Tender Document

For

Supply, Installation and Maintenance of Servers, and other Hardware Components at MPSEDC, Bhopal for SRDH Project

(Tender No. MPSEDC/ACGM/2013/513) - Revised

(All pages of this document except for Commercial-bid to be submitted in original duly signed on each page along with the technical bid envelope. The Commercial bid in original is to be enclosed in a separate sealed envelope)

M P State Electronics Development Corporation Ltd.
(A Govt. of M P Undertaking)
State IT Centre, 47-A, Arera Hills, Bhopal-462011 (M.P.)
Ph.0755-2518602, Fax: 0755-2579824
www.mpsedc.com

INVITATION FOR BIDS

MPSEDC Ltd., Bhopal invites sealed bids, under two envelopes system, from bidders for Supply, Installation and Maintenance of Servers, and other Hardware Components at MPSEDC, Bhopal for SRDH Project. Interested bidders may obtain further information from the office of MPSEDC Ltd., Bhopal Bids are invited for the work mentioned hereunder:

Sl. No.	Items	Description
A	Scope of Work	Supply, Installation and Maintenance of Servers, SAN and other hardware components at MPSEDC, Bhopal
B	Cost of Tender Document	Rs 5000.00 (non-refundable) by Demand Draft/Cash
C	Sale of Tender Document	24.08.13 to 21.11.13 (Between 10.30 a.m. to 5.30 p.m.)
D	Last Date for Submission of Bid Document	22nd November, 2013 upto 03.00 pm
E	Date of Opening of Technical Bid	22nd November, 2013 at 04:00 p.m.
F	EMD	Rs. 3,00,000/- (Rupees Three Lakh Only) in the form of Demand Draft payable to MPSEDC Ltd, Bhopal or Performance Bank Guarantee from Nationalized/Scheduled Bank
G	Place of Opening of Bids	MPSEDC Ltd., State IT Centre, 47 A, Arera Hills, Bhopal – 462 011
H	Address for Communication	MPSEDC Ltd., State IT Centre, 47 A, Arera Hills, Bhopal – 462 011. Ph. No. 0755 – 2518602

Note: Tender Document can be downloaded from our website www.mpsedc.com. In case tender form has been downloaded from the website, the Bidder will have to enclose a Demand Draft of Rs. 5000.00 (Rupees Five Thousand Only) of any scheduled bank in favor of MPSEDC Ltd. payable at Bhopal along with the tender.

* Any future Corrigenda/Information shall be posted only on our website www.mpsedc.com

Letter for Submission of Tender

<div align="right">Dated -------- ,2013.</div>

Addl. Chief General Manager
MPSEDC Ltd.
State IT Centre
47-A, Arera Hills
Bhopal (M P)

Ref: "Tender for Supply and Installation of Server & other Hardware Components against Tender
         No. MPSEDC/ACGM/2013/ 513 due for opening on 22nd November, 2013

Dear Sir,

Having examined the tender document relating to the Supply and Installation of Server & other Hardware Components as detailed in your tender, Conditions and scope of supply, Specifications etc., and having understood the provisions and requirements relating to the supply and all other factors governing the tender, We hereby submit our offer for the supply of the proposed items in accordance with terms and conditions and confirm our acceptance to execute the order within the time period specified in the tender document, at the rates quoted by us in the accompanying Technical & commercial Bid.

If, after the tender document is accepted, we fail to complete the supply of the items as per the order. We agree that, M/s. MPSEDC LTD. Bhopal shall have full authority to forfeit the earnest money and cancel our order with no obligation on their part.

We confirm having deposited Earnest Money of Rs. 3,00,000.00 (Rupees Three Lakh Only) by Demand Draft No…………….dated ……………. drawn on …………………Bank ……………………… Branch/in the form of Irrecoverable Bank Guarantee No…………………………… dated …………… issued by…………………. is attached here to, and general information required are as per annexure attached.

We further confirm that –
i.   We have sufficient qualified manpower and necessary materials and after sales support to execute the order efficiently in the specified time schedule.
ii. The quoted rates shall be valid till the completion of the order but not less than 90 days.
iii. We further confirm that all chapters of the tender documents have been read, understood and signed and there is no deviation/discrepancy
iv. We agree to accept the extension order up to 100% quantity within six months of the issue of the order.
v.   We declare that we have not been blacklisted by any Government Department/Organization.

