functionality for future workload planning on the offered storage using at least the following parameters: a. Window to provide the newer workload characteristics – Number of new volumes, type of application, Average Read and write IO size, Number of read and write IOPS, Capacity growth per week etc. b. The workload planner shall clearly advise whether the above additional workload characteristics can be serviced on the storage array offered. c. The Workload planner shall also provide the detailed report with workload inference. |
|----|--------------------------------------|---|
| 13 | Cloud Enabled - Anomaly Detection | Cloud enabled Advance Analytics engine shall have capability to provide following: a. Analytics engine shall have an overall resource contention analysis page where it shall be able to highlight the CPU and disk utilization contention and associated volumes which are causing the contention. b. Analytics engine shall have in-built anomaly detection for a given storage volume so that it can provide the variance insight of high LUN latency / response time. c. Analytics engine shall clearly mark all those anomaly detection points on the given LUN / Volume latency graph and shall be applicable for both read and write operations. d. Anomaly detection shall also be applicable for a given storage volume throughput so that drift of workload can be easily identified from the usual read and write pattern. e. Sustainability metrics reports including carbon utilization emissions and energy consumption. |



| | Cloud Enabled - Hypervisor Integration | Cloud enabled monitoring and analytics engine shall have capability to integrate with VMware Hypervisor and shall provide at least following features: |
|----|--|---|
| | | a. Offered Cloud enabled monitoring and analytics engine shall be tightly integrated with Hypervisor layer and shall be certified to work with at least VMware. |
| | | b. Hypervisor integration shall be able to provide end to end monitoring of hypervisor Datacenter, Data- store, Hypervisor Host and VMs running within the hypervisor datacenter and shall be able to link with offered storage array. |
| 14 | | c. Cloud monitoring and integration tool shall provide the detailed analysis of CPU Contention, Memory contention, IO contention for each VM – including the latency. |
| | | d. Cloud monitoring and integration tool shall have capability to identify the top VMs which are contributing towards maximum IOs and Latency. |
| | | e. Cloud monitoring and integration tool shall have capability to provide end to end topology map in a pictorial format. |
| | | f. In case vendor doesn't support the above offered functionality then Vendor shall supply the VMware vSphere Foundation (VVF) subscription License for at least 20 Physical servers, each running with dual physical CPUs and 64 cores. The license term shall be equivalent to the overall contract term of the RFP. |



| 15 | Cloud Native data console Management - Life Cycle | Management application shall be truly cloud native so that there shall be no need to configure, upgrade, patching of management application during the life- cycle of support contract and shall be offered as a service. In case, vendor need any additional service like clustering / federation for managing multiple arrays from a single console and doesn't have cloud native data console – then all required accessories like dual Ethernet switches, cables, at-least dual management server in HA etc. shall be provided upfront for at-least 16 arrays. |
|----|---|---|
| | Site Assessment | 1. Vendor shall do comprehensive Cloud based assessment, at-least for VMware environment on a quarterly basis and shall factor the required services for it. |
| 16 | C | 2. Assessment shall provide the detailed analysis of VMware Hosts – CPU & Memory utilization, Storage analysis and relevant findings of contention, Culprit and Victim VMs in the environment attached to offered storage. Offered assessment shall do complete analysis of licensing as well. |
| 17 | Host Ports and Back- end Ports | 1. The offered Storage array shall have a minimum of 8 x 32Gbps Fiber Channel ports, 8 x 10/25Gbps IP ports for Fibre Channel, NVMe-oF/FC NVMe- oF/TCP, iSCSI and remote replication. |
| | | 2. PCI 4.0 slot of the Fiber channel card shall have at- least 16 lanes so that each offered port can work at line speed even after upgrading to 64Gbps. |
| | | 3. Each offered controller shall have minimum of 48 PCI 4.0 lanes for NVMe disk connectivity. |
| | | 4. For maximizing the overall performance and NVMe SSD endurance, offered storage array shall support full RAID stripe write to backend disk drives for eliminating the white space issues of NVMe SSD drives. Vendor shall provide the documentary proof for same. |
| | | |



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|--------------------------------------|-----|

| 18 | Global Hot Spare | offered Storage Array shall support distributed Global hot Spare for offered Disk drives. Global hot spare shall be configure as per industry practice. |
|----|---------------------|--|
| 19 | Quality of service | 1. Offered storage array shall support quality of service for critical applications so that appropriate and required response time can be defined for application logical units at storage. It shall be possible to define different service / response time for different application logical units. |
| | | 2. Quality of service engine shall allow to define minimum and maximum cap for required IOPS / bandwidth for a given logical units of application running at storage array. |
| | | 3. It shall be possible to change the quality of service Response time (In both milliseconds as well as Sub- milliseconds), IOPS, bandwidth specification at real time. |
| 20 | Capacity efficiency | Offered storage array shall support inline data efficiency engine (Supporting Thin Zero detect and reclaim, De-duplication and Compression) and shall be enabled by default. Vendor shall have flexibility to enable / disable the flexibility to enable / disab |
| | | data efficiency engine at the time of Volume creation. 3. Storage subsystem shall be supplied with Thin Provisioning, Thin Re-claim, Snapshot, remote replication, De-duplication, Compression, Performance Monitoring, and Quality of service on day 1 for the supplied capacity of the array. |
| 21 | Firmware Upgrade | Offered storage shall support online non-disruptive firmware upgrade for both Controller and disk drives. |



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| | Integration - Container | Offered Storage array shall be integrated with Red-hat OpenShift, Kubernetes and other industry K8 based container platform through CSI driver set. Vendor shall support at-least following functionalities through their CSI / CSP integration : |
|----|----------------------------|---|
| | | a. Shall support both Static and Dynamic provisioning |
| | | b. Shall be able to expand, re-size the persistent volumes given to statefulset applications. |
| | | c. Shall be able to create and delete the snapshots. |
| 22 | | d. Shall support CSI Raw block volume as well as CSI Volume cloning. |
| | | e. Support for both Fiber channel as well as ISCSI. |
| | | f. Shall support CSI topology so that Kubernetes administrators can dictate which particular-node have access to a particular storage backend through a StorageClass by using supplying topology keys. |
| | | |
| | | |
| | | |



| 23 | Integration - VMware | The offered storage system shall also be provided with VMware vCenter integration pack so that following day to day operations can be performed directly from the vCenter itself: |
|----|--|--|
| | | a. Adding, deleting, expanding the datastore b. Scheduling and restoring datastore and VM snapshot. c. Mounting and applying OOS policy to datastore. |
| | | d. Creation of VMs. e. RDM migration from VMFS to VVOL f. A common dashboard for providing the number of Storage subsystems, Volumes, Datastore, Virtual Machines, host and Clusters. g. Dashboard shall also provide IOPS. Latency and |
| | | bandwidth information for Storage subsystem as well as Volumes. h. Dashboard shall also provide top 5 issues which are most recent and based upon the severity of the issue. |
| | | |
| 24 | Snapshot / Point in time copy, No. of Volumes and Temper- proof protection (Ransomware | The storage array should have support for controller-based snapshots (At-least 1024 copies for a given volume). The system must provide the capability to create |
| | Protection) | immutable, read-only snapshots, that cannot be modified. |
| | | 3. The system shall provide the capability to create compliant, read-only snapshots, which makes it impossible to modify or delete the snapshot and its base volume by the user, a system administrator, and the manufacturer. |
| | | 4. The protection period of the above snapshots must be individually configurable between 1 minute and several years. Changing the system clock must not allow the tampering of protection. |
| | | 5. Offered Storage array shall support more than 60000 base volume on the storage array without snapshot and clone. |

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| 1 |
|---|
| |

| 25 | Vmware VVOL Integration | The offered storage shall support more than 20,000 VMware VVOL when used in conjunction with Fiber channel / ISCSI and shall also support at least 256 VVOL per host when used in conjunction with NVMeOF. The offered storage shall also support VMware VVOL based replication across sites. | |
|----|---------------------------------------|--|--|
| 26 | Remote Replication | The storage array should support hardware based data replication at the array controller level across all models of the offered family. Offered Storage array shall support both Synchronous and Asynchronous replication across 2 storage arrays natively without using any third party or software based solution. Offered storage array shall have capability to create the application consistency group for replication operations. Shall have flexibility to have more than 256 volumes per consistency group. Offered storage subsystem shall support incremental replication or during failback operations. | |
| 27 | Active / Active Stretch Clustering | Offered Storage array shall have capability to provide true Active / Active Replication and Stretch clustering at metro distances for Zero RPO and RTO so that a given volume pair between primary and DR location can have concurrent access to both read and write operations simultaneously. Active / Active replication shall be supported for all well-known OS like VMware, Redhat, Windows etc. | |



| 28 | Cloud Mobility | The offered Storage array shall also have the capability to replicate the data to public cloud instance of storage using storage-based replication. The offered storage public cloud instance shall also be available through the marketplace of the cloud vendor. Vendors shall be able to manage both on premises and public cloud instances directly from their cloud native management console. |
|----|----------------|---|
| 29 | Multi-tenancy | Offered storage array shall be true multi-tenant and shall support at-least 128 Tenant per storage array. Every tenant shall be treated as a separate logical storage array with its own user control access. |

| SAN Switch | | |
|------------|--|--|
| Sr. No. | Specifications | |
| Architec | ture/Scalability/Performance/Management/Availability: | |
| 1 | SAN switch shall be configured with minimum of 24 no of Fibre Channel Ports | |
| 2 | All offered FC ports shall be populated with 32Gbps SFPs and shall have option to upgrade to line speed of 64Gbps per ports by replacing the SFPs. | |
| 3 | Required scalability shall not be achieved by cascading the number of switches and shall be offered within the common chassis only | |
| 4 | Should deliver 64Gbit/Sec Non-blocking architecture with 1:1 performance for up to 56 ports in an energy-efficient, optimized 1U form factor. | |
| 5 | Should protect existing device investments with auto-sensing 8, 16, and 32 Gbit/sec capabilities. | |
| 6 | The switch shall have universal ports so that port can self-configure as E, D, F and EX Port respectively. | |
| 7 | The switch should be rack mountable | |
| 8 | Should provide enterprise-class availability features such as redundant and hot pluggable components like power supply and FAN | |
| 9 | The switch shall provide Aggregate internal bandwidth of 3.5Tbps. | |
| 10 | Offered switch port to port latency shall not be more than 460 ns using cut through frame switching. | |
| 11 | Offered switch shall support up to 15,000 dynamic frame buffers. | |
| 12 | Switch shall have support for web based management and should also support CLI. | |
| 13 | The switch should have USB port for firmware download, support save, and | |

