

No. EI-D/GA/1-29/2013

**ERNET India**

(A Scientific Society under Department of Electronics & Information Technology, GoI)  
10<sup>th</sup> Floor Jeevan Prakash Building 25,  
KG Marg, New Delhi - 110001.

Dated: 01.05.2013

**TENDER DOCUMENT**

Issue of Tender Document: 01.05.2013 to 08.05.2013

Receipt of Queries upto 13.05.2013

Pre-Bid meeting 15.05.2013

Response to Queries\*\* (on ERNET Website only): 20.05.2013

Due Date: 30.05.2013 at 3.00 P.M

Opening of Bids: 30.05.2013 at 3.30 P.M

**Subject : Invitation of Bids for Supply and Installation of Blade server, IPv6 enable EPABX, SIP Wifi phone, SIP phone, Desktops, IPv6 enable camera, Laptop etc.**

Sir,

**ERNET India**, an Autonomous Scientific Society under Department of Information Technology, Govt. of India, is a Class 'A' Internet Service Provider for the Education and Research community in India.

ERNET India is a nodal network for integrating education & research institutions in the country. An Internet service is one of the services being provided by ERNET India to these institutions. The services are provided through 15 Points of Presence (PoPs) located at the premier education & research institutions in the country. All these PoPs are connected on high-speed backbone with international connectivity. More than 1000 educational institutions are connected on the Network through these nodes.

Sealed tenders are, therefore invited from the reputed manufacturers or their authorized representatives for the Supply / Installation of equipments as per technical specification given in **Annexure-I**.

The following instructions should be carefully noted:

### **GENERAL CONDITIONS**

1. The bidder must be a reputed manufacturer or his authorized representative of the type of product offered. The authority from the manufacturer/distributor must be submitted along with the bid. **The bids received without authority will liable to be rejected.**

2. Quotations should be submitted in four separate sealed covers. First and Second cover indicating, “**COVER FOR TECHNICAL SPECIFICATION**” should consist of only technical specification of the system offered along with literature, pamphlets, drawing etc. This cover should contain complete technical specifications, make, model, names of supplier/manufacturer and commercial terms etc. of the system offered. Price column in this cover should be kept blank. Third and Fourth cover indicating, “**COVER FOR PRICE BID**” should consist the same details of first cover as well as price details also. **Both the covers should first be sealed separately**, and then both the covers should be kept **in a single sealed bigger cover**. This cover addressed by name to the officer signing this enquiry should be submitted before due date and time.

3. Sealed tenders are, therefore invited from the reputed manufactures or their authorized representatives for Supply and Installation of Blade server, IPv6 enable E PBAX, SIP Wifi phone, SIP phone and IPv6 enable camera in conformity with Technical Specifications as at **Annexure-I** . Interested parties who wish to Supply the above mentioned equipments may collect Tender Document in person against a Demand Draft or Banker’s Cheque of **Rs.2,000/- (Rupees Two Thousand only)** drawn in favour of “**ERNET India**” **New Delhi from Shri Gulshan Kumar, Deputy Director, ERNET India.**

Note : The Tender Document can also be download from [www.ernet.in](http://www.ernet.in). In such case, an amount of **Rs.2,000/-** in the form of Demand Draft/Banker’s Cheque drawn in favour of ERNET India would be required to be furnished along with the Technical Part of the Bid.

4. Bids should be valid for a minimum period of 180 days after the due date.

5. Envelope should bear the inscription

**“Quotation for Blade server, IPv6 enable EPABX, SIP Wifi phone, SIP phone, Dekstops and IPv6 enable camera”**

**“Tender Enquiry No.: EI-D/GA/1-29/2013”**

**“Due Date & Time of Bid submission: 30.05.2013 at 3.00 PM**

**“Due Date & Time for Opening of Bids: \_ : 30.05.2013 at 3.30 PM**

6. With regard to the technical specifications and other terms and conditions of the tender document, the prospective bidders may submit their queries/ observations by due date to Registrar & CPO, ERNET India.

7. The Bids must reach the undersigned on or before the due date mentioned i.e. 30.05.2013 at 3:00 PM. Bids received after the due date & time is liable to be rejected. In the event of due date being a closed holiday or declared Holiday for Central Government offices, the due date for submission of the bids will be the following working day at the appointed time & venue.
8. The rates should be quoted in Indian Rupees for delivery at premises of ERNET India, New Delhi. All prices shall be fixed and shall not be subject to escalation of any description. The rates must be quoted as per the Performa provided in **Annexure-II** Price comparison will be made as per bill of material specified in **Annexure – II**
9. Govt. Levies like sales tax, octroi, WCT etc., if any, shall be paid at actual rates applicable on the date of delivery and must be quoted as per Performa in **Annexure II**. Rates should be quoted accordingly giving the basic price, Sales Tax / Service Tax etc., if any, as applicable.
10. It may specifically be mentioned whether the quotation is strictly as per tender conditions. If not, deviations must be spelt out specifically. **In the absence of this, the quotation would be treated as adhering to all the conditions of the tender.**
11. Please give the Registration number of the firm along with the LST/CST/WCT No. allotted by the concerned authorities in your quotation.
12. ERNET India reserves the right to accept or reject any bid or cancel the tender proceedings without assigning any reason whatsoever.
13. The bidders should quote the products strictly as per the tendered specifications giving models, make and exact specifications. All the technical literature for the products offered by the bidder may be enclosed in the bid. **Quotations with incomplete technical details shall be rejected.**
14. **Incomplete quotations are liable to be rejected.**
15. Bidder shall sign all pages of quotation and drawings forwarded with the quotation.
16. In case of any discrepancy between rates mentioned in figures and words, the latter shall prevail.
17. Bidder should quote for all the items in Annexure-II.
18. The Vendor / Organization should be ISO 9000 certified.
19. ERNET India may waive any minor infirmity or may seek any clarification, if so desired.
20. Any attempt of negotiation direct or indirect on the part of the tenderer with the authority to whom he has submitted the tender or authority who is competent finally to accept it after he has submitted his tender or any endeavor to secure any interest for an actual or prospective tenderer or to influence by any means the acceptance of a particular tender will render the tender liable to be excluded from consideration.

