INDIAN INSTITUTE OF TECHNOLOGY MAORAS

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V.Sathyanarayanan

Ref: ICS/CSIR/015/2017

Senior Manager (Project Purchase)

Dated: 28.07.2017

Open Tender for supply of "Server Virtualization and VMware set up" Tender No: ICS/CSIR/ 015/2017

Due Date: 21.08.2017 at 2:30p.m

Technical bid opening on 21.08.2017 at 3.30p.m.

Dear Sir/Madam,

On behalf of the Indian Institute of Technology Madras, offers are invited for the supply of "Server Virtualization and VMware setup"(ICS/CSIR/015/2017)conforming to the specifications given in (Annexure-I):

Instructions to the Bidder

- i). **Preparation of Bids:-** The tenders should be submitted under two-bid system (i.e., Technical bid and Financial bid).
- Delivery of the tender:- The tender shall be sent to the below-mentioned address either by post or by courier so as to reach the following address before the due date and time specified in the Schedule: Senior Manager, Project Purchase, 2nd floor, IC & SR Building, I.I.T.Madras-600036.
- iii). **Pre-bid meeting :-** Pre-bid meeting will be held on 09th Aug 2017 at 3:00 p.m. IC&SR Conference hall IIT Madras.
- iv). **Opening of the tender:** The offer/Bids will be opened by a committee duly constituted for this purpose. The technical bids will be opened first and it will be examined by a technical committee which will decide the suitability of the bid as per our specifications

and requirements. In respect of opening the financial bid, those bidders who are technically qualified alone will be called for.

v). Prices: - The price should be quoted in nett per unit (after breakup) and must include all packing and delivery *charges* to various Departments/Centres/Institutions. The offer/bid should be exclusive of taxes and duties. The percentage of tax & duties should be clearly indicated separately.

The price should be quoted without custom duty (and excise duty). IIT Madras is exempt from payment of(excise duty), and eligible for concessional custom duty In case of import supply, the price should be quoted on **EX-WORKS** and **CIP** basis indicating the mode of shipment.

- vi). Agency Commission: Agency commission, if any, will be paid to the Indian agents in Rupees on receipt of the equipment and after satisfactory installation. Agency Commission will not be paid in foreign currency under any circumstances. The details should be explicitly shown in Tender even in the case of 'Nil' commission. The tenderer should indicate the percentage of agency commission to be paid to the Indian agent. The foreign Principal should indicate about the percentage of payment and it should be included in the originally quoted basic price, if any.
- vii). (vi) Terms of Delivery: The item should be supplied to our Department(s) as per Purchase Order. In case of import supply, the item should be delivered at the cost of the supplier to our Institution. The Installation/Commissioning should be completed as specified in our important conditions.
- viii). (vii) Technical Bid Opening: The technical bid will be opened on 21/08/2017 at 3.30pm at the Conference Hall, IC & SR Building, IIT Madras and the financial bids of technically qualified tenders will be opened at a later date under intimation to them.

IIT Madras reserves the full right to accept / reject any tender at stage without assigning any reason.

Yours sincerely,

Senior Manager (Project Purchase)

IC अप्रेंसि, IIT Madras. वी. सत्यनारायणन V. SATHYANARAYANAN वरिष्ठ प्रबंक (परियोजना क्रय) SENIOR MANAGER (PROJECT PURCHASE) आईआईटी मद्रास/I.I.T. MADRAS-600036