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| | configuration upload/download. |
|------------|--|
| 14 | Offered SAN switches shall be highly efficient in power consumption. Bidder shall ensure that each offered SAN switch shall consume less than 350 Watt of power. |
| 15 | Switch shall support POST and online/offline diagnostics, including RAStrace logging, environmental monitoring, non-disruptive daemon restart, FCping and Pathinfo (FC traceroute) and rolling reboot detection. |
| Intelliger | nt Networking: |
| 16 | Offered SAN switch shall support services such as Quality of Service (QoS) to help optimize application performance in consolidated, virtual environments. It should be possible to define high, medium and low priority QOS zones to expidite high- priority traffic |
| 17 | The switch shall be able to support ISL trunk up to 256 Gbit/sec between a pair of switches for optimal bandwidth utilization and load balancing. |
| 18 | SAN switch shall support to restrict data flow from less critical hosts at preset bandwidths. |
| 19 | It should be possible to isolate the high bandwidth data flows traffic to specific ISLs by using simple zoning |
| 20 | The Switch should be configured with the Zoning and shall support ISL Trunking features when cascading more than 2 numbers of SAN switches into a single fabric. |
| 21 | Offered SAN switches shall support to measure the top bandwidth-consuming traffic in real time for a specific port or a fabric which should detail the physical or virtual device. |
| Manager | nent/Services: |

| ef: BD | L/CHD/EOI/2K25/HPSCB/Servers/01 | Date: 23.06.2025 |
|--------|--|---|
| | Offered SAN switch shall be supplied with requir which can: | red fabric management software |
| 22 | o Shall have a policy-based monitoring tool with simplifies fabric-wide threshold configuration and o Shall have a comprehensive tool to identify, more application data flows without using taps to ensure o Shall proactively and non-intrusively monitors behavior through integrated network sensors prove and ensuring service levels o Shall have configuration and operational Monit Services using template based approach for scaling o Shall have comprehensive tool to identify, more application data flows in order to simplify trouble and avoid congestion without using taps to ensure o Ensures optical and signal integrity for Fibre Clip o Customizable screen that contains all critical Sareview and analysis | pre-built rules and automation that d monitoring. onitor, and analyze specific re optimized performance storage device IO performance and viding deep insight into problems toring Policy with automation ng the fabric. hitor, and analyze specific eshooting, maximize performance e optimized performance hannel optics and cables AN information for convenient |
| 23 | Offered SAN switch shall support Fabric Perform Drain Device Quarantine, port & WWN based zo zoning & target-driven zoning, Dynamic Path Se Enhanced BB Credit Recovery, FDMI, Frame Re FSPF, Integrated Routing, NPIV, Registered Sta Commit Service, Simple Name Server and virtua | nance Impact monitoring, Slow oning, broadcast zoning, peer election, Extended Fabrics, edirection, Frame-based Trunking te Change Notification, Reliable I fabric services. Switch shall be |

| Purpose-Built Backup Appliance and Backup software | | | |
|--|---|--|--|
| S.No | Specifications | | |
| 1 | Offered Disk to disk backup device shall be a purpose built backup appliance and | | |
| | shall be certified to work with at-least 3 Backup application independent software | | |
| | vender certified and reputed backup application. | | |
| 2 | Offered device shall be offered with Minimum of 80 TB of RAW space. | | |
| 3 | Offered device shall also be scalable to at-least 250 TB RAW capacity in native mode | | |
| | (Without de-duplication and compression) and should have provision for cloud | | |
| | backup | | |
| 4 | OEM/Bidder shall not use any additional staging device in-between while moving the | | |
| | data from Disk based backup device to public cloud or object storage. | | |
| | | | |
| 5 | Offered device shall be protected with hardware raid 6/ dual drive failure protection | | |
| | from the factory so that no raid configuration is required in field. | | |
| 6 | Offered device shall be configured with at-least one hot spare disk/Space. | | |



| 7 | Offered device shall support emulation of both VTL and NAS target like NFS & CIFS. |
|----|--|
| 8 | Offered device shall have capability to do complete copy of data sets from on premise disk backup storage to Cloud storage instead of data tiering |
| 9 | Offered device shall have the ability to configure at-least combination of 64 tape Libraries & NAS targets along with 100,000 or more Cartridge slots in the single appliance. |
| 10 | Offered device shall have capability to deliver selective restore from disk Library itself. |
| 11 | Offered Device shall integrate and utilize customer's current tape backup infrastructure in the following aspects |
| 12 | Offered device shall have integrated de-duplication license, low bandwidth replication license so that only unique non duplicated block transfers to remote / DR location. |
| 13 | Offered device shall have intelligence to understand both source based, and target based de-duplication and shall be integrated with all well-known backup ISVs. Atleast 3 ISVs shall be supported. |
| 14 | Offered device shall support receiving non duplicated data from remote locations directly from the application servers / Client servers in low bandwidth mode without using any backup or replication-based device at remote location. |
| 15 | Ability to flexibly emulate tape drive/ tape formats LTO-Gen5, LTO-Gen6, and LTO-Gen7 etc. |
| 16 | Offered device shall have Minimum of 4 x 10/25Gbps SFP IP ports & 4 x 32Gbps FC ports. License and SFP for all ports shall be offered and configured. |
| 17 | Offered Appliance Fiber channel ports shall support connectivity of servers either directly / SAN switches while supporting both source and Target based de- duplication. |
| 18 | Offered disk-based backup device shall also support encryption functionality. |
| 19 | Offered disk-based backup device shall also support Secure erase feature for |
| | protecting against unauthorized recovery of deleted data. |
| 20 | Offered disk-based backup appliance shall support VLAN tagging. Offered IP ports |
| | of same type shall also support Port bonding in Adaptive Load balancing as well as in |
| | Active-backup mode. |
| 21 | Offered device shall support read/write performance of at-least 25 TB per hour. |
| 23 | All the necessary accessories should be included. |

| Tape Library | | | | |
|--------------|-----------|----------------|--|--|
| Sr. No | Paramater | Specifications | | |



| | Capacity | 1. Offered Tape Library shall support Native data capacity of 11PB (uncompressed) using LTO-9 Technology. |
|---|-------------------------------|--|
| 1 | | 2. Shall be offered with Minimum of two LTO-9 FC tape drive. Drive shall support encryption |
| | | 3. Shall be offered with 40 Cartridge slots and shall be scalable to 640 slots. |
| | Tape Drive Architecture | 1. Offered LTO-9 drive in the Library shall conform to the Data rate matching technique for higher reliability. |
| 2 | | 2. Tape Drive Architecture in the Library shall conform to the INCITS T10 standard ADI Protocol or newer standards. |
| 3 | Scalability | Tape Library shall be scalable to minimism of 48 number of LTO-9 drives |
| 4 | Speed | Offered LTO-9 drive shall support 300MB/sec in Native mode. |
| 5 | Connectivity | Offered Tape Library shall provide native FC connectivity to SAN switches. |
| 6 | Partitioning | Offered tape library shall have flexibility to configure each offered drive into a separate partition. Offered tape libray shall have support for 21 partition when fully populated. Vendor shall provide the license for same. |
| 7 | Encryption device | Offered Library shall be provided with a hardware device like USB key, separate appliance etc. to keep all the encrypted keys in a redundant fashion. |
| 8 | Management | Tape Library shall provide web based remote management. |
| | Barcode Reader and Mail slots | 1. Tape library shall support Barcode reader and mail slot. |
| 9 | | 2. Tape Library shall be offered with 5 mail slots within the 40 cartridge slots. |
| | | 3. Every additional 40 Cartridge slots shall provide the flexibility to use 5 slots as mail slots. |