<div align="right">Signature of the Bidder
With stamp and date</div>

GENERAL INFORMATION AND EMD DETAILS

1	EMD Details Amount in Rs. Name of the Bank:	
2	Name and Address of the Bidder:	
3	Contacts:	
4	Telephones:	
5	Fax:	
6	E-mail:	
7	Mobile No:	
8	Category of the Bidder (Whether company, partnership firm or Proprietary concern)	
9	Name of Chief Executive Officer and Telephone No.	
10	Year of Establishment	
11	Sales Tax/Commercial Tax/ CST nos.	
12	Service Tax No.	
13	Income Tax PAN/GIR No.	
14	Name and Address of the Banker	
15	List of major Clients and the size of orders executed	

Note: Separate sheets may be attached wherever necessary.

Signature of the Bidder
With stamp and date

Terms and Conditions

Contents of Bidding Documents for the Supply and Installation of Server & other Hardware Components including O S as per specifications given in B O M , the bidding procedures and the terms of contract are prescribed here in under:

01.   Eligibility Criteria

The following are the conditions, which are to be necessarily fulfilled, to be eligible for evaluation of the proposed solution. Only those interested bidders who satisfy the following eligibility criteria should respond to this Tender:

- The products offered must be of high quality and manufactured by nationally / internationally reputed manufacturer having a minimum turnover of Rs 500 Crore (Attach copy of the audited balance sheet) and ISO 9001 (Services and Manufacturing) and ISO 14001 certifications.
- In case of the representative/dealer, the representative/dealer must attach tender specific authorization letter (in the enclosed format in the tender form) from respective manufacturer for all the products quoted by him.
- In case of dealer the bidder must have average turnover more than Rs. 5 crore, for the last three years. Attach copy of the audited balance sheet.
- Bidder or manufacturer must have successfully executed at least 1 project (in the last three years) for the Supply, Installation of Hardware for a minimum value of Rs 150 lakhs in the government sector (attach satisfactory completion from the authorized representatives of the client along with the work order).
- The Bidder must have working office and service center in the state of Madhya Pradesh for at least three years (attach copy of MPST/CST/TIN issued by M.P. If the vendor does not have an office in M.P. he should establish the same within one month of receiving work order.

02.   Amendment in Bidding Document by the Competent Authority

At any time prior to the deadline for the submission of bids, the competent authority may, for any reason, whether on it's own or in response to a clarification requested for by a prospective bidder, modify the bidding document by way of amendment(s).

The prospective bidders having received the bidding documents will be notified of the amendment(s) so made in writing or by Fax and such amendments shall be binding on them.
In order to allow reasonable time to the prospective bidders for taking into account such amendment(s), in the preparation of their bids, the competent authority, at its discretion, may extend the deadline for the submission of bids.

03.   Bid Price

The bidders shall indicate on the prescribed Price Schedule, including item-wise and final Bid Price of the items listed
Prices quoted by the Bidder shall be fixed during the Bidder's performance of the contract and shall not be subject to variation on any account.
A bid submitted with an adjustable price will be treated as non-responsive and rejected.

04.   The EMD may be forfeited

If a Bidder withdraws its bid after due date during the period of bid validity specified by the bidder on the bid Form: or In case of a successful Bidder, if the Bidder fails:

(i)   To accept the order
(ii)   To furnish performance security
(iii)   If the supplier, after accepting the purchase order fails to deliver the material/services as per the order.

Any alterations, erasures or overwriting shall be valid only if the person or persons signing the bid initial them.

05.   Technical requirements

The technical specifications are the minimum configuration required. Higher specifications may be considered but no price weight age for higher specifications shall be considered.

06.   Warranty support

System should invariably be warranted for a period of three years from the date of successful installation and commissioning.

07.   Inspection

Purchaser reserves the right to inspect the manufacturer/supplier works prior to supply. The supplied hardware shall be inspected by the MPSEDC Ltd.

08.   Payment

Payment shall be released by MPSEDC as per the following terms:

90% of the value of goods supplied shall be released against proof of delivery of consignment to the destination places as per dispatch instructions on submission of bills in triplicate. Balance 10% shall be released after successful installation and commissioning of equipments. The bills for the purpose of payment shall be submitted to MPSEDC, Bhopal. No interest shall be payable on delayed payments due to what so ever reason.

General

a. Supply will be complete only when the full quantity is supplied and installed as per tender condition and accepted by us.

b. Bid form shall be duly filled in, signed and complete in all respects

c. The price should be inclusive of all taxes and local levies if any. On FOR destination basis.

d. The rates should be free from all escalation. However, all Tax and duty benefits if applicable should be passed on to us.

e. Delivery period should not exceed 90 days from the date of order under any circumstances. The MPSEDC LTD. reserves the right to extend the delivery period, in the interest of the concerned Deptt.

f. System should invariably be warranted for a period of three years from the date of successful installation and commissioning.