21. The vendor will have to arrange for all the testing equipment and tools required for installation, testing, maintenance etc.
22. ERNET will have the right to increase or decrease the quantity or reject the components /equipment supplied not complying with the specifications at any point of installation /inspection.
23. The vendors should give clause-by-clause compliance for the technical specification of the equipments in their technical bids. Quotations without this would be rejected.

**24. Bidder could also quote for all or any number of Groups. L1 bidder will be calculated per group-wise.**

25. Manpower :- It is mandatory for the vendor quoting for Group A hardware to provide a resident engineer during 0930 to 1730 capable of installing, configuring and maintaining a virtualization and clustering environment based on Microsoft / RHEL and VMWARE environments along with Unified Communication & Email Server solution

ERNET will have the right to ask for changing Resident Engineer, in case their performance is not satisfactory.

26. The annual turnover of the bidders should be more than Rupees fifty (50) Lacs per year, in consecutive last three years and would be profit making company. Documentary proof duly certified by the Chartered Accountant must be enclosed.

27. **INSPECTION**

ERNET India or its representative shall have the right to inspect or to test the items to confirm their conformity to the ordered specifications. The supplier shall provide all reasonable facilities and assistance to the inspector at no charge to ERNET India. In case any inspected or tested goods fail to conform to the specifications, ERNET India may reject them and supplier shall either replace the rejected goods or make all alterations necessary to meet specification required free of cost to ERNET India.

28. **EARNEST MONEY DEPOSIT**

- i) Each quotation must be accompanied by Earnest Money Deposit of Rs.1,00,000/- (Rupees One Lakh only) in the form of Demand Draft/Pay Order/Bank Guarantee of any Nationalized Bank/Scheduled Bank taken in the name of ERNET India, New Delhi. Bank Guarantee should be valid minimum for a period of 180 days from the original due date of the bid submission. **Quotations received without Tender Fee and Earnest Money Deposit are liable to be rejected.**
- ii) Earnest Money is liable to be forfeited and bid is liable to be rejected, if the tenderer withdraw or amends, impairs or derogated from the tender in any respect within the period validity of the tender.

- iii) The earnest money of all the unsuccessful tenderers will be returned after placement of order on the selected vendor. No interest will be payable by ERNET India on the Earnest Money Deposit.
- iv) The Earnest Money of successful bidder shall be returned after delivery & installation of equipments.
- v) EMD must be submitted in the Technical Part of the Bid. Non-submission of EMD will be treated as non-responsive of the bid and bid will be rejected.

29. **WARRANTY / AMC**

- a) Warranty shall include free maintenance of the whole equipment supplied including free replacement of parts and free software upgrades. The defects if any, shall be attended to, on immediate basis but in no case any defect should prolong for more than 24 hours. The Comprehensive Warranty shall be for a minimum period of three years from the date of acceptance of the equipment by ERNET India..
- b) The bidder shall ensure supply of the spare parts, for at least a period of 5 years from the date of supply of equipments (on payment on approved price list basis if not under AMC).
- c) The bidder must have local logistics support, by maintaining a local spares depot in the country of deployment of the equipment. This is to ensure immediate delivery of spare parts from the principal vendor of equipment to its channel partners / system integrators.

30. **Annual Maintenance Contract (AMC)**

All the prospective bidders may also quote for AMC of all hardware for a period of one (1) year after the completion of warranty period of three (3) years. AMC price would be included for price comparison. A separate PO for AMC will be issued, if required.

31. **Payment Terms :**

90% payment shall be made by ERNET India after delivery, testing and acceptance of the equipment as well as receipt of pre-receipted bill in duplicate. 10% payment would be released after expiry of the warranty. However, release of 100% payment would be considered subject to furnishing of Bank Guarantee of the amount equivalent to 10% of the cost of the equipment drawn on any Indian Nationalized Bank in favour of ERNET India valid for the period of warranty.

32. **DELIVERY PERIOD**

The delivery is required within six weeks on placement of the purchase order. However, ERNET India has the right to reduce the delivery period from 6 weeks depending upon the requirement of the equipments. Any delay by the supplier in the performance of delivery of items shall render the supplier liable to any or all the following sanctions-forfeiture of its Earnest Money Deposit, imposition of liquidated damage as per para 30 below or / and cancellation of the purchase order for default.

33. **LIQUIDATED DAMAGES**

In the event of the Supplier's failure to have the stores ready for shipment / delivery by the date / dates specified in this Purchase Order, ERNET India may at its discretion withhold any payment, until the whole of the stores have been supplied by the contractor, as liquidated damages and not any way of penalty at the rates of 1% of the price of the delayed goods for every week maximum up-to to 10% of Purchase Order value. The amount towards Liquidated Damage would be recovered from the amount of Bank Guarantee furnished by the firm or any payment due to the firm.