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| | Other Features | 1. | Tape | Li | brary | shal | l have | GUI | Panel |
|----|----------------|------------------|------------------------------------|-------------------------|----------------------------------|--------------------------|---------------------------------------|--------------------------------|-------------------------------|
| 10 | | 2. | Sh | nall | b | e | rack | mo | untable. |
| | | 3. | Shall ha | ave | option | for | redundant | power | supply |
| | | 4. car and | Tape Lib 1 predict d shall a | orary and also | shall b prevent sugges | e sup failu t the | plied with res througl required | software n early service | e which warning action. |
| | | 5. sup | Offered | drive th d | es in th lata pat | ne tap th an | be library ad control | shall op path 1 | tionally failover. |
| | | 6. det cor | Offered termine w mpression | Softv vhen vratio | ware sh to retin o is bein | all al e the g ach | so have the tape cartrieved | ne capał idges ar | oility to nd what |
| | | | | | | | | | |

| Layer 3 Network Switch | | | | |
|------------------------|---|--|--|--|
| Sr. No | Specifications | | | |
| 1 | Architecture | | | |
| | The switch should have 48 x 1G/10G/25G SFP28 and 6 x 40G/100G QSFP28 Ports | | | |
| | from day one and shall support QSFP28-SR4,LR4,QSFP SR4,LR4, ER4 transceiver | | | |
| | Populated with 48 nos. of 25G SR multi-mode transceiver and 2 nos of 40G SR4 | | | |
| | Multi mode transceiver | | | |
| | The proposed shwich should have switching performance of 4.8 Tbps with 1,000Mpps | | | |
| | throughput. All switching and routing are wire-speed to meet the demands of | | | |
| | bandwidth-intensive applications today and in the future. | | | |
| | The switch should have 16GB RAM, 32GB Flash and 32MB Packet buffer | | | |
| | The proposed switch should support High-speed fully distributed architecture | | | |
| | The proposed shwich should have High availability with redundancy, and redundant | | | |
| | power supplies and fans | | | |
| | Switch shall 1RU 19" rack mountable. | | | |
| 2 | Management | | | |
| | The proposed switch should support automation and programmability using REST | | | |
| | APIs or equivalent and Python scripts fine-grained programmability of network tasks | | | |
| | The proposed switch should support access to all network state information to allow | | | |
| | | | | |
| | I he proposed switch should support centralized configuration with validation for | | | |
| | consistency and compliance | | | |

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Upgrade with LACP traffic.

anomalies are detected.

Quality of Service (QoS)

The proposed switch should support SNMP v2c/v3

configurations

2 and Layer 3

structure

ping, NTP

(LLDP)

3

The proposed switch should support Dual flash images to provide independent primary and secondary operating system files for backup while upgrading

for capacity planning and real-time network monitoring purposes.

| | The proposed switch should support congestion actions |
|---|--|
| | The proposed switch should support Strict priority (SP) queuing and Deficit Weighted |
| | Round Robin (DWRR) |
| | The proposed switch should support Data Center Bridging (DCB) |
| | The proposed switch should support lossless Ethernet networking standard PFC, ETS |
| | and DCBX. |
| 4 | Resiliency and high availability |
| | The proposed switch should support distributed and redundant architecture by |
| | deploying two switches with each switch maintaining independent control and |
| | synchronized during upgrades or failover and should support upgrades during live |
| | operation. |

The proposed switch should support simultaneous viewing and editing of multiple

The proposed switch should support Network health and topology visibility

The proposed switch should support Flexible active-active network designs at Layers

The proposed switch should support High availability by design during upgrades, Live

The proposed switch should able to restricts access to critical configuration commands to offers multiple privilege levels with password protection, ACLs provide SNMP

The proposed switch should support IPSLA or equivalant to monitor the network for degradation of various services, including monitoring voice. Monitoring is enabled via

the NAE for history and for automated gathering of additional information when

The proposed switch should support sFlow (RFC 3176) to Provides scalable ASICbased wire speed network monitoring and accounting with no impact on network performance and gather a variety of sophisticated network statistics and information

The Proposed switch shall support RMON, TFTP/SFTP, IPv4 and IPv6 traceroute and

The proposed switch should support IEEE 802.1AB Link Layer Discovery Protocol

The proposed switch should support real-time state and resiliency and allowing individual software modules to be independently upgraded for higher availability

The proposed switch should support Industry-standard CLI with a hierarchical

access, local and remote Syslog capabilities to allow logging of all access



| | The proposed switch should support Virtual Router Redundancy Protocol (VRRP) |
|---|---|
| | The proposed switch should support Ethernet Ring Protection Switching (ERPS) to supports rapid protection and recovery in a ring topology. |
| | The proposed switch should support Unidirectional Link Detection (UDLD) |
| | The proposed switch should support IEEE 802.3ad LACP with 50 link aggregation groups (LAGs), each with eight links per group, with a user-selectable hashing algorithm |
| | The proposed switch should support N+1 high reliability with hot swappable, redundant power supplies |
| | The proposed switch should support Redundant, Hotswappable and load-sharing fans and power supplies |
| | The proposed switch should support Separates control from services and keeps service processing isolated to increases security and performance |
| 5 | Layer 2 switching |
| | The switch should have 96K MAC address table size |
| | The proposed switch should support up to 4000 port-based or IEEE 802.1Q-based VLANs |
| | The proposed switch should support VLAN Translation |
| | The proposed switch should support Static VXLAN to manually connect two or more VXLAN tunnel endpoints (VTEP). |
| | The proposed switch should support Dynamic VXLAN with BGP-EVPN to Deep segmentation for campus networks or Layer 3 designs |
| | The proposed switch should support Port mirroring to duplicates port traffic (ingress and egress) to a local or remote monitoring port and support minimum 4 mirroring groups with an unlimited number of ports per group |
| | The proposed switch should support IEEE 802.1D STP, IEEE 802.1w Rapid Spanning Tree Protocol (RSTP) for faster convergence, and IEEE 802.1s Multiple Spanning Tree Protocol (MSTP) |
| | The proposed switch should support Rapid Per-VLAN spanning tree plus (RPVST+) to allow each VLAN to build a separate spanning tree to improve link bandwidth usage in network environments with multiple VLANs |
| 6 | Layer 3 routing |
| | The switch should support 60K IPv4 and 30KIPv6 Unicast Routes |
| | The proposed switch should support Static IPv4 routing, RIPv2, RIPng, Policy Based Routing (PBR), Border Gateway Protocol 4 (BGP-4) |
| | The proposed switch should support Open shortest path first (OSPF) with support of ECMP, NSSA, and MD5 authentication for increased security and graceful restart for feater failure measures. |
| | The proposed switch should support Multiprotocol BGP (MP-BGP) with IPv6 Address Family |
| | The proposed switch should support 6in4 tunnels to tunnell of IPv6 traffic in an IPv4 network. |

| Ref: B | DL/CHD/EOI/2K25/HPSCB/Servers/01 | Date: 23.06.2025 |
|--------|--|--|
| | The proposed switch should support Advanced Layer OSPF, VRF-lite, and IPv6 | 2/3 feature set includes BGP, |
| | The proposed switch should support IP performance tools to improve the performance of IPv4 networks w customization of TCP parameters, support of ICMP e display capabilities | optimization to Provides a set of which include directed broadcasts, error packets and extensive |
| | The proposed switch should support Dual IP stack | |
| | The proposed switch should support Equal-Cost Mult | tipath (ECMP) |
| | The proposed switch should support Generic Routing | g Encapsulation (GRE) |
| 7 | Security | |
| | The proposed switch should support Access control 1 and IPv6 and ACLs should also protect control plane NTP or web servers. | list (ACL) Feature for both IPv4 services such as SSH, SNMP, |
| | The proposed switch should support Remote Authent (RADIUS) | ication Dial-In User Service |
| | The proposed switch should support Terminal Access System (TACACS+) | s Controller Access-Control |
| | The proposed switch should support Management acc | cess security |
| | The proposed switch should support Secure shell (SS | Hv2) |
| 8 | Multicast | |
| | The switch should support 7000 IPv4 and IPv6 Multi | cast Routes |
| | The proposed switch should support Internet Group N v2, and v3) | Management Protocol (IGMPv1, |
| | The proposed switch should support Anycast RP | |
| | load-sharing capabilities. | oups to provide redundancy and |
| | The proposed switch should support FastLeave (FL) | and Forced-FastLeave (FFL) |
| | The proposed switch should support Microsoft Network | fork Load Balancer (NLB) for |
| | The proposed switch should support Multicast Listen | er Discovery (MLD) |
| | The proposed switch should support Multicast Servic | e Delivery Protocol (MSDP) |
| | The proposed switch should support IGMP/MLD Sno | ooping |
| | The proposed switch should support Protocol Indepen | ndent Multicast (PIM) |
| | The proposed switch should support PIM for IPv4 an many-to-many and support for PIM Sparse Mode (PI proposed switch should support PIM Dense Mode | d IPv6 supports one-to-many and M-SM, IPv4 and IPv6).The |
| 9 | Environmental Features | |
|) | The proposed switch should support for RoHS (FN 5 | 0581:2012) regulations |
| | The Switch shall have common criteria NDPP certific | ed |
| | The switch support Operating temperature of 0°C to 4 | 45°C |
| | | |

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Safety : EN 60950 or IEC 60950-1 or UL 60950-1 or CSA 22.2 No 60950-1 or EN
60825-1:2007 or IEC 60825-1:2007 Class 1EMC : EN 55032:2012 or Class A EN 55024:2010 or EN 61000-3-2:2014 or Class A
EN 61000-3-3:2013 or FCC CFR 47 Part 15:2010 Class A or VCCI Class A CNS
1343810Warranty and SupportThe switch shall be offered with minimum five years hardware warranty with NBD
Shipment and software updates/upgrades from OEM directly