The manufacturer authorization should be submitted by bidder Server & other Hardware Components separately as per the attached form.

Force Majeure

Neither party shall be responsible to the other for any delay or failure in performance of its obligations due to any occurrence commonly known as Force Majeure which is beyond the control of any of the parties, including, but without limited to, fire, flood, explosion, acts of God or any Governmental body, public disorder, riots, embargoes, or strikes, acts of military authority, epidemics, strikes, lockouts or other labour disputes, insurrections, civil commotion, war, enemy actions. If a Force Majeure arises, the Bidder shall promptly notify Tenderer in writing of such

condition and the cause thereof. Unless otherwise directed by Tenderer, the successful bidder shall continue to perform his obligations under the contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event. The successful bidder shall be excused from performance of his obligations in whole or part as long as such causes, circumstances or events shall continue to prevent or delay such performance.

Limitation of Liability: The total liability of the Bidder arising out of any clause of this Tender shall be limited to the total amount payable to the Bidder during the contract period.

SUBMISSION OF BIDS

09.   Sealing and Marking of Bids

The bidders shall submit EMD, technical bid (containing the technical specifications offered, literature leaflets etc and original copy of commercial bid in separate sealed, envelopes all the above envelopes shall be sealed in one main envelope. All the envelopes should be distinctly marked EMD, technical bid, and commercial bid.

The inner and outer envelopes shall be addressed to the competent authority at the following address:

Additional Chief General Manager
M P State Electronics Dev. Corporation Ltd.
State IT Centre
47 – A, Arera Hills,
BHOPAL-462011

The envelopes shall also indicate the name and address of the Bidder to enable the bid to be returned unopened in case it is declared "late."

If the outer envelope is not sealed and marked, the competent authority will assume no responsibility for the bids, misplacement or premature opening.

Fax bids will be rejected.

Conditional bids are liable to be rejected.

10.   Deadline for Submission of Bids

Bids must reach to the competent authority at the address specified but not later than the time and date specified in the invitation of Bids. In the event of the specified date for the submission of bids being declared a holiday for the office of the competent authority, the bids will be received up to the appointed time on the next working day.

11.   Late Bid

Any bid received after the deadline for submission of bids prescribed by the competent authority, will not be accepted and returned unopened to the bidder.

13.   Opening of Bids

Since it is a Two-bid system, Technical and EMD envelope will be opened first by the Committee constituted for this purpose. If the technical bid specifications offered, EMD and deviations asked (if any) are found in order, the Committee will open commercial bid only for the eligible bidders.

The Committee will open the bids, in the presence of Bidders' representatives who choose to attend on the date specified at the following location:

Additional Chief General Manager
M P State Electronics Dev. Corporation Ltd.
State IT Centre
47 – A, Arera Hills,
BHOPAL-462011

Prospective Bidder's representatives shall sign a register evidencing their attendance.

In case, the commercial bid is not opened on the same or next day of opening of technical bid the Committee may decide to open the commercial bid on subsequent dates. In such case the date, time and place of opening of commercial bid will be intimated to the bidders or their representatives.

14.   Preliminary Examination

Before starting evaluation, the bids will be examined to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed, and whether the bids are generally in order. In case of computational error the basic price will prevail.

If bid is determined as not substantially responsive, the competent authority will reject it and only the substantially responsive commercial bids will be considered.
The process of evaluation of bid is as follows:

(i)   The Committee, appointed by the MPSEDC LTD., will first verify that the Bank Draft for Bid Security is in order and as per requirement of the bid. The Committee will examine the bid on Eligibility Criteria as specified. The scrutiny of technical proposals will be based on the Evaluation Criteria determined.

(ii)   The commercial bid will be opened only for the proposals, which are found eligible and technically acceptable by the Committee and approved. On the day specified for the opening of bid, the Committee, appointed by the MPSEDC LTD., will open the commercial bids of eligible bidders and scrutinize the same minutely.

(iii)   After scrutiny, the MPSEDC LTD. after having examined the proposal may accept the same or accept the bid price of any other bidder found suitable or reject all or any proposal. The decision of the MPSEDC LTD. in this regard shall be final and binding.

(iv)   The quantity mentioned in the tender document is as per our estimate. However, MPSEDC reserves the right to place order for the less/higher quantity or drop the items or segregated delivery schedule depending on the actual requirement.

15.   Earnest Money Deposit/Performance Security

The successful bidder is required to furnish performance guarantee for 5% of the value of the order for a period three years. Performance Guarantee should be submitted within 15 days of receiving the Work Order. Performance Guarantee can be in the form of Demand Draft/Bank Guarantee/FDR pledged in favour of MPSEDC Ltd.

