

	<p style="text-align: center;"><b>INDIAN INSTITUTE OF TECHNOLOGY MADRAS</b> <b>Chennai 600 036</b></p> <p style="text-align: center;">Telephone: (044) 2257 E-mail: pre@iitm.ac.in/ tlc@smail.iitm.ac.in</p>	
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Prof. Edamana Prasad  
Project Coordinator

Ref: TLC/EDM/2019/006  
Dated: 24.09.2019

Limited Tender No: TLC/EDM/2019/006

**Due Date: 14.10.2019, 2:00pm**

**Technical Bid opening meeting on Due Date: 14.10.2019, 3:00pm**

Dear Sir/Madam,

On behalf of the Indian Institute of Technology Madras, Quotations are invited as sealed bids from Original Equipment Manufacturers (OEM) or authorized Dealers of OEMs with Service support in Chennai for supply of “**HD Video conference system**” (**Annexure I**). Authorized dealers should attach an authorization certificate from the OEM they represent for being considered.

**Pre-qualifying Condition:**

The pre-qualifying condition is that the vendor should have previous experience of having sold and installed at least **three similar units** of the **same make** or their higher versions of the same make to Premier Educational Institutions / MNCs / Governmental bodies / reputed broadcasting companies within the last three financial years.

**Instructions to the Bidder**

- I. **Preparation of Bids:** - The Limited tenders should be submitted under two-bid system (i.e.) Technical bid and Financial bid.
- II. **Delivery of the tender:** - The tender shall be sent to the below-mentioned addresses either by post or by courier so as to reach the following address before the due date and time specified in our Schedule:

**The Coordinator,  
Teaching and Learning Centre  
4th Floor, Central Library  
Indian Institute of Technology Madras,  
Chennai - 600 036**

- III. **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. The bidders will be invited for opening of Technical bids. In respect of opening of financial bid, those bidders who are technically qualified only will be called for.
- IV. **Prices:** - The price should be quoted in net per unit (after breakup) and must include all packing and delivery charges to **Teaching Learning Centre, IIT Madras.**
- The offer/bid should be exclusive of taxes and duties, which will be paid by the purchaser as applicable. However the percentage of tax & duties should be clearly indicated. The price should be quoted without custom duty and excise duty, since I.I.T. Madras is exempt from payment of excise duty, and the custom duty will be paid at concessional rate against duty exemption certificate. In case of import supply, the price should be quoted on EX-WORKS and CIP basis indicating the mode of shipment.
- V. **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 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.
- VI. **Terms of Delivery:** - The item/service should be supplied to our Departments 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.
- VII. **Technical Bid Opening:** The technical bid will be opened on **14.10.2019; 3:00pm** at the Teaching Learning Centre, IIT Madras and the financial bids of those tenders who are technically qualified will be opened at a later date under intimation to them.
- VIII. IIT Madras reserves the full right to accept / reject any tender at stage without assigning any reason.

Yours sincerely,

**Prof. Edamana Prasad,  
Teaching Learning Centre,  
IIT Madras  
Chennai - 600 036.**

## SCHEDULE

### Important Conditions of the tender

1. The due date for the submission of the tender is **14.10.2019, 2:00pm**.  
The offers / bids should be submitted in two bids systems (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 Limited Tender for supply of "**HD Video conference system**" should be written on the left side of the Outer bigger cover and sealed.
2. **All technical details including specifications of the make and model with datasheet of the product that you are proposed to supply, prequalification conditions indicated above must be clearly given in the technical bid.**
3. Type of warranty without indication of commercial terms should also be mentioned in the technical bid.
4. The commercial bid should contain all commercial terms including, delivery of equipment at CCE office, IIT Madras. Installation and those related to warranty and other costs.
5. The bidders should comply with all specifications. A separate compliance sheet indicating whether each specification mentioned in Table 1 is met. This is to be indicated point by point for all the specifications mentioned in Table 1. A table to this effect should be enclosed duly attested by the bidder in the **Technical Bid**.
- 6.
7. **Validity:** Validity of Quotation not less than 60 days from the due date of tender.
8. **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.
9. **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.
10. **Payment:** -  
  
No Advance payment will be made for Indigenous purchase. However, 50% Payment against Delivery and remaining 50% payment after successful installation and commissioning are agreed to wherever the installation is involved. In case of import of 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).

11. **On-site Installation:** - The equipment has to be installed or commissioned by the successful bidder within 20 days from the date of receipt of the item at site of IIT Madras.

12. **Vendor Details:**

Vendors should provide their full contact details including: Name of the Contact Person, Postal address, Tel. No., Mobile No., Email and FAX Nos., in both the bids. **In addition these contact details also should be indicated on the outer surface of the main envelope that contains the Technical and Financial Bids.**

13. **Warranty/Guarantee:** - The Supplier should confirm that the Products supplied under the tender are new, unused, of the most recent or current models and that they incorporate all recent improvements in design and materials unless provided otherwise in the Tender.

**Warranty for the supplied product should remain valid for a minimum period of 36 months after installation. In case of failure in functionality of the supplied equipment the warranty should ensure that alternate equipment is made available by the supplier at no cost within one working day of notification if the existing supplied equipment requires warehouse service.**

**In addition upon receipt of registering a complaint, the Supplier should with all reasonable speed, repair or replace the defective Product or parts thereof, without any additional costs within 7days of notification.**

14. **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.