SCHEDULE

Important Conditions of the tender

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- The due date for the submission of the tender is21/08/2017, 2:30pm. The offers / bids should be submitted in two bids system (i.e.) Technical bid and Financial bid. The Technical bid should consist of all technical details / specifications only. The Financial bid should indicate item-wise price for each item and it should contain all Commercial Terms and Conditions including Taxes, transportation, packing & forwarding, installation, guarantee, payment terms, pricing terms etc. The Technical bid and Financial bid should be put in separate covers and sealed. Both the sealed covers should be put in a bigger cover. The Tender for supply of Server Virtualization and VMware set up "(ICS/ICSR/015/2017)" should be written on the left side of the Outer bigger cover and sealed.
- 2. EMD: -EMD should be at 2% (two percent) of the tender value quoted by the bidder. The EMD should be included in the Financial bid which will not be opened for Technical evaluation. Enclosing the EMD in the Technical bid will automatically disqualify the tenderer. EMD should be in the form of DD in favour of "The Registrar, Indian Institute of Technology Madras" and payable at Chennai. The tender without EMD would be considered as UNRESPONSIVE and REJECTED. Photo/FAX copies of the Demand Draft/Banker's pay orders will not be accepted. No interest will be paid for the EMD and the EMD (Bid Security) will be refunded to the successful bidder on receipt of Performance Security.EMD is exempted for Micro and Small Enterprises (MSEs) as defined in MSE Procurement Policy issued by Department of Micro, Small and Medium Enterprises (MSME) or registered with the Central Purchase Organisation or with IITMadras as on the date of submission of bids.
- 3. Performance Security:-The successful bidder should submit Performance Security for an amount of 5% of the value of the contract/supply within 21 days from the issue of work/purchase order. The Performance Security should be furnished in the form of an Account Payee DD / FD Receipt from the commercial bank (or) Bank Guarantee from any nationalized bank in India.

Performance Security in the form of Bank Guarantee:- Incase the successful bidder wishes to submit Performance Security in the form of Bank Guarantee, the Bank Guarantee should be routed through the Beneficiary Bank to the end user bank. Otherwise, the Indian Agent of the foreign vendor has to submit a Bank Guarantee from a Nationalized Bank of India.

The Bank Guarantee should remain valid for a period of sixty days beyond the date of completion of all contractual obligations of the supplier including the warranty obligations.

4. Indian agent:- If an Indian agent is involved, the following documents must be enclosed: Foreign principal's proforma invoice indicating the commission payable to the Indian Agent and nature of after-sales service to be rendered by the Indian Agent.

Copy of the agency agreement with the foreign principal and the precise relationship between them and their mutual interest in the business.

The enlistment of the Indian agent with Director General of Supplies & Disposals under the Compulsory RegistrationScheme of Ministry of Finance.

5. The offer/bids should be sent only for a machine that is available in the market and supplied to a number of customers. A list of customers in India and abroad with contact details must accompany the quotations. Quotations for a prototype machine will not be accepted.

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- 6. Original catalogue (not any photocopy) of the quoted model duly signed by the principals must accompany the quotation in the Technical bid. No prices should ever be included in the Technical bid, and catalogue.
- 7. Documentary proof for the claimed position and repetition accuracies must be obtained from the principals and submitted along with the relevant pages of the standards.
- 8. Compliance or Confirmation report with reference to the specifications and other terms & conditions should also be obtained from the principal.
- 9. Validity: Validity of Quotation should not be less than 90 days from the due date of tender.
- **10. Delivery Schedule:-** The tenderer should indicate clearly the time required for delivery of the item. In case there is any deviation in the delivery schedule, liquidated damages clause will be enforced or penalty for the delayed supply period will be levied.
- 11. Risk Purchase Clause:- In the event of failure of supply of the item/equipment within the stipulated delivery schedule, the purchaser has all the right to purchase the item/equipment from other sources on the total risk of the supplier under risk purchase clause.
- 12. Payment:- No Advance payment will be made for Indigenous purchase. However 90% Payment against Delivery and 10% after installation are agreed to wherever the installation is involved. In case of import supplies the payment will be made only through 100% Letter of Credit i.e. (90% payment will be released against shipping documents and 10% after successful installation wherever the installation is being done).
- **13.** Advance Payment:-No advance payment is generally admissible. In case of specific percentage of advance payment is required, the Foreign Vendor has to submit a Bank Guarantee equal to the amount of advance payment and it should be routed through the Beneficiary Bank to the end user Bank. Otherwise, the Indian Agent of the foreign vendor has to submit a Bank Guarantee through a Nationalized Bank of India.
- 14. On-site Installation: The equipment or machinery has to be installed or commissioned by the successful bidder within 15 to 20 days from the date of receipt of the item at site of IIT Madras. Installation should be done by the successful bidder at free of cost.
- **15. Warranty/Guarantee:-** The offer should clearly specify the warranty or guarantee period for the machinery/equipment. Any extended warranty offered for the same has to be mentioned separately. (for more details please refer our Technical Specifications). At least one year warranty from the date of installation.
- 16. Late offer:- The offers received after the due date and time will not be considered. The Institute shall not be responsible for the late receipt of Tender on account of Postal, Courier or any other delay.