34 Equipment should be delivery free of cost on site.

35 Rates quoted by the Bidder shall be final and no negotiation will be held.

Yours faithfully,

(Dinesh Kumar Dixit)  
Registrar & CPO

**Annexure-I****GROUP-A**

<b>Blade Chassis –4 Quantity</b>		
<b>Sl. No</b>	<b>Features</b>	<b>Specifications</b>
1	Description	Should Provide common resources essential for the Blade Servers like Power, Ethernet , Fibre Channel , Internal/External Storage
2	Blade Bays	Blade Chassis to accommodate minimum of six quantities of 2 CPU Full Height Hot Plug-gable Blade Servers with Dual I/O Connectors as well as Power Connectors for Redundancy.
3	Ethernet Switch	2 redundant 1GB Ethernet switch to be provided in the chassis
4	I/O Path for all Fabrics	Chassis should have dual I/O connections from every blade server to help provide maximum uptime
5	SAS Switch Modules	Chassis should be configured with dual Redundant Hot-Swap SAS Switch Modules/Fiber Channel Switch Modules for connecting Internal/External storage and should support hardware Raid 0,1,5 and 10. Atleast SAS to ISCSI convertors to be provided for expansion
6	Management Modules	Chassis should be configured with integrated IP KVM switch module for managing the Blade chassis locally as well as remotely
7	Power Modules	Chassis should be fully configured with all the Power supplies of highest capacity: Each blade should have dual redundant connectivity for Power from the Power supplies through the midplane
8	Form Factor	6U -10U
9	CD/Diskette/USB	Chassis should be configured with Internal/external CD-ROM/DVD-ROM Drive which can be sheared among all the blade servers.
10	System Panel	LED/LCD panel to provide power-on, location, over temperature, information and system error conditions
11	Support Automatic Failover of Blade servers	Blade center chassis should be provided with OEM management software licence which provides an automatic blade failover ( inter- and - intra - chassis ) to an standby blade server without any manual intervention. Failover should be automatic without manual intervention when ever any blade in the production fails. Failover blade should be either in the same chassis or any chassis in the domain. Stand by blade server or pool of servers should be supported across 250 Blade chassis
12	Virtualization software	Virtualization software for creating VM's, should be inbuilt with licences for atleast three years.
<b>2 - Way Blade Server (32 GB RAM)-24 Quantity</b>		
<b>Sl. No</b>	<b>Features</b>	<b>Specifications</b>
1	CPU	Latest generation x86 eight core processor blade server populated with 2 processors which supports multithreading @ 2.40 GHz each or higher wth spec int rate base of 520 i
2	Cache L3	12 MB of L3 Cache
3	Chipset	Latest chipset to be provided to support above given processor specifications
4	Memory	64 GB Registered DDR-3 ECC Memory Upgradeable to 192 GB
5	Active Memory protection	ECC memory protection support, memory mirroring and memory sparing
6	SCSI Controllers	Integrated Hardware Raid Controller to supports Hardware Raid 0,1
7	Disk Drives	600GB 6Gbps10K SAS Hard Disk Drive or higher
8	Graphics Controller	16MB SDRAM
9	Diagnostics	Pre Failure Alerts for all active and important components like processors , memory hard

		drives
10	HBA Connectivity	Dual port connectivity to Internal/External Storage
11	I/O Expansions	2 x8 PCIe
12	Power Supply	From the Blade Chassis via Dual Redundant Power Connectors
13	Ethernet ports	Server should be configured with four quantities of 1Gbps Ethernet Ports
14	Form Factor	Full Height Blade Servers
15	Failure Alerting Mechanism	The server should be able to alert impending failures on maximum number of components. The components covered under alerting mechanism should at least include Processor, memory, HDDs and expansion cards
16	Blade Form Factor	Full Height Blade Server with Dual Redundant I/O and Power Connectors
17	OS Support	Server should support latest version of MS Windows, Redhat, Novell and VMware
<b>STORAGE</b>		
	Storage	Chassis should be configured with a capability of Internal / External storage with 10 TB Raw Capacity mounted initially and upgradable to atleast 20 TB subsequently. Each Storage Controller should have minimum 1Gb Cache Memory with a 72 hour battery backup unit.. Storage should not have no single point of failure at controller level Support connectivity to multiple hosts, must be quoted with redundant iSCSI and FC/SAS 6GBPs ports across controllers. Storage support intermixing of drives like SAS,SSD,SATA etc. Necessary licenses if any for the same to be provided for the above quoted capacity.
	Equipment Rack	To house the above all Blade Chassis and storage boxes with accessories. Should have 1200 mm depth, Glass perforated front door, Cable channels and power strips with universal 15 Amp sockets to power these equipments in a redundant dual source fashion. Sides to be perforated and high performance high speed fans below and above for air circulations. Wheel mounted.