Software upgrades/updates shall be included as part of the warranty

| Management Switch | | | | |
|-------------------|--|--|--|--|
| Sr. No | Specifications | | | |
| | | | | |
| 1 | 48 RJ-45 autosensing 10/100/1000 ports and 2 x 1G/10G SFP+ uplink ports. | | | |
| 2 | Shall have switching capacity of 176 Gbps for providing non-blocking performance | | | |
| 1 | Architecture | | | |
| 11 | Shall be 1RU 19" Rack Mountable | | | |
| 1.2 | 24 RJ-45 autosensing 10/100/1000 ports and 4 SFP+ ports | | | |
| 1.3 | 1 RJ-45 (serial RS-232C) or USB micro-B console port | | | |
| | Should have 1Gb SDRAM and required flash memory to store min 2 version of | | | |
| 1.4 | operating system & multiple configuration files | | | |
| 1.5 | Packet buffer size of minimum 12 MB to support video/streaming traffic | | | |
| 1.6 | Shall provide Gigabit (1000 Mb) Latency of < 4 µs | | | |
| 2 | Resiliency | | | |
| | IEEE 802.1D Spanning Tree Protocol, IEEE 802.1w Rapid Spanning Tree Protocol | | | |
| 2.1 | and IEEE 802.1s Multiple Spanning Tree Protocol | | | |
| | IEEE 802.3ad Link Aggregation Control Protocol (LACP) up to eight links (ports) | | | |
| 2.2 | per group | | | |
| 2.3 | Shall support stacking | | | |
| 3 | Laver 2 Features (any additional licenses required shall be included) | | | |
| 31 | MAC address table size of 32000 entries | | | |
| 5.11 | Shall support up to IEEE 802.10 (4.094 VLAN IDs) and 2000 VLANs | | | |
| 3.2 | simultaneously | | | |
| | Shall support GARP and MVRP VLAN Registration Protocol or equivalent feature | | | |
| 3.3 | to allow automatic learning and dynamic assignment of VLANs | | | |
| | Shall have the capability to monitor link connectivity and shut down ports at both | | | |
| 3.4 | ends if uni-directional traffic is detected, preventing loops | | | |
| | Shall support 9200 bytes Jumbo frames to improve the performance of large data | | | |
| 3.5 | transfers | | | |
| | Internet Group Management Protocol (IGMP) as per RFC 1112, RFC 2236, RFC | | | |
| 3.6 | 3376, RFC 4541, RFC 2933 | | | |

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| 3.7 | Multicast Listener Discovery (MLD) snooping as per RFC 2710 | | | |
|---|--|--|--|--|
| | IEEE 802.1AB Link Layer Discovery Protocol (LLDP) and LLDP-MED (Media | | | |
| 3.8 | Endpoint Discovery) | | | |
| | IPv6 host and Dual stack (IPv4/IPv6) support to provide transition mechanism from | | | |
| 3.9 | IPv4 to IPv6 | | | |
| 3.10 | Shall support L2 tunneling protocol for network overlay | | | |
| | | | | |
| 5 | Layer 3 Features (any additional licenses required shall be included) | | | |
| 5.1 | Static Routing min 4k entries for both IPv4 and IPv6 | | | |
| 5.2 | Shall support OSPF | | | |
| 5.3 | Shall include Equal-cost Multipath (ECMP) capability | | | |
| 5.4 | RIPv1, RIPv2 RIPng routing | | | |
| 5.5 | DHCP, DHCPv6 (client and relay) | | | |
| 6 | QoS and Security Features | | | |
| 6.1 | Access Control Lists for IPv4 and IPv6 traffic filtering | | | |
| 6.2 | Source-port filtering or equivalent feature to allow only specified ports to | | | |
| | communicate with each other | | | |
| 6.3 | Traffic prioritization based on IP address, IP Type of Service (10S), Layer 3 | | | |
| | protocol, TCP/UDP port number, source port, DiffServ etc | | | |
| 6.4 Shall support traffic classification into eight priority levels mapped to eight | | | | |
| 6.5 | Shall support traffic rate-limiting per port | | | |
| | Shall support selecting the number of queues and associated memory buffering to | | | |
| 6.6 | meet the requirements of the network applications | | | |
| | IEEE 802.1x to provide port-based user authentication with multiple 802.1x | | | |
| 6./ | authentication sessions per port | | | |
| 6.9 | Media access control (MAC) authentication to provide simple authentication based | | | |
| 0.8 | on a user's MAC address | | | |
| 6.0 | Web-based authentication to provide a browser-based environment to authenticate | | | |
| 0.9 | clients that do not support the IEEE 802.1X supplicant | | | |
| 6 10 | Dynamic Host Configuration Protocol (DHCP) protection to block DHCP packets | | | |
| 0.10 | from unauthorized DHCP servers | | | |
| 6.11 | Port security to allow access only to specified MAC addresses | | | |
| 6.12 | STP BPDU port protection to prevent forged BPDU attacks | | | |
| 6 1 4 | STP Root Guard to protect the root bridge from malicious attacks or configuration | | | |
| 0.14 | mistakes | | | |
| 6.15 | Dynamic ARP protection blocking ARP broadcasts from unauthorized hosts | | | |
| | Should have Trusted Platform Module (TPM) for secure hardware-based generation | | | |
| 6.16 | and storage of cryptographic keys that can be used for a variety of authentication | | | |
| | purposes | | | |
| 7 | Management Features | | | |
| | Configuration through the CLI, console, Telnet, SSH and browser-based | | | |
| 7.1 | management GUI (SSL) | | | |
| 7.2 | SNMPv1, v2, and v3 and Remote monitoring (RMON) support | | | |

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| 7.3 | sFlow (RFC 3176) or equivalent for traffic analysis | | |
|--|---|--|--|
| 7.4 | TFTP, Secure FTP, Zero Touch Provisioning of switch with centralized NMS | | |
| | Dual flash images to provide independent primary and secondary operating system | | |
| 7.5 | files | | |
| | Multiple configuration files to allow multiple configuration files to be stored to a | | |
| 7.6 | flash image | | |
| 7.7 | RADIUS/TACACS+ for switch security access administration | | |
| 7.8 | Simple Network Time Protocol (SNTP) or equivalent support | | |
| | Shall have Digital optical monitoring of transceivers to allow detailed monitoring of | | |
| 7.9 | the transceiver settings and parameters | | |
| | The switch should support TPM & Zero-Touch Provisioning (ZTP). The switch shall | | |
| | support IP SLA for Voice monitors quality of voice traffic using the UDP Jitter and | | |
| 7.1 | UDP Jitter for VoIP tests | | |
| 8 | Software Defined Networking (SDN) Capability | | |
| 8.1 | OpenFlow 1.3 protocol capability to enable software-defined networking | | |
| | | | |
| | Allows the separation of data (packet forwarding) and control (routing decision) | | |
| 8.2 | Allows the separation of data (packet forwarding) and control (routing decision) paths, to be controlled by an external SDN Controller, utilizing Openflow protocol | | |
| 8.2 9 | Allows the separation of data (packet forwarding) and control (routing decision) paths, to be controlled by an external SDN Controller, utilizing Openflow protocol Environmental Features | | |
| 8.2 9 | Allows the separation of data (packet forwarding) and control (routing decision) paths, to be controlled by an external SDN Controller, utilizing Openflow protocol Environmental Features Shall support IEEE 802.3az Energy-efficient Ethernet (EEE) to reduce power | | |
| 8.2 9 9.1 | Allows the separation of data (packet forwarding) and control (routing decision) paths, to be controlled by an external SDN Controller, utilizing Openflow protocol Environmental Features Shall support IEEE 802.3az Energy-efficient Ethernet (EEE) to reduce power consumption | | |
| 8.2 9 9.1 9.3 | Allows the separation of data (packet forwarding) and control (routing decision) paths, to be controlled by an external SDN Controller, utilizing Openflow protocol Environmental Features Shall support IEEE 802.3az Energy-efficient Ethernet (EEE) to reduce power consumption Operating temperature of 0°C to 45°C | | |
| 8.2 9 9.1 9.3 | Allows the separation of data (packet forwarding) and control (routing decision) paths, to be controlled by an external SDN Controller, utilizing Openflow protocol Environmental Features Shall support IEEE 802.3az Energy-efficient Ethernet (EEE) to reduce power consumption Operating temperature of 0°C to 45°C Safety and Emission standards including EN 60950; IEC 60950; VCCI Class A; | | |
| 8.2 9 9.1 9.3 9.4 | Allows the separation of data (packet forwarding) and control (routing decision) paths, to be controlled by an external SDN Controller, utilizing Openflow protocol Environmental Features Shall support IEEE 802.3az Energy-efficient Ethernet (EEE) to reduce power consumption Operating temperature of 0°C to 45°C Safety and Emission standards including EN 60950; IEC 60950; VCCI Class A; FCC part 15 Class A | | |
| 8.2 9 9.1 9.3 9.4 10 | Allows the separation of data (packet forwarding) and control (routing decision) paths, to be controlled by an external SDN Controller, utilizing Openflow protocol Environmental Features Shall support IEEE 802.3az Energy-efficient Ethernet (EEE) to reduce power consumption Operating temperature of 0°C to 45°C Safety and Emission standards including EN 60950; IEC 60950; VCCI Class A; FCC part 15 Class A OEM Criteria | | |
| 8.2 9 9.1 9.3 9.4 10 | Allows the separation of data (packet forwarding) and control (routing decision) paths, to be controlled by an external SDN Controller, utilizing Openflow protocol Environmental Features Shall support IEEE 802.3az Energy-efficient Ethernet (EEE) to reduce power consumption Operating temperature of 0°C to 45°C Safety and Emission standards including EN 60950; IEC 60950; VCCI Class A; FCC part 15 Class A OEM Criteria Switch or Switch's Operating System on different hardware plateform should be | | |
| 8.2 9 9.1 9.3 9.4 10 | Allows the separation of data (packet forwarding) and control (routing decision) paths, to be controlled by an external SDN Controller, utilizing Openflow protocol Environmental Features Shall support IEEE 802.3az Energy-efficient Ethernet (EEE) to reduce power consumption Operating temperature of 0°C to 45°C Safety and Emission standards including EN 60950; IEC 60950; VCCI Class A; FCC part 15 Class A OEM Criteria Switch or Switch's Operating System on different hardware plateform should be tested for EAL 2/NDPP or above under Common Criteria Certification | | |
| 8.2 9 9.1 9.3 9.4 10 10.1 | Allows the separation of data (packet forwarding) and control (routing decision) paths, to be controlled by an external SDN Controller, utilizing Openflow protocol Environmental Features Shall support IEEE 802.3az Energy-efficient Ethernet (EEE) to reduce power consumption Operating temperature of 0°C to 45°C Safety and Emission standards including EN 60950; IEC 60950; VCCI Class A; FCC part 15 Class A OEM Criteria Switch or Switch's Operating System on different hardware plateform should be tested for EAL 2/NDPP or above under Common Criteria Certification. | | |
| 8.2 9 9.1 9.3 9.4 10 10.1 | Allows the separation of data (packet forwarding) and control (routing decision) paths, to be controlled by an external SDN Controller, utilizing Openflow protocol Environmental Features Shall support IEEE 802.3az Energy-efficient Ethernet (EEE) to reduce power consumption Operating temperature of 0°C to 45°C Safety and Emission standards including EN 60950; IEC 60950; VCCI Class A; FCC part 15 Class A OEM Criteria Switch or Switch's Operating System on different hardware plateform should be tested for EAL 2/NDPP or above under Common Criteria Certification. The OEM shall be in Leaders Quadrant of Gartner report for Wired & Wireless LAN | | |