17. Acceptance and Rejection: - I.I.T. Madras has the right to accept the whole or any part of the Tender or portion of the quantity offered or reject it in full without assigning any reason.

18. Do not quote the optional items or additional items unless otherwise mentioned in the Tender documents / Specifications.

19. Disputes and Jurisdiction: -

Settlement of Disputes: Any dispute, controversy or claim arising out of or in connection with this PO including any question regarding its existence, validity, breach or termination, shall in the first instance be attempted to be resolved amicably by both the Parties. If attempts for such amicable resolution fails or no decision is reached within 30 days whichever is earlier, then such disputes shall be settled by arbitration in accordance with the Arbitration and Conciliation Act, 1996. Unless the Parties agree on a sole arbitrator, within 30 days from the receipt of a written request by one Party from the other Party to so agree, the arbitral panel shall comprise of three arbitrators. In that event, the supplier will nominate one arbitrator and the Project Coordinator of IITM shall nominate one arbitrator. The Dean IC&SR will nominate the Presiding Arbitrator of the arbitral tribunal. The arbitration proceedings shall be shared equally by the Parties. The seat of arbitration shall be at IC&SR IIT Madras, Chennai..

- a) The Applicable Law: This Purchase Order shall be construed, interpreted and governed by the Laws of India, Court at Chennai shall have exclusive jurisdiction subject to the arbitration clause.
- **b)** Any legal disputes arising out of any breach of contract pertaining to this tender shall be settled in the court of competent jurisdiction located within the city of Chennai in Tamil Nadu.
- 20. All Amendments, time extension, clarifications etc., will be uploaded on the website only and will not be published in newspapers. Bidders should regularly visit the above website to keep themselves updated. No extension in the bid due date/ time shall be considered on account of delay in receipt of any document by mail.

Acknowledgement:- It is hereby acknowledged that the tenderer has gone through all the conditions mentioned above and agrees to abide by them.

SIGNATURE OF TENDERER

ALONG WITH SEAL OF THE COMPANY WITH DATE

Specifications for Server Virtualization and VMware set up

1. Introduction

This request for quotations in two-bid process is for a solution to setup hardware and software for Server virtualization and VMware.

The scope of procurement as part of this tender includes the following items.

- Server
- Storage + FC connectivity to servers
- Smart network rack
- Firewall
- Software and Licenses from Microsoft for Server OS, SQL and Visual Studio
- Licenses from VMware

2. Vendor Qualification

The vendor participating in the bidding process and interacting directly with IC&SR IIT Madras, is referred here as "Solution Provider". The hardware components that are being procured as part of this tender are to be from original equipment manufacturers referred here as OEMs. The major software and requisite licenses that are being procured as part of this tender are from Microsoft® and VMWare® to ensure continuity of the email operation and compatibility with existing infrastructure in the institute.

Only those solution providers are qualified to participate in the bidding process who satisfy the following criteria. Documentary support for each of these criteria are to be enclosed along with the technical bid.

- 2.1 The solution provider must be a Solutions partner and Gold certified Microsoft partner. The partnership must be active during the period of the tender process.
- 2.2 The solution provider must have VMWare® Certified Professionals (VCP) as part of its technical team. The capability must be present during the period of the tender process.
- 2.3 The solution provider must be authorized for supply, installation and support of the hardware items from the OEM partner.
- 2.4 The solution provider must have implemented commissioning of the specific hardware items from the OEM partners at least 2 times earlier.
- 2.5 The solution provider must have a technical team for Microsoft practice and Virtualization practice. Size and certification level of such teams on their pay roll as on the date of tender shall be disclosed.
- 2.6 The solution provider must have business representation office in Chennai to help with the call coordination.
- 2.7 Each OEM is required not to nominate more than one solution provider for this tender.