16.   Contacting the Competent Authority

Any effort on part of a Bidder to influence the Competent Authority or members of Technical/Monitoring committee, in its decisions on bid evaluation; bid comparison or contact award may result in rejection of the bidder's bid.

MPSEDC LTD. does not bind them to accept the lowest or any other tender and reserve the right to accept or reject any or all the tender in full or in part without assigning any reason.

MANUFACTURERS   AUTHORIZATION FORM

Ref No: ………………..   **Dated:………………..**

Additional Chief General Manager
M.P. State Electronics Dev. Corpn. Ltd.
State IT Centre
47-A Arera Hills, BHOPAL-462011

Tender No:……………………………………… Due Date: ………………………..

Dear Sir,

We_____who are established and reputed Manufacturers
of _____having factories At_____(Address of the
factory) do hereby authorize M/s_____(Name & Address of agent) to submit a bid, and
subsequently negotiate and sign the contract with you against the above tender.

We hereby extend our full guarantee, warranty and support and also in meeting warranty obligations
by providing necessary spares in time for the goods & services offered by the above firm against this
tender, as per standard as well as MPSEDC warranty terms.

Yours sincerely,

(Name)
(Name of the manufacturer)

Note: This letter of authority should be on the letterhead of the manufacturer and should be signed
by a person competent and having a power of attorney to bind the manufacturer. The bidder in its
bid should include it.

Technical Specifications

Note : All specifications are intended to be generic. In case, any specifications is specific to any OEM the Bidder can quote any equivalent or better standard providing equivalent functionality.

BLADE CHASSIS		
Item	**Feature Requirements**	**Compliance (Y/N) with reference to datasheet**
Base Chassis	Chassis should accommodate at least 12 number of Dual socket servers or 6 number of Quad socket servers.	
	Single console for all blades in the enclosure or KVM Module with built in KVM switch or Virtual KVM feature over I P.	
	Should support Hot Pluggable & Redundant chassis Management Modules	
	Dual network connectivity for each blade server for redundancy should be provided. Backplane should be completely passive device. If it is active, dual backplane should be provided for redundancy	
	DVD ROM can be internal or external, which can be shared by all the blades allowing remote installation of S/w and OS	
Interconnect support	Should support simultaneous housing of Ethernet, FC, iSCSI, IB interconnect fabrics, offering Hot Pluggable & Redundancy as a feature. Enclosure Should have No-Single-Point-of-Failure Architecture with adequate numbers of Interconnect Bays. Enclosure backplane should support 40Gb Ethernet for networking and minimum 8 GB Fiber Channel for storage.	
Blade Server Ethernet Interconnect	The chassis should have 2 Nos. of 10 Gb redundant network switches with adequate number of 10 Gbps Downlinks ports with respect to the number of servers supported by the chassis and at least 4 **x** 1 Gigabit or 2 **x** 10 GB and 4 **x** 10 GB SR SFP+ uplink ports per switch for connecting to the data center switch.	
Blade Server FC Interconnect	The enclosure should be supplied with redundant fiber channel SAN switch containing adequate numbers of ports with at least 8x8 Gbps auto negotiating FC uplink and 8 Gbps auto negotiating downlink to all server bays and 8 Gbps Fiber Channel for connectivity to the uplink.	
Power Supply	Hot Swap redundant power supplies to be provided, Power supplies should have N+N redundancy. All Power Supplies modules should be populated in the chassis.	
Cooling	Each blade enclosure should have a fully populated cooling subsystem consisting of hot pluggable fans / blowers enabled with technologies for improved power consumption and acoustic	

Management	Must have the capability to provide proactive notification of actual or impending component failure alerts. Automatic Event Handling should be supported to configure actions to notify appropriate users of failures through e-mail, pager, or Short Message Service (SMS) gateway Must provide the option of a browser-based GUI or a command line interface (CLI) to make it easy to incorporate into your existing management processes Software should support embedded hardware Graphical Remote Console capabilities of the servers that can turn a supported browser into a virtual desktop, giving the user full control over the display, keyboard, and mouse of the host server. Should support integration with enterprise-class directory services like Microsoft Active Directory and Novell e-Directory to provide secure, scalable, and cost effective user management. Must have real time Virtual KVM functionality and be able to perform a remote Power sequence. Must provide both Java & Java-free browsing options.	
Performance Management & Alerting	Must have the ability to perform a hardware level (32 bit & 64 bit) measurement. Must also monitor CPU, I/O, Memory, Storage & Network	
	Must have ability to compare the hardware performance with known performance capabilities of each component.	
	Must have the ability to provide comprehensive recommendations for the issue and the resolution.	
	Must have the ability to automatically trigger events and alerts based on performance issues or thresholds set	
	Should be able to events when the performance state of a server changes. Should detect these changes early, displaying a warning before an actual bottleneck happens.	
Deployment	Must have the capability of capturing and deploying OS images.	
	Must have the capability of configuring the hardware and changing system settings such as RAID level before the deployment of the Operating System. Must also have the capability of capturing the hardware settings and replicating it across servers.	
	Must be able to generate various reports based on formats using the latest industry standards	
Reporting	Management software should support reporting. Reports communicate power and thermal information -- from individual server utilization to data-center-level summaries and analysis. Reports on under-utilized servers identify those that are power hogs, are idle but still running, or are decommissioned but not powered off.	
	Must have the ability to generate reports for system bottleneck state and overall performance utilization	