<b>Laptop - 02 nos.</b>		
Sl. No	Features	Specifications
1	Operating System Processor Display	Genuine Windows® 8 Ultimate 64 bit or higher
2	Other features	Intel® Core™ i5-3320M (2.60 GHz, 3MB L3,1600MHz FSB) or better 12.5" Multitouch HD 300 NIT Wide-Viewing (IPS) Panel (Direct-Bonded, Gorilla Glass) Bluetooth 4.0 Keyboard : Backlight Camera: Low-Light 720p HD Battery Backup : Up to 18 hours with Slim Battery Pack Graphics : HD quality Drive: Multi-Burner DVD RAM : 8GB or higher HDD : 500GB (7200rpm) SATA Wi-fi : B/g/n Wireless (1x1 BGN)
3	Ports	1) VGA 2) USB 3.0 3) 4-in-1 SD Card Reader (SD/SDHC/SDXC/MMC slot) 4) Ethernet RJ45
4	Weight	Less than 2kg

## GROUP B

All in One Desktops - 30 nos.		
Sl. No	Features	Specifications
1	Operating System Processor Display	Genuine Windows® 8 Ultimate 64 bit or higher
2	Other features	Intel® Core™ i3-3320M (2.60 GHz, 3MB L3,1600MHz FSB) or better Bluetooth 4.0 20"LED Monitor Wireless Keyboard & Mouse Camera: 720p HD or better Graphics : HD quality Drive: Multi-Burner DVD RAM : 4GB or higher HDD : 500GB (7200rpm) SATA Wi-fi : B/g/n Wireless (1x1 BGN)
3	Ports	1) VGA (2) USB 3.0 (3) 4-in-1 SD Card Reader (SD/SDHC/SDXC/MMC slot) (4) Ethernet RJ45

**GROUP - C**

<b>Macbook Air- (13 inch) -02</b>		
<b>Sl. No</b>	<b>Features</b>	<b>Specifications</b>
1	Display	13-inch (diagonal) high-resolution LED-backlit glossy widescreen display with support for millions of colours
2	Storage	128GB flash storage
3	Processor	1.8GHz dual-core Intel Core i5 (Turbo Boost up to 2.8GHz) with 3MB shared L3 cache
4	Other features	Height: 0.3-1.7 cm (0.11-0.68 inches) Width: 32.5 cm (12.8 inches) Depth: 22.7 cm (8.94 inches) Weight: 1.35 kg (2.96 pounds) 802.11n Wi-Fi wireless networking;3 IEEE 802.11a/b/g compatible Bluetooth 4.0 wireless technology

## GROUP - D

IPv6 enabled EPABX - 01 nos.		
Sl. No	Features	Specifications
<b>Port</b>		
1	Ethernet port	RJ-45, 10/100 base-T
2	Other Ports	WAN port, for connect to Internet 2 to 4-LAN port 4-FXS ports (RJ11) 4-FXO ports (RJ11) Status LEDs to indicates Ethernet, FXS, FXO and SIP system status
<b>IP Network connection</b>		
	Netwok Connections	IPv4 (RFC 791) MAC Address (IEEE 802.3) PPPoE Client (RFC 2516) DNS Client DHCP Client (RFC 2131) for WAN port DHCP Server (RFC 2131) for LAN port NAT (RFC 1631) TCP/UDP (RFC 793/768) ICMP (RFC 792) RTP/RTCP (RFC 1889/1890) SNTP (RFC 2030) TFTP Client Telnet Server HTTP Server QoS: DiffServ (RFC 2475) / ToS (RFC 791/1349)
<b>IP Telephony (VoIP)</b>		
	IP Telephony	SIPV2 (RFC 3261) - Session Timer (RFC 4028) - Two Outbound proxy setting for increasing Performance, Productivity, and security. - SIP proxy redundancy- Setting Primary and Secondary proxy by IP or URI.
<b>Physical Interface Specification</b>		
		Voice Codecs - G.711 (A-Law/u-Law) - G.723.1: 6.3k bits - G.729A - G.729 VAD – Voice Activity Detection with Silence Suppression CNG – Comfortable Noise Generation Silence Suppression Echo Cancellation (G.165/G.168) Signaling Protocol: Loop Start (both FXO/FXS) Jitter Buffer – Adaptive & Configurable Packet Loss Compensation - increasing voice quality DTMF: In-band, Out-of-band (RFC 2833), and SIP-Info Caller ID Generation/Detection – FSK/DTMF FAX transmission: - G.711 pass-through - T.38 Fax relay Tone Generation/Detection: - Ringing Tone - Ring Back Tone - Dial Tone - Programmable Tone Call Features

		<ul style="list-style-type: none"> <li>- Call Hold</li> <li>- Call Transfer (Blind &amp; consultant)</li> <li>- Call Forward (Unconditional / No Answer / Busy)</li> </ul> MWI – Message Waiting Indication Configurable Routing table to route call among IP, FXO and FXS. IP line hunting ( Hot line ) Adjustable volume level
<b>Security</b>		
	Security	HTTP 1.1 basic/digest authentication for WEB access MD5 for SIP authentication (RFC 2069/2617) Password protected Admin access authority
<b>Setting and Management</b>		
	Features	Configure & Update method <ul style="list-style-type: none"> <li>- Web Browser (HTTP)</li> <li>- Telnet</li> <li>- FTP/TFTP</li> </ul> Voice announcement of IP address SIP wifi Enabled Phones to connect to the above with all features - 05 nos.
<b>SIP WI-FI phone - 05 nos.</b>		
<b>Hardware Interface:</b>		
	Microphone	4.0mm (Φ) x 1.5mm
	sensitivity	42dB
	Receiver	32Ω
	Rated sine power	10mW
	Speaker	8Ω
	Rated sine power	0.5W
	Other Features	Navigation Keys Vibrator : Support I/O Connector: USB with charging support Battery Capacity : 1000 mAh or more Standby Time : 160 hrs or more Talk Time : 6 hrs or more Power Adaptor: - INPUT: AC100V~240V, 50/60Hz LCD Display Language : English Wireless Specification : Internal Antenna Operation Mode : IEEE 802.11b/g client Transmit Power : IEEE 802.11b: 15dBm or more Receive Sensitivity : IEEE 802.11b (11M): -83dBm or better IEEE 802.11g (54M): -68dBm or better WiFi Security : WEP 64, WEP 128, WPA-PSK, WPA2-PSK (TKIP and AES) Wireless Features: Layer 2 intelligent roaming algorithm, WMM / WMM-PS
	IP Network connection	IPv4 (RFC 791) & IPv6 MAC Address (IEEE 802.3) Static IP DHCP Client (RFC 2131) DNS Client NTP Server TCP/UDP (RFC 793/768) RTP/RTCP (RFC 1889/1890)