3. Server

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The server procured as part of this tender are, 2 in number

- 3.1 Model: Make and model of the server being proposed to be mentioned. Relevant brochures and manuals of the models must be enclosed along.
- 3.2 Processor: Intel Xeon E5 series, preferably E5-2620, V4, 2.1 GHz, 20MB L3 Cache, 9.6GT/s QPI, Power 85 W, 2133 DDR4 Hz
- 3.3 Number of Cores: 8 per processor
- 3.4 CPU Frequency: 2.1 GHz
- 3.5 L3 Cache: 20 MB
- 3.6 Number of CPUs installed : At least 2, both identical processors
- 3.7 Chipset: Intel C610 Series
- 3.8 Number of DIMM Slots: At least 16 slots or more
- 3.9 Memory: 128 GM populated with RDIMM of 2400 MHz using DDR4 modules
- 3.10 Raid Controller: Support RAID levels 0, 1, 5 and 10
- 3.11 HDD: Support 8 hot plug drives of small form factor (2.5"). Populated with 2 discs configured in RAID 1 and at least 1 hot spare. Each disc shall be of SAS type, 15K RPM, 500 GB.
- 3.12 I/O expansion slots: System shall have at least 3 PCI Express 3 slots.
- 3.13 Network: System shall have at least two LAN ports of 1G/s capability.
- 3.14 HBA Cards: System shall have 1 cards of dual port for FC connectivity at 8 GB/s
- 3.15 USB Ports: System shall have support at least 3 USB ports.
- 3.16 Video: System shall have a video controller with at least 16MB memory.
- 3.17 Redundancy: There must be redundant power supply and fans. System shall not have a single point of failure
- 3.18 Form Factor: System shall have preferable a form factor of 2U
- 3.19 OS Certification: System shall be certified for Windows Server, RHEL and VMware ESXi latest editions.
- 3.20 Benchmark: The proposed server must have a published SPEC benchmark. Energy efficiency star rating compliance chart to be enclosed along.
- 3.21 Accessories: System driver media, documentation, cables, rack mounting kit, cable management arm and all required accessories to provide connectivity within the proposed solution must be included.
- 3.22 Warranty and Support on these servers is described in a separate section below

4. Storage

The storage procured as part of this tender are, 1 in number

4.1 Storage Architecture: The storage shall have no single point of failure. There shall be a minimum of 4 FC ports per controller.

- 4.2 Storage Controller: The array shall be at least dual controller, active-active for better performance, redundancy and fail -over capability.
- 4.3 Disk drive support: The system shall support hot pluggable enterprise class SFF SAS drives of different capacitysuch as 1TB / 2TB / 3TB
- 4.4 Storage Capacity: The total required capacity would be 14TB in split-up of 2TB 12G SAS 7.2K 3.5in HDD. Storage configuration shall have capability to attach disc expansion enclosures for capacity enhancement in future.
- 4.5 Raid levels: The system shall support RAID levels 0, 1, 5, and 10
- 4.6 Interface: The storage shall have at least 4 ports of 16 Gb/ 8 Gb fiber channel per controller. At least two 8Gb SW FC SFP fiber channel should include to connect server with 5 meter Multi-mode LC/LC Fiber cables of 8nos for fiber connectivity between storage to server.
- 4.7 OS compatibility: The storage system shall be certified for compatibility with latest operation system from Microsoft and VMware latest editions.
- 4.8 Redundancy: The system shall have dual power supply and fans to avoid single point of failure.
- 4.9 Form Factor: The system shall be mountable with same rack as the servers described in the earlier section.

5. Smart network rack

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The smart network rack procured as part of this tender are, 1 in number

- 5.1 The Smart network rack shall be an OEM one.
- 5.2 The network rack size should be 42U HD which should capable of mounting the server, storage and other hardware's and accessories as described in the earlier section. The preferable brand would be Emerson.
- 5.3 If preferable brand is not available, then alternative brand should match than the preferable specification.
- 5.4 The smart network rack should have an inbuilt UPS system as mentioned; the capacity would be at least 3KVA with 10 to 15 min battery backup.
- 5.5 The smart network rack should have an inbuilt cooling system as mentioned; the cooling capacity would be at least 1500 watts.
- 5.6 Accessories like power distributional panel, Cable manager, Keyboard tray and Blanking panels must be included.