BLADE SERVER		
Item	**Feature Requirements**	**Compliance (Y/N) with reference to datasheet**
Processor	Latest generation x 86-64 processor , 2 Nos. of Intel Hexa Core E5-2600 series, 2.9 GHz or higher processor, based on Intel C600 series chipset, offering **15MB** shared L3 cache or higher, 5.86 GT/s or higher with QPI technology	
Chipset	Intel Chipset	
Memory	Minimum Memory: For Database Server: 256 GB DDR3 RAM DDR3 1600 MHz, For App/Testing/Dev. Server: 128 GB DDR3 RAM DDR3 1600 MHz	
	Maximum Memory Support: Scalable up to 512 GB. Memory should support advanced memory protection features like advanced ECC, Online Spare etc.	
HBA	The Blade should have dual port 8 Gbps Fiber Channel HBA.	
Ethernet Controller	2 x 10 G multifunction network ports and support for partitioning up to 4* Ethernet ports per 10Gbps port when using with appropriate Blade interconnect. Should have an additional embedded NIC for remote management	
	Integrated PCIe 3.0/PCIe 2.0 based SAS Raid Controller with RAID 0, 1	
Internal Storage	2 x 300GB SAS HDD or more hot swappable system disk with mirroring using integrated RAID 0,1 on internal disks. It should be possible to hot swap the drives without shutting down the server.	
Expansion Slot	Minimum of 2Nos of PCIe 3.0 based mezzanine slots. One PCIe x16 based and one PCIe x8 based supporting Ethernet, FC adapters, Infiniband and SAS based adaptors	
Display	VGA / Graphics Port / Controller	
OS Environment	Should support heterogeneous OS environment to run Windows 2008 Server (32 & 64 Bit), Red Hat Linux/Suse Linux	
Industry Standard	The server must be compliant with following international standards: PCIE 3.0 Compliant, Microsoft® Logo certifications, USB 2.0 Support, ACPI 2.0. Compliant.	
Products Certifications	UL/FCC, Should be in the in the list of top 5 server brands as per IDC report published for India during year 2012	
OEM Certifications	ISO 9001-14001, ISO 9001-2008	

SAN STORAGE		
Item	**Feature Requirements**	**Compliance (Y/N) with reference to datasheet**
Operating System & Clustering Support	The storage array should support industry-leading Operating System platforms including: *Windows Server 2008, Windows 2012*, VMware, Sun Solaris, HP-UX, IBM-AIX, OpenVMS and Linux.	
Capacity & Scalability	The Storage Array shall be offered with 20 TB USABLE Capacity after RAID 5 using 300GB or higher SAS drives and 40 TB USABLE capacity after RAID 5 using 1TB or higher MDL/NL-SAS Drives. Storage shall be scalable to minimum of 400TB using 900 GB or higher drives.	
Cache	Offered Storage Array shall be given with Minimum of 32GB cacheData cache scalable to 64GB.	
Architecture & Processing Power	Controllers shall be true active-active.	
No Single point of Failure	Offered Storage Array shall be configured in a No Single Point of failure configuration.	
Disk Drive Support	Offered Storage Array shall support 6Gbps dual-ported 300 GB or higher hot-pluggable. Enterprise SAS hard drives, Minimum of 100 GB higher SLC SSD Drives along with SAS MDL/NL 2TB/3TB drives.	
Raid Support & Virtualization	Offered Storage Subsystem shall support Raid 0, 1, 1+0, 5 and Raid 6. Offered storage array shall have native virtualization support.	
Data Protection	Incase of Power failure, Storage array shall have de-stage feature to avoid any data loss.	
Host Ports & Back-end Ports	Offered Storage shall have minimum of 8 host ports for connectivity to servers running at 8Gbps speed and shall be scalable to 16 host ports. Offered storage shall also support additional Quad 10Gbps native ISCSI ports. Offered storage shall have two additional IP ports for the the storage based replication. Offered storage shall have minimum of 16 SAS lanes running at 6Gbps speed and shall be scalable to 32 SAS lanes without any controller change.	
Global Hot Spare	Offered Storage Array shall support distributed Global hot Spare for offered Disk drives. Global hot spare shall be configured as per industry practice.	
Performance	Storage shall be provided with Performance Management Software.	
Thin Provisioning and Space Reclaim	Offered storage array shall be supplied with Thin provisioning.	
Maintenance	Offered storage shall support online non-disruptive firmware upgrade for both Controller and disk drives.	
Snapshot / Point in time copy / Clone	Offered Storage shall have support to make the snapshot and full copy (Clone) on the thin volumes if original volume is created on thick or vice-versa. Storage array shall have functionality to re-claim the space from Thin Provisioned Deleted snapshot automatically. Vendors shall provision at-least 20% additional space over and above the actual requirements, if space re-claim from thin provisioned deleted snapshot is not possible automatically.	
Remote Replication	1. The storage array should support hardware based data replication at the array controller level across all models of the offered family. 2. Replication shall support incremental replication after resumption from Link Failure or failback situations.	