		IPV4 ICMP (RFC 792),
	SIP Protocol	RFC3261 compliance Support for multiple SIP Accounts SIP UDP Protocol Message Waiting Indication (RFC3842) Support DNS SRV to locate SIP Server (RFC 3263)
	Audio Codec	G.711, G.729 Silence Suppression VAD/CNG Automatic Gain Control In-band/out of band DTMF (RFC 4733 (RFC 2833)/SIP INFO) Adaptive/Configurable Jitter Buffer Acoustic Echo Cancellation Volume Adjustment
	Call Features	Call history: Dialed call, Missed call, Received call, Call duration , Caller ID display Call Hold, Call Mute, Call Transfer, Call waiting, Call Forward, Speaker Phone Mode , speed dial, Call Waiting/Switching between Calls Phone Book: 200 records or more Contact List : 200 records or more Group Number : 50 or more Ring Tone: Polyphonic MIDI and MP3 Indicators: WLAN status, SIP server status, battery level Desirable : Organizer with Alarm, calendar, world clock, calculator Flight Mode , Vibration Mode Auto Keypad Lock FTP firmware upgrade
	Dimension	Sleek and handy
	Weight	Light weight approx 200gm
	Approvals	CE, FCC, LVD and RoHS
<b>SIP –Phone - 05 nos.</b>		
		LCD Display Language Option: English IP Network connection IPv4 (RFC 791), IPV6(RFC 2460) IPv6 Auto Configuration (RFC 4862) MAC Address (IEEE 802.3) Static IP DHCP Client (RFC 2131) PPPoE DNS Client TCP/UDP (RFC 793/768) RTP/RTCP (RFC 1889/1890) IPV4 ICMP (RFC 792), IPV6 ICMP(RFC 4443) TFTP Client VoIP VLAN Support (802.1Q/802.1P) HTTP/HTTPS Server QoS Support Support IPV4 only, IPV6 only or dual stack mode
	SIP Protocol	RFC3261 compliance Support up-to 3 SIP Register Accounts (IPv4 and IPv6 are selectable) Support Primary and Backup SIP Proxy SIP UDP Protocol Support SIP compact Form SIP Session Timer (RFC 4028) MD5 Digest Authentication

		<ul style="list-style-type: none"> <li>Reliability of provisional responses PRACK (RFC3262)</li> <li>Early/Delay media support</li> <li>Offer/answer (RFC3264)</li> <li>Message Waiting Indication (RFC3842)</li> <li>Event Notification (RFC3265)</li> <li>REFER (RFC3515)</li> <li>Support DNS SRV to locate SIP Server (RFC 3263)</li> <li>Support STUN NAT Traversal</li> <li>Support "rport" parameter (RFC 3581)</li> </ul>
	Audio Codec	<ul style="list-style-type: none"> <li>G.711 A-law/<math>\mu</math>-law, G.723.1 (6.3K/5.3K)</li> <li>G.729A, GSM 6.10 (full rate)</li> <li>Silence Suppression</li> <li>VAD/CNG</li> <li>Automatic Gain Control</li> <li>In-band/out of band DTMF (RFC 4733 (RFC 2833)/SIP INFO)</li> <li>Adaptive/Configurable Jitter Buffer</li> <li>Acoustic Echo Cancellation</li> <li>Volume Adjustment</li> </ul>
	PREFERENCE	<ul style="list-style-type: none"> <li>Customized Idle Text</li> <li>Phone Book</li> <li>Intelligent Phone Book Name Dialing</li> <li>Clock, Daylight Saving, Call-timer</li> <li>Call History of Missed, Received and Dialed</li> <li>Dialing Plan</li> <li>Digit Manipulation</li> <li>Selectable Call Progress Tone</li> <li>Support Personal Music Ring</li> <li>Support Silence Ring</li> <li>Auto Answer Mode</li> <li>Support Auto Priority (Auto Switch) Calling</li> <li>Support Specified Line Calling</li> </ul>
	Call Features	<ul style="list-style-type: none"> <li>Caller ID display or inhibit</li> <li>Voice Mail with Indication</li> <li>Speed Dialing</li> <li>Call Waiting/Switching between Calls</li> <li>Call Forward (Busy, Unconditional, No Answer)</li> <li>Blocking of Anonymous Call</li> <li>Do not disturb</li> <li>Call Hold</li> <li>Call Mute</li> <li>Call Transfer</li> <li>Incoming Call Blocking List</li> <li>Music-on-hold support (via IPPBX or local)</li> <li>Conferencing (3-way conference over phone)</li> <li>Multi-parties conference (via IPPBX)</li> <li>Distinct Ring between on-net and off-net calls (compatible with SIPPBX6200S, 6200GS and 6200N only), 6200x.</li> <li>Call Pickup (via IPPBX)</li> <li>Call Park/Retrieve (via IPPBX)</li> <li>Voice Broadcasting (via IPPBX)</li> <li>Barge-in &amp; Barge-in Allowance List 3 LP389, LP389A and LP389S, LP389SA</li> <li>IPv6 and IPv4 SIP IP Phone</li> <li>Redialing/pre-dialing</li> <li>Hot Line</li> <li>Support Peer to Peer Dialing</li> <li>Support Receiving and Display Instant Message (RFC 3428)</li> </ul>
	MANAGEMENT	<ul style="list-style-type: none"> <li>SNTP with Daylight Saving</li> <li>Administrative Telnet CLI</li> <li>Provides System Status</li> <li>Diagnostics (debug through syslog)</li> </ul>