| 4(i) | Eligibility Criteria of Applicants | | | | | |
|------|------------------------------------|---|--|--|--|--|
| | а | Company Profile: | | | | |
| | | The bidder shall be a company incorporated/registered in India under the | | | | |
| | | Companies Act 1956/2013/Proprietorship/Partnership Firm/Limited Liability | | | | |
| | | Partnership (LLP). The bidder should be an OEM/System Integrator of similar | | | | |
| | | work. | | | | |
| | b | The Bidder must have a minimum average annual turnover of Rs. 1.35 crores | | | | |
| | | in the last three financial years (FY 2021-22, FY 2022-23 & FY 2023-24). | | | | |
| | | Audited Financial for FY 2023-24 duly certified by registered Chartered | | | | |

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Date: 23.06.2025

| Accountant should be attached at the time of bidding. |
|--|
| Applicability of exemption of Turnover to MSME firms is based on prevailing GOI guidelines. For availing this exemption, a certified copy of NSIC/MSME certificate and GOI notification need to be enclosed along with the technical bid. |
| The bidder should have positive Net Worth in the last three Financial Year (FY 2021-22, FY 2022-23 & FY 2023-24). CA Certificate for Net Worth must be provided. |
| Bidders should have successfully completed "similar work" in government (departments/ boards/corporations/ PSUs/ Societies) / Large reputed Enterprise during the last five years ending 31.03.2024. One similar completed service costing not less than 3.6 Cr, OR Two similar completed services costing not less than 2.25 Cr, OR Three similar completed services costing not less than 1.8 Cr. |
| Bidders are required to submit bid specific Manufacturing Authorization Form (MAF) as per the requirement of End Customer document as defined above in point no. 2 of Scope of Work. |
| The bidder should have a registered number of following: - • PAN • GST |
| Power of Attorney OR Authorization letter: The signatory signing the bid on behalf of the bidder should be duly authorized by the Board of Directors / Partners of the bidder to sign the bid on their behalf. |
| The bidder must ensure to deposit the tender fees and EMD. |
| The Bidder should hold valid certificates for ISO 9001/ISO- 20000 /ISO-27001 |
| Blacklisting Self Declaration - The bidder shall submit the undertaking that the bidder: - Has not been ever under a declaration of ineligibility for corrupt or fraudulent practices and should not be blacklisted by any State Govt. / Central Govt. / Board, Corporations and Government Societies / PSU for any reason. Has not been ever insolvent, in receivership, bankrupt or being wound up, not have its affairs administered by court or judicial officer, not have its business activities suspended and must not be the subject of legal proceedings for any of the foregoing reasons. And their directors, partners and officers not have been convicted of any criminal offense related to their professional conduct or the making of false statements or misrepresentations as to their qualifications within a period of three years as on date of submission of bid or not have been |
| |



| | k | The Bidder to bring OEM for different equipment who meets the OEM eligibility criteria as per customer tender requirement. Undertaking in this regard to be submitted | | | | |
|----------------------|--|---|---|--|--|--|
| | 1 | Bidder should undertake to comply all the tender requirements i specifications | ncluding technical | | | |
| | m | Bidder should submit write up on Implementation Plan and capability (technical and financial) on how the project will be executed by the bidder | | | | |
| | n | Bidder should submit self-certificate with proper contact deta with PO reference and amount supplied (Details of End Us Contact person, Designation, Telephone Number, Fax, Official same should be issued by authorized signatory of bidder. ITI reserves the right to verify the correctness of the clien Copies/Work orders) and any other information submitted by offer. In case of any wrong information submitted by bidder, the bi and subsequently the bidder will be blacklisted from doing any | il of clients along ser - Firm Name, mail id etc.). The t certificates (PO y the bidder in his id will be rejected | | | |
| | | Limited. | ousiness with 111 | | | |
| | 0 | A self-certificate that "The Purchaser reserves the right to increat quantity to be ordered upto 25 percent of bid quantity at the tim contract. The purchaser also reserves the right to increase the o up to 25% of the contracted quantity during the currency of the contracted rates. Bidders are bound to accept the orders according | ase or decrease the ne of placement of rdered quantity by the contract at the ngly." | | | |
| | p Certificates Bidder's offer is liable to be rejected if they don't upload any of the certification documents sought in the customer Bid document, ATC and Corrigendum if an Q q Certificates The bidder is required to upload, along with the bid, all relevant certificates as BIS licence, type test certificate, approval certificates and other certificate prescribed in the Product Specification given in the bid document. | | | | | |
| | | | | | | |
| | r | Manual bids will not be accepted. | | | | |
| | s The Bidder should have adequate financial resources. solvency certificate m please be enclosed in technical bid . | | | | | |
| 4(ii) Gen eral | Please | e provide compliance for the following clauses | Compliance Yes / No | | | |
| 1 | ITI re (in fui manuf | serves the right to quote & supply ITI manufactured products Il or partial quantity) if BOM of Tender/Project contains ITI factured products. | | | | |



| 2 | ITI reserves the right to undertake the supplies up to 50% of the order quantity | |
|----|--|--|
| 3 | ITI reserves the right to undertake services likes installation and | |
| | commissioning activities, Annual Maintenance Contract (AMC) etc. | |
| | | |
| 4 | ITI reserves the rights to split the balance orders (after taking out the | |
| | ITI portion) in 70%: 30% ratio between H1 and H2 (Highest margin | |
| | bidders) for speeding up the work, provided H2 bidder matches H1 | |
| | margins offered, and wherever technically feasible. (Not Applicable | |
| _ | | |
| 5 | All activities like Proof of concept on "No Cost No Commitment" | |
| | bidders | |
| 6 | Bidder should be willing to impart required training to ITI engineers | |
| | for undertaking services & execution of project (if applicable) | |
| 7 | Bidder will be responsible for any shortcoming in the BOM and the | |
| | same should be rectified free of cost | |
| 8 | Bidder should be willing to provide ToT for manufacture of offered | |
| | products in ITI if the bidder is an OEM. Bidder/OEM shall give an | |
| | undertaking for doing contract manufacturing of their proposed | |
| 9 | Bidder should be willing to sign an exclusive agreement with ITL for | |
| , | smooth execution of the project. | |
| 10 | All commercial terms will be as per the customer Tender/PO on | |
| | back-to-back basis. | |
| 11 | PBG will be taken from back-end partner, once ITI will be declared | |
| | | |
| 12 | Performance Bank Guarantee (PBG) required for the bid will be | |
| | borne by the selected bidder. | |
| 13 | Security Deposit required for the bid will be borne by the selected | |
| | bidder. | |
| 14 | Delivery Schedule: | |
| | Delivery Schedule as per the customer Tender/ PO on back-to-back | |
| | basis. | |
| 15 | LD Clause: LD shall be as per ITI Clauses (@ 0.5% of order value per | |
| | week or part thereof subject to a maximum of 10% of the undelivered | |
| | portion/ the order value (if the item(s) cannot be used unless full supply | |