Backup Software		
Item	**Feature Requirements**	**Complian ce (Y/N) with reference to datasheet**
Operating System & Clustering Support	The proposed backup solution should be available on various OS platforms such as Windows, Linux, and UNIX platforms	
	The proposed backup solution shall support industry leading cluster solution such as MSCS, MC Service Guard, Veritas Cluster etc.	
User Interface	The proposed backup solution shall have same GUI across heterogeneous platform to ensure easy administration.	
	The proposed backup solution software has inbuilt Java/Web based GUI for centralized management of backup domain.	
	The proposed backup solution should allow creating tape clone facility after the backup process.	
Licensing	The proposed backup solution shall be configured in such a fashion that no extra license for file backup of clients or back up software shall be offered for all quoted servers (along with Scalability) including online backup of respective databases.	
	The proposed backup solution shall be configured with preferably unlimited file backup client or atleast 250 file backup client and media licenses for both SAN based backup and LAN based backup or back up software shall be offered for all quoted servers (along with Scalability) including online backup of respective databases.	
Streaming and Multi-plexing	The proposed backup solution should support the capability to write multiple data streams.	
	The proposed backup solution should support the capability to write up to 32 data streams.	
	The proposed backup solution support de-multiplexing of data cartridge to another set of cartridge for selective set of data for faster restores operation to client/servers	
Media Management	The proposed backup solution has in-built media management and supports cross platform device and media sharing in SAN environment. It provides a centralized scratched pool thus ensuring backups never fail for media.	
	The proposed backup solution has in-built frequency and calendar based scheduling system.	
Database Support	The proposed backup solution has certified "hot-online" backup solution for different type of databases such as Oracle, MS SQL, Sybase etc including Open source databases.	
	The proposed backup solution shall also support granular recovery for VMware, Exchange server, Share point Portal.	
Restore	The proposed backup solution must be able to rebuild the backup database/catalog from tapes in the event of catalog loss/corruption.	
	The proposed backup solution shall provide granularity of single file restore.	
	The proposed backup solution must support MS Exchange single email restore.	
	The backup software should support object level restore.	

De-duplication	The proposed backup software should use the same API for software and hardware de-duplication	
	The proposed backup software should give the option to allow de duplication to be done either on the Application Server or on backup server or at the destination /target device	
	The proposed backup should support zero hydration replication support. Or de-duplication with capability to replicate data to DR	
Search and Compliance	The proposed backup should support searching data using either structured and unstructured Information	
	The proposed backup software should support contextual search based on meaning or individual file restoration based on search.	
Cloud support	The proposed backup software should support both on-premise and secure hosted backup solution	
IPv6	The proposed backup software should be IP v6 compliant	
Other Features	The proposed backup solution must support full automated transfer of disk backup images to tape on a scheduled basis.	
	The proposed backup solution shall support synthetic full backup/Virtual full backups.	
	The proposed backup solution shall also support disk based virtual full backup approach.	
	The proposed backup solution shall be able to copy data across firewall.	
	The proposed backup solution shall support automatic skipping of backup during holidays.	
	The proposed backup solution must support at least AES 256-bit encryption capabilities.	
	The internal backup catalogue database should not have a big foot print.	
	The backup software should support object based restore option for the most granular restore options	
	The backup software should support instant recovery of Exchange , SQL and Oracle databases, Postgre SQL	
	The proposed backup software shall support Zimbra mail solution	
	The backup software should support restore of one single mail from Exchange back up.	