15. **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.

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

17. **Disputes and Jurisdiction:** -

a. **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 carried out in English language. The

cost of arbitration and fees of the arbitrator(s) shall be shared equally by the Parties. The seat of arbitration shall be at IC&SR IIT Madras, Chennai..

- b. **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.
- c. 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.

18. 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**

<b>TABLE – 1</b>
<b>PACKAGE</b>
<ul style="list-style-type: none"> <li>• Full HD 1080p60 camera, microphone, codec, cables, and remote control with all necessary hardware and software, one additional microphone with cable.</li> </ul>
<b>VIDEO STANDARDS AND RESOLUTIONS</b>
<ul style="list-style-type: none"> <li>• It should support H.323, SIP standards for communications.</li> <li>• It should support H.261, H.263, H.264 AVC/SVC, H.264 High Profile</li> <li>• It should support 1080p 60 fps, 1080p 30 fps, 720p 60 fps and 720p 30fps</li> </ul>
<b>CONTENT STANDARDS AND RESOLUTIONS</b>
<ul style="list-style-type: none"> <li>• It should support content sharing using standard based H.239 and BFCP over SIP. It should also support audio from PC used for content sharing.</li> <li>• It should transmit both people and content simultaneously to the far end location at 1080p 30fps</li> </ul>
<b>AUDIO STANDARDS AND FEATURES</b>
<ul style="list-style-type: none"> <li>• It should support G.711, G.728, G.729A, G.722, G.722.1, AAC-LD or better</li> <li>• It should support 20 kHz or better bandwidth with crystal clear audio and stereo sound.</li> <li>• Automatic Gain Control and Automatic Noise Suppression</li> <li>• Keyboard noise reduction and instant adaptation echo cancellation</li> </ul>
<b>VIDEO AND AUDIO INPUTS</b>
<ul style="list-style-type: none"> <li>• 1 x HD input for connecting main HD camera</li> <li>• 1 x HD input for connecting secondary HD camera</li> <li>• 1 x HDMI /DVI input for connecting PC/Laptop to share HD content</li> <li>• 2 x Microphone Input(Support for minimum 4 mics)</li> <li>• 2 x RCA line-in</li> </ul>
<b>VIDEO AND AUDIO OUTPUTS</b>
<ul style="list-style-type: none"> <li>• 2 x HDMI output for connecting main monitor &amp; second monitor.</li> <li>• 1 x HDMI output for recording with both (local and far end participants) audios.</li> <li>• 1 x RCA pair stereo line-out</li> </ul>
<b>INTERFACES</b>
<ul style="list-style-type: none"> <li>• 2 x 10/100/1000 LAN port</li> <li>• 2 x USB for software upgrade and connecting external devices</li> <li>• 1 x RS-232 mini-DIN 8-pin or equivalent</li> </ul>
<b>CAMERA</b>
<ul style="list-style-type: none"> <li>• It should support 1080p60fps with 12x optical zoom.</li> <li>• It should support PAN Range of +/-100°, and Tilt of +/-20°</li> <li>• ½.33”CMOS, focal length 3.76-37.6mm, Auto focus, Auto Iris, minimum 50 lux, with IR Detectors, Signal to noise ratio 50db,</li> </ul>
<b>NETWORK FEATURES</b>
<ul style="list-style-type: none"> <li>• H.323 and SIP bandwidth up to 6 Mbps</li> <li>• IPv4 and IPv6 support from day one</li> <li>• Auto Gatekeeper Discovery</li> <li>• IP Precedence,</li> <li>• Differentiated Service (QoS).</li> <li>• H.323 based Packet Lost Recovery</li> <li>• DHCP</li> </ul>

<b>SECURITY</b>
<ul style="list-style-type: none"> <li>• Media Encryption (H.323, SIP): AES-128, AES-256</li> <li>• Authenticated access to admin menus, web interface and telnet API</li> <li>• Local account password policy configuration</li> </ul>
<b>OTHER STANDARDS</b>
<ul style="list-style-type: none"> <li>• It should also support H224/H.281, H.323, H.225, H.245, H.241, H.239, H.243, H.460</li> </ul>
<b>SOFTWARE OPTION</b>
<ul style="list-style-type: none"> <li>• It should support Skype for Business and Lync Integration</li> <li>• It Should be provided 1080p license, providing up to 1080p60 for people and content</li> </ul>
<b>ESSENTIAL FEATURES</b>
<ul style="list-style-type: none"> <li>• All cameras should function zoom and similar web based conference software.</li> <li>• There should be instant and easy swapping between Primary Camera to secondary Camera and vice versa with feature on remote to select cameras.</li> <li>• Video conferring machine should be content sharing and multi view.</li> </ul>

**Note:**

The above mentioned conference system will be used as a stand-alone system to connect one on one or connect an MCU for connecting multiple location using same or different make and models which web based conference solutions.

The system can initially be provided with what is asked for but should be able to function as an MCU to connect at least four locations in full HD (4 + 1).

Rate for AMC from the last day of warranty to be quoted separately.

If VC system has to be taken out for service with warranty period a stand-by system has to be provided