| | is made) or to cancel the order and purchase the materials from alternative source at the risk and cost of the supplier) OR as per the | | | | |
|---------------|---|---|--|--|--|
| | customer PO/tenderclause whichever is higher. | | | | |
| 16 | Payment Terms: | | | | |
| | a) Payment terms will be as per customer tender and will be done through an Escrow account on back-to-back basis. | | | | |
| | b) Pavn | pent to the vendor shall be done after deduction of all | | | |
| | i I | D/recoveries imposed by customer (if any) | | | |
| | ii L' | El's margin | | | |
| | No adv | ance navment shall be released for any work | | | |
| | | | | | |
| 17 | The bid | der shall give an undertaking for the following: | | | |
| | a. To ex | tend a fully back-to-back partnership | | | |
| | b. To su | pport ITI as a SI and bid in this tender with ITI as lead bidder | | | |
| | c. To su | pport ITI for preparation of the tender, post bid clarifications, | | | |
| | technica | I presentations and any other requirements as per tender. | | | |
| | d. To make all arrangements and carry out Proof of Concept | | | | |
| | (PoC)/NCNC at bidder's cost (If applicable) | | | | |
| 4(iii) | Checklist of documents/information to be submitted: | | | | |
| | a. Company Profile | | | | |
| | b. Certificate of Incorporation as per clause a of 4(i) | | | | |
| | c. Memorandum & Articles of Association | | | | |
| | d. The bidder should have average annual turnover of more than Rs. 1.35 crores | | | | |
| | | for any three of last five financial years reported i.e. till FY 2023-24 duly | | | |
| | | certified by registered Chartered Accountant as per clause b of 4(i) | | | |
| | e. Proof of positive net worth in last financial year(2023-24) as per clause c of 4(| | | | |
| | f. | PO & Client certificate in this regard shall be submitted for proof of experience | | | |
| | | as per clause d of 4(i) | | | |
| | g. | Undertaking as per clauses 4(i) k, l, m & n (whichever applicable) and 4(ii) 8 | | | |
| | U | & 17 in company letter head | | | |
| | h. | GST Registration Certificate or valid exemption certificate as per clause f of | | | |
| | 4(i) | | | | |
| | i. | Copy of PAN Card as per clause f of 4(i) | | | |
| | i. | CIN (Corporate Identity Number), if applicable | | | |
| | k. | Authorization letter in the company letterhead authorizing the person signing | | | |
| | | the bid for this EOI and Power of Attorney (POA) as per clause g of 4(i) | | | |
| | 1. | Undertaking in letter head to indemnify ITI from any claims / nenalties / | | | |
| | | statutory charges, liquidated damages, with legal expenses etc. | | | |
| | m. | Undertakings in Company letter head as per Annexure I | | | |
| | 1. | Undertaking in letter head to indemnify ITI from any claims / penalties / statutory charges, liquidated damages, with legal expenses etc. | | | |
| | m. Undertakings in Company letter head as per Annexure I | | | | |

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| n. | Bidders Details as per Annexure II |
|----|--|
| 0. | Clause by clause compliance of EOI terms with references to supporting |
| | documents as per Annexure III |
| p. | Pre-Contract Integrity Pact as per Annexure-IV |
| | a) "Bidders participating in the EOI have to agree to sign Integrity Pact on |
| | placement of order / contract" |
| | b) "Those bidders who are not willing to sign Integrity Pact will not be |
| | considered for bid opening" |
| q. | Bid security declaration annexure -V (if applicable) |
| r. | Brief technical literature of the offered equipment |
| s. | MAF as per clause e of 4(i) |
| t. | Blacklisting Self Declaration as per clause j of 4(i) |
| u. | The bidder should give an undertaking on the company's letter head that all the documents/certificates/information submitted by them against this NIT are genuine. |
| v. | Bidder shall submit technical data sheet by highlighting each complied specification. Wherever technical specifications and operational/functional requirements not mentioned in datasheet, OEM compliance shall be submitted |
| w. | Work order / Contract clearly highlighting the scope of work, Bill of Material and value of the contract/order; AND Completion / Commission Certificate issued & signed by the competent authority of the client entity on the entity's Letterhead. |
| Х. | Copies of certifications sought by customer in their RFP |
| у. | ISO Certificates : The Bidder should hold valid certificates for ISO 9001/ISO-20000/ISO-27001 as per clause i of 4(i) |
| Z. | Proof of tender fees and EMD as per clause h of 4(i) |
| aa | All the applicable annexures of end customer tender duly filled & signed (along with supporting documents) to be submitted by the bidder. |
| ab | Any other documents mentioned in the customer tender. |
| ac | Complete EOI and customer tender document digitally signed, stamped and complied on each page by the bidder be uploaded. |
| ad | Conditional bids will not be entertained and summarily rejected. Only online bids on https://itilimited.ewizarde.in portal will be accepted and no physical bids will be accepted. |

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| | ae | When notified by the Procuring entity to the supplier/ bidder/ selected bidder bids for specified article. If any. shall be accompanied by one set of samples of the articles bid. where asked for, properly packed. Such samples if submitted personally will be received in the office. A receipt will be given for each sample by the officer receiving the samples. | |
|---------|--|--|--|
| | af | Option Clause Undertaking as per clause no o of 4(i) | |
| | ag | Undertaking as per clause no t of 4(i) | |
| | ah | certificates as per clause no q & r of 4(i) | |
| | ai | Undertaking as per clause no p of 4(i) | |
| 4(iv) | Financi Price an A - Sub of Requ B - Quo C - Abs D - Ove | al Bid d Margin Bid Format: mit Lump sum details for supply and service items as per Schedule irements (SoR) and Scope of Work (SoW) in INR (without Taxes) te margin to ITI as a percentage of A olute value of Margin = A*B rall Quoted price = A-C During evaluation bidders with least "D" will be considered as L1 The bid having higher value of "B" will be selected in case of tied D If the bidder is selected, during the final tender submission, the price to be quoted shall not be more than price "A" and the margin offered to ITI shall not be less than "B" | |
| | (Please also refer note 10, 11 & 12 below) | | |
| Special | cial Conditions of EOI: | | |

- **a.** No advance will be paid to the SI, even though ITI is eligible to get advance from the customer being a front end bidder.
- **b.** The selected SI , who has partnered with ITI for a particular tender/ project shall not partner with any other lead bidder for the same tender/project
- **c.** If the bidder is selected, during the final tender submission, the price to be quoted shall not be more than price "A" and the margin offered to ITI shall not be less than "B"

Note:

 The Bidding (For both Technical and Financial Part of the Bid) would be subjected to an On-line / e-Tendering process. The prospective Bidders are requested to go through



https://itilimited.ewizard.in to understand the entire e-Tendering Process and follow the Registration and Bidding Process on https://itilimited.ewizard.in as defined in the document. In case of any clarifications on e-tender portal, bidders may contact the portal administrators of https://itilimited.ewizard.in

- The Technical Bid and financial bid shall be uploaded in e-procurement site of ITI Limited (https://itilimited.ewizard.in). For submission of online bid and procedure to be followed, visit https://itilimited.ewizard.in
- ITI's Tender document can be downloaded from ITI web site <u>www.itiltd.in</u> or CPP portal www.eprocure.gov.in. For uploading the bid proposal, all vendors have to register in our eProcurement portal (https://itilimited.ewizard.in) .When submitting the bid please state the tender ID.
- 4. Any clarifications regarding the tender can be obtained from "Any corrigendum/addendum/errata in respect of the above tender shall be made available at our official website <u>www.itiltd.in</u>. / CPPP or <u>https://itilimited.ewizard.in</u>. No further press advertisements will be given. Hence, all bidders are advised to check the ITI ltd website regularly" and Helpdesk:

Mr. Sudhir Kumar Bharati

AM-NSU

Mobile No: +91-9465555127

e-mail: skbharati_nsu@itiltd.co.in

- 5. Technical bids will be opened at 03:30 PM on 07.07.2025
- 6. Financial Bid opening will be done after the evaluation of Technical bid (Only for technically qualified bidders).
- 7. Bid should be valid for a period of 120 from the date of opening of EOI response.
- 8. Conditional offers are liable for rejection.
- 9. The Bidders should give Clause by clause compliance of EOI with references to supporting documents; otherwise the offers are liable for rejection.
- 10. Payment to the successful bidder shall be made after deducting the offered margin and the statutory taxes payable to the Govt (Penalties if any levied by the customer will be passed on to the Successful bidder), only after the receipt of payment from the customer.



- Margin offered should be firm throughout the contract irrespective of reason, what so ever, including the exchange rate fluctuation.
- 12. SI will be selected on the basis of 4(iv).
- 13. Indemnity: The vendor to indemnify ITI from any claims / penalties / statuary charges, liquidated damages, with legal expenses etc as charged by the customer. LD/ Penalties incurred on account of delay in supply, product failure during warranty if any and deficiency in Warranty and AMC services attributable to the partner shall be borne by the partner
- 14. Arbitration: Any dispute arising out of this Agreement shall be settled and resolved as per the dispute resolution and arbitrations clause agreed between the Parties under the main Contract.
- 15. Set Off: Any Sum of money due and payable to the supplier under this contract may be appropriated by the purchaser or any other person contracting through the ITI and set off the same against any claim of the purchaser for payment of a sum of money arising out of this contract or under any other contract made by the supplier with the purchaser.
- 16. The interested SI may like to discuss the customer tender related information, EOI Bidding Conditions, Bidding Process and clarifications, if any with the Mr. Sudhir Kumar Bharati, AM-NSU, Mobile No: +91-9465555127 e-mail id:- <u>skbharati_nsu@itiltd.co.in</u> and obtain the complete tender document from customer website.
- 17. ITI will not consider any or all of the bids if they are not meeting EOI requirements.
- 18. Bidders participating in the EOI have to agree to sign Integrity Pact on placement of order / contract.
- 19. Those bidders not willing to sign Integrity Pact will not be considered for bid opening.
- 20. Intellectual Property Rights:
 - All deliverable, outputs, plans, drawings, specifications, designs, reports and other documents and software submitted by the contractor under this contract shall become and remain the property of the procuring entity and subject to laws of copyright and must not be shared with third parties or reproduced, whether in whole or part, without: the procuring entity's prior written consent.
 - The contractor shall, not later than upon termination or expiration of this contract, deliver all such documents and software to the procuring entity, together with a detailed inventory thereof.