Server Rack – 42U	
Feature Requirements	**Compliance (Y/N) with reference to datasheet**
Width : 600mm	
Height : 42U	
Depth : 1000mm	
Frame : Floor Standing Heavy Duty Extruded Aluminium Frame. Top cover with FHU provision. Top & Bottom cover with cable entry gland plates. Heavy Duty Top and Bottom frame of MS. Two pairs of 19" mounting angles with 'U' marking. 3 pairs of Depth support channels.	
Overall weight carrying Capacity : Minimum 800 Kg	
Bracket : Vertical sliding brackets to mount patch panels vertically between bayed position of the cabinets	
Baying : Provision for baying so as to suitable for both network & server applications	
Standards : Conform to EIA-310 Standard for Cabinets, Racks, Panels and Associated Equipment and accommodate industry standard 19" rack mount equipment.	
Door : Steel (solid / grill / mesh) front / rear doors and side panels. Racks should NOT have glass doors / panels.Front and Rear doors must have the ability to open from the left and right without the need for any field modifications or tools.	
Door Hinges : Dual hinged front, Quad hinged rear doors, Open from left or right, Easily removable	
Perforation: Front and Back doors should be perforated hexagonal with minimum 70% Perforation and 100% air perforation area to 19" mounting angles.	
Lock & Key : Rack should be lockable on all sides	
Cooling System : Racks should be compatible with floor throw as well as top-throw data centre cooling system Fan Housing & Environment Monitoring Fan Housing Unit with minimum 4 Fans of :90CFM 230VAC 4" dia or better, Top Mounted with Thermostat based monitoring, The Fans should switch on based on the Temperature within the rack. The temperature setting should be factory settable .equipped with humidity & temperature sensors	
Wire Manager Per Rack : Minimum Two Vertical and Four Horizontal	
Power Distribution Unit Per Rack : 2 Nos.: Vertically Mounted, 32 AMPs with 230V (36) C13 and (6) C19,sockets. Electronically controlled circuits Bracket for Surge & Spike protection, LED readout for the total current being drawn from the channel should be SNMP enabled, with IEC309 Cord	
Mechanical / Electrical Properties : Adjustable mounting depth, Multi-operator component compatibility, Numbered U positions, Powder coat paint finish and Protective grounding provisions.	
Minimum Accessories to be supplied Per Rack :"Mounting hardware : 2 Packs, Blanking Panel 4U – 5 U size : 1 No. Keyboard Tray with BB slides (Rotary type) : 1 No. 627mm Stationary Shelf : 2 Nos."	

KVM Switch	
Feature Requirements	**Compliance (Y/N) with reference to datasheet**
Availability: should be able to Troubleshoot servers and diagnose problems in lieu of a working operating system with POST and BIOS-level access to servers.	
Agility: Cascade multiple KVM switches for a modular solution that supports multiple platforms, improving flexibility and simplifying future expansion. Please see the user's manual for specific cascading capabilities.	
Plateform Supported: Windows, Sun, Unix and Linux compatible.	
Input Frequency 50/60 Hz	
Rack Height 1 U	
Regulatory Approvals : AS/NZS 3548 (C-Tick) Class A, CE, FCC Part 15 Class A, ICES-003, IEC 60950, UL 60950, VCCI	
Warranty: 3 Years	
RoHS Compliant	
Should be 8 Port Multi-Platform Analog KVM along with power cord, Configuration cable, Firmware upgrade cable, KVM cables, Rack Mounting brackets, power cable	

RACKMOUNT LCD KEYBOARD DRAWERS	
Feature Requirements	**Compliance (Y/N) with reference to datasheet**
Slim 1 U Rackmountable Drawer with 17" LCD Monitor	
Either PS2 or USB input to the LCD Drawer	
Multiple keyboard language selection with either touch pad or track ball	
slide rail with fixed positions to prevent drawer movement when typing	
Multi-lingual on screen display menu 12,24 and 48 Volt DC Power Option	
External locking facility provided to restrict used by un authorised users	
Built in self-rail locking facility	
integrated keyboard, mouse, trackball	

CAT 6 - Patch Cords	
Feature Requirements	**Compliance (Y/N) with reference to datasheet**
Length	
5 Meters	
Cable Type	
UTP CAT 6 ANSI/TIA/EIA 568-B.2-1	
Plug Protection	
Anti-snag feature	
Modular plugs, which exceed FCC CFR 47 part 68 subpart F and IEC 60603-7 specifications	
Terminals	
50 micro-inches minimum of gold plating over nickel contacts	
The cable jacket shall comply with Article 800 NEC for use as a nonplenum	
cable. The 4 pair UTP cable shall be UL□ and c (UL□)	
Listed Type CM (non-plenum).	
End point connector	
Factory fitted RJ-45 plugs at both ends with Push-Pull latching design	
Insulation	
patch cord have FR- PVC	