6. Firewall

The Firewall procured as part of this tender are, 1 in number

- 6.1 The Firewall solution offered must be rated as "Leaders/Challengers" in the latest Magic Quadrant for Firewall published by Gartner.
- 6.2 The Firewall shall be an OEM one which should support at least 200 concurrentusers.
- 6.3 The preferable brand and model would be Fortinet Fortigate 200D
- 6.4 If preferable brand is not available, then alternative brand and model should match the preferable specification.

7. Software and Microsoft Licenses

The solution provider is expected to offer academic discounted pricing for all requisite licenses. Software, licenses and CALs from Microsoft shall be listed in detail as given below.

- 7.1 Microsoft Server Standard Core 2016 OS in a virtualized environment can be for two servers and CALs for 20 numbers.
- 7.2 Microsoft SQL standard 2016 can be for 1 number and CALs for 5 numbers.
- 7.3 Microsoft Visual studio 2017 can be for 1 number.
- 7.4 VMware VSphere 6 Essential Plus Kit can be for 1 number. The VMware kit includes ESXi for 3 hosts with all features pertain to Essential Plus Kit.

8. Implementation

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- 8.1 The installation and commission of the solution is deemed to be complete only when all hardware and software installed and migration are addressed.
- 8.2 The installations include migration of existing servers to virtual machines with storage and memory allocation as per IC&SR requirements.
- 8.3 The installations include AD/user migration and SQL migration from older versionto latest Windows version.
- 8.4 The installations include hosting of In-house software and web based application from existing servers to virtual machines.
- 8.5 The installations include configuration of Firewall with all required policies and network setups to ensure proper security are enforced.
- 8.6 The virtual machines which are considered as high availability should be configured in a load balancing mode.
- 8.7 The solution provider should quote for implementation charges as a solution package as per the warranty mentioned for hardware.
- 8.8 The system should be ready with connectivity to users from within and outside campus.
- 8.9 A detailed installation report with screenshots, a demonstration of the installed system, knowledge transfer for administrative tasks to nominated technical staff from IC&SR IIT Madras and handover of administrative privileges is necessary before sign-off of the project.
- 8.10 The solution provider shall ensure that there is no single point of failure for the whole solution. All accessories of hardware and software necessary to ensure this shall be included in the solution.

9. Warranty and Support

- 9.1 All hardware and software items must have a comprehensive warranty and support for 3 years.
- 9.2 The solution provider is responsible for 3 years solution support and in case of any emergency the solution provider should provide engineers on site.
- 9.3 AMC options for a period beyond warranty to be made available for hardware and service.
- 9.4 Call coordination shall be done by the solution provider. Contact details of the person to be contacted by IC&SR IIT Madras in case of any support requirement to be made

available. Each time any contact detail of the person of the call coordination from the solution provider side changes, the same should be intimated to IC&SR IIT Madras immediately.

9.5 Escalation mechanism for calls should be clarified by the solution provider as part of technical bid.

Terms and Conditions

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- 1. The system should be delivered within 4 to 6 weeks from the opening of the letter of credit or issue of purchase order, whichever is later.
- 2. The cost should include 3 years warranty of the overall solution including service and support with calibration and CIP up to Chennai.
- 3. Prices quoted should be valid for at least three months.
- 4. Individual costs should be indicated for the different items (parts) quoted. IC&SR IIT Madras reserves the right to exclude some items from the purchase.
- 5. Costs and related information should be given only in the financial bid.
- 6. At least two days of training at IC&SR IIT Madras should be provided with no additional cost. Installation and training shall be done by the suppliers' engineer(s).
- 7. Complete document with system manual should be provided.
- 8. The list of at least three users of similar installations in India including contact details (name of the person in-charge, email and phone number) is to be provided.
- 9. There must be a local service agent in India.
- 10. The payment conditions consist of 90% LC at sight and 10% after installation and satisfactory training or within 60 days of delivery whichever is earlier.
- 11. The supplier/vendor must be an original equipment manufacturer.