- The contractor may retain a copy of such documents and software but shall not use it for any commercial purpose.
- 21. Late offer: Any offer received after the prescribed timeline shall be rejected and shall be returned unopened to the Companies.
- 22. Language of offers: The offers prepared by the Company and all the correspondences and documents relating to the offers exchanged by the companies shall be written in English language.
- 23. In the event that ITI is required to provide demonstration or working of the product to their buyers, the same shall be arranged by the system integrator at latter's cost and expenditure.
- 24. Price negotiation will be permitted downwards only and ITI profit margin negotiation will be upwards only.
- 25. **Cost of EOI:** The bidder shall bear all costs associated with the preparation and submission of his offer against this EOI, including cost of presentation for the purposes of clarification of the offer, if so desired by ITI. ITI will, in no case be responsible or liable for those costs, regardless of the conduct or outcome of the EOI process.
- 26. Purchaser's Right to accept any bid and to reject any or All Bids or to cancel the EOI: ITI Limited reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids, at any time prior to award of contract without assigning any reason whatsoever and without thereby incurring any liability to the affected bidder or bidders on the grounds of purchaser's action
- 27. Amendment of EOI: At any time prior to the last date for receipt of offers, ITI, may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, modify the EOI document by an amendment. In order to provide prospective bidder reasonable time in which to take the amendment into account in preparing their offers, ITI may, at their discretion, extend the last date for the receipt of offers and/or make other changes in the requirements set out in the Invitation for EOI.
- 28. **Disclaimer:** ITI and/or its officers, employees disclaim all liability from any loss or damage, whether foreseeable or not, suffered by any person acting on or refraining from acting because of any information including statements, information, forecasts, estimates or projections contained in this document or conduct ancillary to it whether or not the loss or damage arises in connection with



Date: 23.06.2025

any omission, negligence, default, lack of care or misrepresentation on the part of ITI and/or any of its officers, employees.

- **29.** Accessibility of EOI Document: Complete EoI document with terms and conditions is provided in the following websites
 - (i) http://www.itiltd.in
 - (ii) https://itilimited.ewizard.in
 - (iii) http://eprocure.gov.in
 - (iv) Gem Portal





Annexure-I

Undertakings (To be in Bidder's Letter Head)

M/s..... do here by undertake the following

- 1. are not blacklisted by Central Govt./ any State or UT Govt/ PSU/ organized sector in India
- 2. to work with ITI as per this EOI and Customer Tender terms and conditions. Also, we agree to implement the project (scope of work as per Tender terms and conditions including investment) covering Warranty & post-warranty services, maintenance etc, in the event of ITI winning the contract on back-to-back basis.
- 3. To submit EMD and Performance Bank Guarantee to customer/ITI (as decided by ITI) as per Customer Tender terms & conditions.
- 4. that we will be equipped with the required manpower with qualifications, certifications and experience as mentioned in the customer tender.
- 5. to get required certificate& support (warranty & post-warranty/maintenance) in the name of ITI from the OEM as per customer tender requirement.
- 6. to obtain relevant statutory licenses for operational activities.
- 7. to sign MoU/Teaming Agreement, Integrity Pact with ITI for addressing the customer tender as per customer's tender terms and conditions.
- 8. to indemnify ITI from any claims / penalties / statuary charges, liquidated damages, with legal expenses etc as charged by the customer.
- 9. to support the offered equipment for a period as asked in customer bid documents.

10. to supply equipment/components which conform to the latest year of manufacture.

11. The bidder should give certificate stating that all the hardware/ software supplied under the contract shall not contain any embedded malicious codes that could inhibit the desired functions of the equipment or cause the network to malfunction in any manner.



Date: 23.06.2025

Annexure-II

Bidders Profile

| 1. | Name and address of the company | | | |
|-----|--|---------|---------|---------|
| 2. | Contact Details of the Bidder (Contact person name with designation, Telephone Number, FAX, E- mail and Web site) | | | |
| 3. | Area of business | | | |
| 4. | Annual Turnover for 3 financial years (Rs in Cr) | 2021-22 | 2022-23 | 2023-24 |
| 5. | IT Turnover for 3 financial years (Rs in Cr) | 2021-22 | 2022-23 | 2023-24 |
| 6. | Net Worth as on 31.03.2024 | | | |
| 7. | Date of Incorporation | | | |
| 8. | GST Registration number | | | |
| 9. | PAN Number | | | |
| 10. | CIN Number, if applicable | | 4 4 | |
| 11. | Number of technical manpower in company's rolls | 1 | | |



Date: 23.06.2025

Annexure-III

Compliance Statement

| S.No | Clause No. | Clause | Compliance (Complied/ N Complied) | Not | Remarks Reference | with | Documentary |
|------|------------|--------|---|-----|----------------------|------|-------------|
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Annexure - IV

PRE-CONTRACT INTEGRITY PACT

(To be executed on plain paper and submitted along with Technical Bid/ EOI Documents. To be signed by the bidder and same signatory Competent/ Authorized to sign the relevant contract on behalf of the ITI Ltd).

EOI No.....

This Integrity Pact is made onday of 2025

BETWEEN:

ITI Limited, MSP Delhi having its Registered & corporate office at ITI Bhavan, Dooravani Nagar, Bangalore – 560016 India, and established under the Ministry of Communications & IT, Government of India (hereinafter called the Principal), which term shall unless excluded by or is repugnant to the context, be deemed to include its Chairman & Managing Director, Directors, Officers or any of them specified by the Chairman & Managing Director in this behalf and shall include its successors and assigns) ON THE ONE PART AND

M/sChief Executive Officer (hereinafter called the bidder(s)/Contractor(s)), which term shall unless excluded by or is repugnant to the context be deemed to include its heirs, representatives, successors and assigns of the bidder/contract ON THE SECOND PART.

Preamble

WHEREAS the Principal intends to enter into an MOU of partnering business opportunities of common interest and able to generate synergies in execution of such business for (name of the Stores / equipment / items). The Principal, values full compliance with all relevant laws of the land, regulations, economic use of resources and of fairness/ transparency in its relations with its Bidder(s)/ Contractor(s).

In order to achieve these goals, the Principal has appointed an Independent External Monitor (IEM), who will monitor the EOI process and the execution of the contract for compliance with the principles as mentioned herein this agreement.

WHEREAS, to meet the purpose aforesaid, both the parties have agreed to enter into this Integrity Pact the terms and conditions of which shall also be read as integral part and parcel of the EOI Documents and contract between the parties.



NOW THEREFORE, IN CONSIDERATION OF MUTUAL COVENANTS STIPULATED IN THIS PACT THE PARTIES HEREBY AGREE AS FOLLOWS AND THIS PACT WITHNESSETH AS UNDER:

SECTION 1 - COMMITMENTS OF THE PRINCIPAL

The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:

- a. No employee of the Principal, personally or through family members, will in connection with the EOI for or the execution of the contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the personal is not legally entitled to.
- b. The Principal will, during the EOI process treat all bidder(s) with equity and reason. The Principal will in particular, before and during the EOI process, provide to all bidder(s) the same information and will not provide to any bidder(s) confidential/ additional information through which the bidder(s) could obtain an advantage in relation to the EOI process or the contract execution.
- c. The Principal will exclude from the process all known prejudiced persons. If the principal obtains information on the conduct of any of its employee, which is a criminal offence under IPC/PC Actor if there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officer and in addition can initiate disciplinary action as per its internal laid down Rules/ Regulations.

SECTION 2 – COMMITMENTS OF THE BIDDER / CONTRACTOR

- 2.1 The Bidder(s)/Contractor(s) commits himself to take all measures necessary to prevent corruption. He commits himself observe the following principles during the participation in the EOI process and during the execution of the contract.
- a. The bidder(s)/contractor(s) will not, directly or through any other person or firm offer, promise or give to any of the Principal's employees involved in the EOI process or the execution of the contract or to any third person any material or other benefit which he/ she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever (during the EOI process or during the execution of the contract.
- b. The bidder(s)/contractor(s) will not enter with other bidders/ contractors into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.

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- c. The bidder(s)/contractor(s) will not commit any offence under IPC/PC Act, further the bidder(s)/contractor(s) will not use improperly, for purposes of competition of personal gain, or pass onto others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
- d. The Bidder(s)/Contractor(s) of foreign original shall disclose the name and address of the Agents /representatives in India, if any. Similarly, the Bidder(s)/Contractor(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any.
- e. The Bidder(s) f Contractor(s) will, when presenting the bid, disclose any and all payments made, are committed to or intend to make to agents, brokers or any other intermediaries in connection with the award of the contract.
- f. The Bidder(s)/Contractor(s) will not bring any outside influence and Govt bodies directly or indirectly on the bidding process in furtherance to his bid.
- g. The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or to be an accessory to such offences.

SECTION 3 – DISQUALIFICATION FROM EOI PROCESS & EXCLUSION FROM FUTURE CONTRACTS

If the Bidder(s)/Contractor(s), during EOI process or before the award of the contract or during execution has committed a transgression in violation of Section 2, above or in any other form such as to put his reliability or credibility in question the Principal is entitled to disqualify Bidder(s)/Contractor(s) from the EOI process.