SAN Switch		
Item	**Feature Requirements**	**Compliance (Y/N) with reference to datasheet**
1	Minimum Dual SAN switches shall be configured where each SAN switch shall be configured with minimum of 16 Ports scalable to 40 ports.	
2	Required scalability shall not be achieved by cascading the number of switches and shall be offered within the common chassis only	
3	Should deliver 8 Gbit/Sec Non-blocking architecture with 1:1 performance for up to 24 ports in a energy-efficient fashion	
4	Should protect existing device investments with auto-sensing 2, 4, 8 and 16 Gbit/sec capabilities.	
5	The switch shall support different port types such as FL_Port, F_Port, M_Port (Mirror Port), and E_Port; self-discovery based on switch type (U_Port); optional port type control in Access Gateway mode: F_Port and NPIV-enabled N_Port	
6	The switch should be rack mountable	
8	Non disruptive Microcode/ firmware Upgrades and hot code activation.	
9	The switch shall provide Aggregate bandwidth of 192 Gbit/sec: 24 ports × 8 Gbit/sec (data rate) end to end after configuring all the ports.	
10	Switch shall have support for web based management and should also support CLI.	
11	The switch should have USB port for firmware download, support save, and configuration upload/download.	

12	Offered SAN switches shall be highly efficient in power consumption.	20
13	Switch shall support POST and online/offline diagnostics, including RAStrace logging, environmental monitoring, non-disruptive daemon restart, FCping and Pathinfo (FC traceroute), port mirroring (SPAN port).	
14	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 expedite high-priority traffic	
15	SAN switch shall support to restrict data flow from less critical hosts at preset bandwidths.	
16	It should be possible to isolate the high bandwidth data flows traffic to specific ISLs by using simple zoning	
17	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.	
18	Offered SAN Switch shall be suplied with Integrated redundant, hot swappable cooling fans and power supplies	

Tape Library (OPTIONAL)		
Item	**Feature Requirements**	**Compliance (Y/N) with reference to datasheet**
Capacity	1. Shall support Native data capacity of 60TB (uncompressed) expandable to 150TB (2.5:1compressed). 2. Shall be offered with Minimum of Two LTO6 FC tape drive and minimum of 24 cartridge slots. Shall support encryption.	
Tape Drive Architecture	Offered LTO6 drive in the Library shall conform to the Continuous and Data rate matching technique for higher reliability.	
Speed	Offered LTO6 drive shall support 160MB/sec in Native mode and 400MB/sec in 2.5:1 Compressed mode.	
Scalability	Tape Library shall be scalable to 4 Number of LTO-6 and 48 slots either within the same frame or by cascading another frame.	
Encryption device	Offered Library shall be provided with a facility to keep all the encrypted keys in a redundant fashion.	
Connectivity	Offered Tape Library shall provide 8Gbps native FC connectivity to SAN switches.	
Management	Tape Library shall provide web based remote management.	
Barcode Reader and Mail slots	Tape library shall support Barcode reader and mail slot.	
Other Features	1. Tape Library shall have GUI Panel 2. Shall be rack mountable. 3. Tape Library shall be supplied with software which can predict and prevent failures through early warning and shall also suggest the required service action. 4. Offered Software shall also have the capability to determine when to retire the tape cartridges and what compression ratio is being achieved. 5. Shall be offered with 100 Tape Media	

Financial Bid

Sl. No.	Item	Qty	Unit Price	Total Price
1	Blade Chassis	1		
2	Application servers	2		
3	Database servers	2		
4	Development server	1		
5	SAN STORAGE	1		
6	SAN SWITCH 16 ports up-gradable to 40 ports	2		
7	Backup Software	1		
8	19" 42 U Sever Racks (Including Storage Rack)	2		
9	KVM switch with LCD Console	1		
10	5 Meters Factory Crimped CAT 6 Patch Cords	20		
11	**Optional Item**			
12	TAPE Library with Cartridges			
			Total	
			VAT	
			Grand Total	

Rupees (In …………………………………………………………………………………….only)

Note:
- The cost of optional items shall also be included for evaluation of Financial Bid
- The quantity of hardware may be changed as per requirement. Payment shall be made as per actual quantity installed.

We further confirm our acceptance to the terms & conditions of the tender document.

Signature and Seal of Bidder