		Configuration Backup/Restore Dual Firmware Image Backup to avoid crashing Support HTTP provision through MAC address
	Power Adaptor	INPUT: AC100V~240V, 50/60Hz
	Approvals	CE, FCC, LVD and RoHS

## GROUP- E

IPv6 Enabled Camera – 5 nos.		
Sl. No	Features	Specifications
1	Hardware Profile	<ul style="list-style-type: none"> <li>• Sensor: 1/4" Megapixel progressive CMOS sensor</li> <li>• SDRAM: 256 Mbytes</li> <li>• Flash Memory: 128 Mbytes</li> <li>• ICR: Built-in Infrared-Cut filter Removable module</li> <li>• Lens: 4 mm fixed lens , F1.5</li> <li>• View Angle: Horizontal 65.4 degrees</li> <li>• IR LED: 15 meter illumination distance and light sensor</li> </ul>
2	Image Features	<ul style="list-style-type: none"> <li>• Adjustable image size, quality, and bit rate</li> <li>• Time stamp and text overlays</li> <li>• 3 configurable motion detection windows</li> <li>• 5 configurable privacy masks</li> <li>• Flip &amp; mirror</li> <li>• Configurable brightness, saturation, contrast, sharpness</li> </ul>
3	Video Algorithms Supported	<ul style="list-style-type: none"> <li>• H.264/MPEG4/MJPEG format compression simultaneously</li> <li>• JPEG for still image</li> <li>• H.264/MPEG-4 multicast streaming</li> </ul>
4	Video Resolution	Upto 1280x800 @ 30 fps
5	Network Protocols	<ul style="list-style-type: none"> <li>• IPv4, IPv6</li> <li>• TCP/IP, UDP, ICMP</li> <li>• DHCP Client</li> <li>• DNS Client</li> <li>• SMTP Client</li> <li>• FTP Client</li> <li>• HTTP / HTTPS</li> <li>• Samba Client</li> <li>• PPPoE</li> <li>• UPnP Port Forwarding</li> <li>• RTP / RTSP/ RTCP</li> <li>• IP filtering</li> <li>• 3GPP</li> <li>• LLTD</li> <li>• CoS/QoS</li> <li>• SNMP/IGMP</li> <li>• SNMP</li> <li>• IGMP</li> <li>• 802.1x</li> <li>• ONVIF Compliant</li> </ul>

## GROUP – F

Private Cloud Suite Package for 9 numbers of Physical Servers with unlimited rights to deploy any number of Virtual Machines. The Hypervisor and Private Cloud Management/Monitoring suite should be of the same OEM so as to make the system robust and integrated. It should have the following specifications:--	
S.No	Specifications
1	The Solution should be capable of decoupling applications and application infrastructure configurations in portable containers called service templates
2	The Solution should be capable of orchestrating compute and storage resource placements based on flexible policies to maximize hardware utilization
3	The Solution should be able to run various operating systems like windows client, windows server, linux etc..
4	The Solution should have the capability for creating Virtual Machines templates to provision new servers
5	The Solution should continuously monitor utilization across Virtual Machines and should intelligently allocate available resources among the Virtual Machines
6	The Solution should allow for taking snapshots of the Virtual Machines to be able to revert back to an older state, if required
7	The Solution should be able to dynamically allocate and balance computing capacity across collections of hardware resources of one physical box aggregated into one unified resource pool
8	The Solution should cater for the fact that if one server fails all the resources running on that server shall be able to migrate to another set of virtual servers as available
9	The Solution should provide support for cluster services between Virtual Machines
10	The Solution should provide patch management capabilities such that it should be able to update patches on its own hypervisor and update guest operating systems.
11	The Solution should support Live Migration of Virtual Machine from one host to another
12	The Software should have the capability to create Virtual Machines with required number of vCPUs
13	The Solution should allow Virtual Machines consume RAM dynamically in such a way that if some of the VMs in Physical machine are not utilizing the RAM, this RAM can be utilized by some other VM in the same physical machine which has a requirement
14	The Solution should allow configuring each Virtual Machine with one or more virtual NICs. Each of those network interfaces can have its own IP address and even its own MAC address
15	The Solution should allow for creating virtual switches that connect virtual machines
16	Solution should take advantage of NIC Teaming Capabilities
17	The Solution should have the capability for moving Virtual Machines from Primary site to the Secondary site.
18	The Solution should offer Automated and Approval based Upgrades for Virtual Machines delivering cloud infrastructure
19	The Solution must offer Identity, Authentication and Role based access to User Departments Infrastructure - Machines (Virtual or Physical),
20	The Solution must offer Policy based administration by putting User Departments Machines (Virtual or Physical) in logical groups and apply relevant policies
21	The Solution should have the ability to not just enforce policies but also track and report non-conformance to access
22	The Solution should provide a simple to use intuitive Web experience for SDC Cloud Administrator and User Departments
23	The Solution should automate provisioning of new and changes to existing infrastructure (Virtual, Physical, Application or Common Services) with approvals