If the Bidder(s)/Contractor(s), has committed a transgression through a violation of Section 2 of the above, such as to put his reliability or credibility into question, the Principal shall be entitled exclude including blacklisting for future EOI/contract award process. The imposition and duration of the exclusion will be determined by the severity of the transgression. The severity will be determined by the Principal taking into consideration the full facts and circumstances of each case, particularly taking into account the number of transgression, the position of the transgressor within the company hierarchy of the Bidder(s)/Contractor(s) and the amount of the damage. The exclusion will be imposed for a period of minimum one year.

The Bidder(s)/Contractor(s) with its free consent and without any influence agrees and undertakes to respect and uphold the Principal's absolute right to resort to and impose such exclusion and further accepts and undertakes not to challenge or question such exclusion on any ground including the lack

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of any hearing before the decision to resort to such exclusion is taken. The undertaking is given freely and after obtaining independent legal advice.

A transgression is considered to have occurred if the Principal after due consideration of the available evidence concludes that on the basis of facts available there are no material doubts.

The decision of the Principal to the effect that breach of the provisions of this Integrity Pact has been committed by the Bidder@)/ Contractor(s) shall be final and binding on the Bidder(sj/ Contractor(s), however the Bidder(s)/Contractor(8) can approach IEM(s) appointed for the purpose of this Pact.

On occurrence of any sanctions/ disqualifications etc arising out from violation of integrity pact Bidder(s)/ Contractor(s) shall not entitled for any compensation on this account.

Subject to full satisfaction of the Principal, the exclusion of the Bidder(s)/Contractor(s) could be revoked by the Principal if the Bidder (\$)/ Contractor(s) can prove that he has restored/ recouped the damage caused by him and has installed a suitable corruption preventative system in his organization.

SECTION 4 – PREVIOUS TRANSGRESSION

- 4.1 The Bidder(s)/ Contractor(s) declares that no previous transgression occurred in the last 3 years immediately before signing of this Integrity Pact with any other company in any country conforming to the anti-corruption/ transparency International (TI) approach or with any other Public Sector Enterprises/ Undertaking in India of any Government Department in India that could justify his exclusion from the EOI process.
- 4.2 If the Bidder(s)/ Contractor(s) makes incorrect statement on this subject, he can be disqualified from the EOI process or action for his exclusion can be taken as mentioned under Section-3 of the above for transgressions of Section-2 of the above and shall be liable for compensation for damages as per Section- 5 of this Pact.

SECTION 5 – COMPENSATION FOR DAMAGE

- 5.1 If the Principal has disqualified the Bidder(s)/Contractor(s) from the EOI process prior to the award according to Section 3 the Principal is entitled to forfeit the Earnest Money Deposit/Bid Security/ or demand and recover the damages equitant to Earnest Money Deposit/Bid Security apart from any other legal that may have accrued to the Principal.
- 5.2 In addition to 5.1 above the Principal shall be entitled to take recourse to the relevant provision of the contract related to termination of Contract due to Contractor default. In such case, the Principal shall be entitled to forfeit the Performance Bank Guarantee of the Contractor or

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demand and recover liquidate and all damages as per the provisions of the contract agreement against termination.

SECTION 6 – EQUAL TREATEMENT OF ALL BIDDERS/CONTRACTORS

6.1 The Principal will enter into Integrity Pact on all identical terms with all bidders and contractors for identical cases.

- 6.2 The Bidder(s)/Contractor(s) undertakes to get this Pact signed by its subcontractor(s)/subvendor(s)/ associate(s), if spy, and to submit the same to the Principal along with the EOI document/contract before signing the contract. The Bidder(s)/Contractor(s) shall be responsible for any violation(s) of the provisions laid down in the Integrity Pact Agreement by any of its subcontractors/ sub-vendors / associates.
- 6.3 The Principal will disqualify from the EOI process all bidders who do not sign this Integrity Pact or violate its provisions.

SECTION 7 – CRIMINAL CHARGES AGAINST VIOLATIG BIDDER(S)/CONTRACTORS

7.1 If the Principal receives any information of conduct of a Bidder(s)/Contractor(s) or subcontractor/ sub-vendor/associates of the Bidder(s)/Contractor(s) which constitutes corruption or if the principal has substantive suspicion in this regard, the principal will inform the same to the Chief Vigilance Officer of the Principal for appropriate action.

SECTION 8 – INDEPENDENT EXTERNAL MONITOR(S)

8.1 The Principal appoints competent and credible Independent External Monitor(s) for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extend the parties comply with the obligations under this pact.

Details of IEM appointed by IT1 are as under:

IEM - I Shri Javeed Ahmad, IPS (Retd.) M-1101, Shalimar Gallant Apartment Vigyanpuri, Mahanagar Lucknow-226006

IEM - II Shri Atul Jundall, IFS (Retd.) 3/10 Vishesh Khand Opp. Little Friend School Gomti Nagar,Lucknow-226010(UP)



- 8.2 The Monitor is not subject to any instructions by the representatives of the parties and performs his functions neutrally and independently. He will report to the Chairman and Managing Director of the Principal.
- 8.3 The Bidder(s)/Contractor(s) accepts that the Monitor has the right to access without restriction to all product documentation of the Principal including that provided by the Bidder(s)/Contractor(s). The Bidder(s)/Contractor(s) will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The Monitor is under contractual obligation to treat the information and documents Bidder(s)/Contractor(s) with confidentiality.
- 8.4 The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the project provided such meeting could have an impact on the contractual relations between the Principal and the Bidder(s)/Contractor(s). As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or take corrective action, or to take other relevant action. The monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in specific manner, refrain from action or tolerate action.
- 8.6 If the Monitor has reported to the Chairman & Managing Director of the Principal a substantiated suspicion of an offence under relevant IPC/PC Act, and the Chairman & Managing Director of the principal has not, within the reasonable time taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner.
- 8.7 The word 'Monitor' would include both singular and plural.

SECTION 9 - FACILITATION OF INVESTIGATION

9.1 In case of any allegation of violation of any provisions of this Pact or payment of commission, the Principal or its agencies shall be entitled to examine all the documents including the Books of Accounts of the Bidder(s)/Contractor(s) and the Bidder(s)/Contractor(s) shall provide necessary information and documents in English and shall extend all help to the Principal for the purpose of verification of the documents.

SECTION 10 - LAW AND JURISDICTION

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- 10.1 The Pact is subject to the Law as applicable in Indian Territory. The place of performance and jurisdiction shall the seat of the Principal.
- 10.2 The actions stipulated in this Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the extent law in force relating to any civil or criminal proceedings.

SECTION 11 – PACT DURATION

This Pact begins when both the parties have legally signed it. It expires after 12 months on completion of the warranty/ guarantee period of the project /work awarded, to the fullest satisfaction of the Principal.

If the Bidder(s)/Contractor(s) is unsuccessful, the Pact will automatically become invalid after three months on evidence of failure on the part of the Bidder(s)/Contractor(s).

If any claim is lodged/made during the validity of the Pact, the same shall be binding and continue to be valid despite the lapse of the Pact unless it is discharged/determined by the Chairman and Managing Director of the Principal.

SECTION 12 - OTHER PROVISIONS

- 12.1 This pact is subject to Indian Law, place of performance and jurisdiction is the Registered & Corporate office of the Principal at Bengaluru.
- 12.2 Changes and supplements as well as termination notices need to be made in writing by both the parties. Side agreements have not been made.
- 12.3 Should one or several provisions of this pact turn out to be invalid, the remainder of this pact remains valid. In this case, the parties will strive to come to an agreement to their original intentions.
- 12.4 Any disputes/ difference arising between the parties with regard to term of this Pact, any action taken by the Principal in accordance with interpretation thereof shall not be subject to any Arbitration.
- 12.5 The action stipulates in this Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings.

| Ref: BDL/CHD/EOI/2K25/HPSCB/Servers/01 | Date: 23.06.2025 |
|--|--|
| In witness whereof the parties have signed a mentioned in the presence of the witnesses: | nd executed this Pact at the place date first done |
| For PRINCIPAL | For BIDDER(S)/CONTRACTOR(S) |
| | |
| Name Designation | Name Designation |
| Witness | |
| 1 | 1 |
| 2 | 2 |
| | |



Date:

Annexure - V

BID SECURITY DECLARATION

To, ITI Limited (A Govt. of India Enterprise) BC Office, 1St Floor, Core-6, Scope Complex,7-Lodhi Road, MSP-Delhi -110003

Subject: Bid Security Declaration EOI NO: ----- DATED ----- Procurement of: ----- e-Tender Id: -----

1. I/We have downloaded/obtained the Tender document(s) for the above mentioned Tender/Work. I/We, undersigned declare that:-

(a) I/We will not modify/withdraw our bid and will not impair or derogate from the Bid in any respect within the period of validity of the bid as mentioned in the tender.

(b) I/we will furnish the Performance Security for the due performance of the contract as asked in the tender.

(c) I/we will not refuse to accept/execute the contract.

(d) I/we accept that I/We may be disqualified from bidding for any contract for the period as decided by the competent authority for breaching of any obligations/declaration as mentioned above.

2. Further, this Bid security declaration will remain in force upto and including 120 days after the period of bid validity.

3. I/We certify that all information furnished by our Firm is true & correct in all respect.

Yours Sincerely,

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