24	The Solution should allow creation of library hosting various Operating System, Databases that can be selected while creating new virtual servers
25	The Solution should allow creation of library hosting various Operating System, Databases that can be selected while creating new virtual servers
26	The Solution should allow for implementing workflows for provisioning, deployment, decommissioning all virtual and physical assets in the cloud datacenter
27	The Solution should allow easy inventory tracking all the physical & virtual assets in the Private Cloud
28	The Solution should employ Role Level Access Control with the ability to central manage Roles and Identities in an LDAP based Identity Store
29	The Solution should offer usage report by tenant, by region, or by Virtual Machine reporting usage of memory consumption, CPU consumption, disk consumption, Network & Disk IO
30	The Solution should have capabilities to create workflows to automate common admin challenges
31	The Solution should have the ability to develop highly customized workflows and easy user interface.
32	The Solution should be able to monitor User Department Virtual Resources independent of the platform & solution/service they are running
33	The Solution should be able to monitor key performance characteristics of the virtual resource (OS, RDBMS, Memory, Storage, Network etc.)
34	The Solution should have the mechanism to store the historical data for problem diagnosis, trend and analysis
35	The Solution should be able to send the reports through e-mail to predefined user with pre-defined interval
36	The Solution should provide a Knowledge base to store history of useful incident resolution

Unified Communication & Email Server solution. The product should be license for 100 number of users each	
S.No	Specifications
1	The Product should support the basic features of Electronic mail, commonly called email or e-mail, which is a method of exchanging digital messages across the Internet or other computer networks.
2	Global Folder Sharing - The Solution should allow Global Folder Sharing, so that the users can leverage real time collaboration when working on common projects.
3	Mailing Features at Server Level - The product should support the basic mailing features at server level :
3.1	Send mail,
3.2	receive mail,
3.3	mail forwarding,
3.4	per folder aging policies,
3.5	deferred delivery by time & date,
3.6	Prioritization of mail (high/low/normal),
3.7	email scheduling based on mail size, time & domain,
3.8	Auto Reply Vacation,
3.9	Auto Forward to Multiple Recipients,
3.10	Spell Check
4	Multiple & Virtual Domain Support - The product should support the following:

4.1	a) Hosting of multiple/virtual domains: Same user id across multiple/virtual domains in the same server Ex: xyz@nic.in, xyz@nkn.in, xyz@tn.nic.in, xyz is the same user id used for three different people in three domains.
4.2	b) Mail access using email addresses (Fully Qualified Domain Name) and login id (LDAP attribute UID) should be configurable.
4.3	c) Mail-host provision: Should have provision to distribute users under any domain across multiple message stores.
4.4	MTA Throttling/Limit –configurable parameters based on client IP/ user id to freeze number of emails allowed to be sent per minute/per hour / per day.
4.5	Provision to scan local mails (within the server) for malware through an external scanning box prior to delivery to message store of recipient.
5	Support Multiple Queue based on:
5.1	a) Domain
5.2	b) Number of Mails
5.3	c) Priority
5.4	d) Aging The product should support the feature of multiple queuing based on the domains, number of mails, priority of the email and aging.
6	Viewing and processing of particular queue by administrator - The product should allow the administrator to view and process particular queue based on the importance
7	Processing of Queues by Domain names - The Product should support processing of queues by domain names at the server level.
8	Protocol Supported - The product should support the following protocol: HTTP,HTTPs, POP, POPs, IMAP, IMAPS, SMTP and SMTPs (Mandatory to support all protocols)
9	Auto reply & Auto Forward -The product should support Auto Reply & Auto Forward Option at the User Level
10	Change Password - The product should have the capability of changing password at the user level.
11	Solution should allow mail/document owners i.e. authors to define who can open, modify, print, forward, or take other actions with the information. Solution should be able to ensure access only to authorized users and computers/devices.
12	Solution should allow role/designation-based usage rights and conditions for confidential, classified, and private data and emails
13	Integrated Audio/Video/IM Solution should have following capabilities
13.1	Text based Messaging and file sharing between two or more people.
13.2	Live voice & Video Calling
13.4	Ability to manage multiple active conversations in one place
13.5	Ability to access conversation history and conversations missed
13.6	Ability to send/receive files via the IM client.
13.7	Ability to initiate IM to a specific user from within any application
13.8	In addition to IM, it should provide the Group Chat functionality
13.9	Ability to initiate a conference via meeting invitation or ad hoc formation (by calling a person or by adding people to an existing call). To simplify conference call setup, it must be possible to use drag-and-drop functionality to add participants from the UC client• Ability to initiate a conference via meeting invitation or ad hoc formation (by calling a person or by adding people to an existing call). To simplify conference call setup, it must be possible to use drag-and-drop functionality to add participants from the UC client
13.10	Ability for users or non-enterprise members to join a conference via a PC endpoint using a web or PC client interface available as part of the conferencing product.
13.11	Ability to record conferences for later reviews, including voice, video, and web content. Ability to publish these recordings to a central location that is accessible by others officers later for review.
13.12	Ability to interoperate with existing room-based video conference systems and new visual

	communication solutions.
13.13	Ability to collect statistical usage metrics for IM, conferencing, and Enterprise Voice by tracking call detail records.
13.14	Create new users or modify existing users, as well as to move individual users or groups from one pool to another.

**Annexure-II**

**PRICE SCHEDULE**

To,

The Registrar & CPO,  
ERNET India  
10<sup>th</sup> Floor, Jeevan Prakash Building,  
25, K.G. Marg,  
New Delhi – 110 001

Tender No. \_\_\_\_\_

Date of Opening .....

We \_\_\_\_\_ hereby certify that we are established firm of manufactures/authorized agents of M/s. \_\_\_\_\_ With factories at \_\_\_\_\_ which are fitted with modern equipment and where the production methods, quality control and testing of all materials and parts manufactured or used by us are open to inspection by the representative of ERNET India. We hereby offer to supply the following items at the prices and within the period indicated below:

**GROUP A**

S.No.	Description	Qty.	Unit Price Rate	Tax	Total Unit Rate (D+E)	Total Cost (C XF)
A	B	C	D	E	F	(C XF)
1.	Blade Chassis with 10TB raw storage as per given specifications	04				
2.	Comprehensive Annual Maintenance Charges per Blade Chassis for two years on per year basis after three year of free warranty		Service Tax extra @ _____ % @ _____ per Blade Chassis per year			
3.	2 Way Blade Server compatible with the above chassis	24				
4.	Comprehensive Annual Maintenance Charges per Blade Server for two years on per year basis after three year of free warranty		Service Tax extra @ _____ % @ _____ per 2 - Way Blade Server per year			
5	Additional HDD 1TB SAS compatible with storage at line item 2 of group A with	01				

	installation					
6	Manpower – All inclusive per year					
7	Equipment Rack	02				
8	Laptop	02				
9	Comprehensive Annual Maintenance Charges per laptop for two years on per year basis after three year of free warranty		Service Tax extra @ _____ % @ _____ per laptop per year			

### GROUP B

S.No.	Description	Qty.	Unit Price Rate	Tax	Total Unit Rate (D+E)	Total Cost
A	B	C	D	E	F	(C X F)
1	All in one Desktop per given specifications in group B	30				
2	Comprehensive Annual Maintenance Charges per All in one Desktop for two years on per year basis after three year of free warranty		Service Tax extra @ _____ % @ _____ per All in one Desktop per year			

### GROUP C

S.No.	Description	Qty.	Unit Price Rate	Tax	Total Unit Rate (D+E)	Total Cost
A	B	C	D	E	F	(C X F)
1	Mac Book Air given specifications in Group C	2				
2	Comprehensive Annual Maintenance Charges per Mac Book Air for two years on per year basis after three year of free warranty		Service Tax extra @ _____ % @ _____ per Mac Book Air per year			

**GROUP D**

S.No.	Description	Qty.	Unit Price Rate	Tax	Total Unit Rate (D+E)	Total Cost
A	B	C	D	E	F	(C X F)
1	IPv6 enabled EPABX as per the given Specification	01				
2	Comprehensive Annual Maintenance Charges per IPv6 enabled EPABX for two years on per year basis after three year of free warranty		Service Tax extra @ _____ % @ _____ per IPv6 enabled EPABX per year			
3	SIP Wifi phone as per given specifications	05				
4	Comprehensive Annual Maintenance Charges per SIP Wifi phone for two years on per year basis after three year of free warranty		Service Tax extra @ _____ % @ _____ per SIP Wi-fi per year			

**GROUP E**

S.No.	Description	Qty.	Unit Price Rate	Tax	Total Unit Rate (D+E)	Total Cost
A	B	C	D	E	F	(C X F)
1	IPv6 enable camera as per given specifications	05				
2	Comprehensive Annual Maintenance Charges per IPv6 enable camera for two years on per year basis after three year of free warranty		Service Tax extra @ _____ % @ _____ per IPv6 enable camera per year			

**GROUP F**

	<b>Description</b>	<b>Qty.</b>	<b>Unit Price Rate</b>	<b>Tax</b>	<b>Total Unit Rate (D+E)</b>	<b>Total Cost</b>
<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>(C XF)</b>
1	Private Cloud Suite Package for 9 numbers of Physical Servers with unlimited rights to deploy any number of Virtual Machines as given in specifications above	01				
2	Unified Communication & Email Server solution (License for 100 users each) given in the specifications <b>above</b>	01				
	<b>One Time Installation /Configuration of above</b>					

**Column B**

<b>Break up of Unit Rate (in Indian Rupees)</b>					
<b>Ex-Factory Price</b>	<b>Sales Tax/ Service Tax, as applicable</b>	<b>Packing and forwarding charges in detail</b>	<b>Freight to Destination at site</b>	<b>WCT/Other charges (if any)</b>	<b>Total free delivery price</b>
A	B	C	D	E	F

1. It is hereby confirmed that we have understood the terms and conditions of the tender and have thoroughly examined specifications and are thoroughly aware of the nature of goods required and our offer is to supply goods strictly in accordance with the requirement and terms and conditions of the tender. We agree to abide by the terms and conditions of the tender if the contract is awarded to us.
2. We hereby offer to supply the goods detailed above or such portion thereof as you specify in the purchase order at the price quoted and agree to hold this offer open for acceptance for a period of 180 days from the date of opening of bid.
3. Bid security for an amount equal to Rs. ....-/- is enclosed in the form of Bank Draft/Pay Order/ Bank Guarantee.

\_\_\_\_\_  
(Signature and seal of Manufacturer/Bidder)

Dated \_\_\_\_\_ 2011

