National Centre for Geodesy



INDIAN INSTITUTE OF TECHNOLOGY KANPUR

TENDER REFERENCE NO.: IITK/NCG/2019-20/18

BID SUBMISSION END DATE- 18.02.2020

TENDER DOCUMENTS

FOR

"Procurement and Installation of Video Conferencing System"

BID DOCUMENT

Online bids (Technical & Financial) from eligible bidders which are valid for a period of 90 days from the date of Technical Bid opening (i.e.) are invited for and on behalf of the Assistant Registrar, IIT, Kanpur for "Procurement and Installation of Video Conferencing System".

Name of Work	"Procurement and Installation of Video Conferencing System"
Date of Publishing	29.01.2020 (17:00 hrs)
Bid Submission Start Date	29.01.2020 (17:00 hrs)
Last Date and time of uploading of Bids	18.02.2020 (16:00 hrs)
Last Date and time of submitting EMD and other documents at IIT Kanpur (if any)	18.02.2020 (12.00 hrs)
Pre-Bid Meeting	NA
Date and time of opening of Technical Bids	20.02.2020 (16:00 hrs)
Date and time of opening of Financial Bids	Will be separately notified for Technically shortlisted/qualified bidders

Interested parties may view and download the tender document containing the detailed terms & conditions from the website http://eprocure.gov.in/eprocure/app

(The bids have to be submitted online in electronic form on www.eprocure.gov.in only. No physical bids will be accepted.)

INSTRUCTIONS FOR ONLINE BID SUBMISSION

The bidders are required to submit soft copies of their bids electronically on the Central Public Procurement (CPP) Portal http://eprocure.gov.in/eprocure/app, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

REGISTRATION:

- (i) Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (<u>URL:https://eprocure.gov.in/eprocure/app</u>) by clicking on the link "Online Bidder Enrolment" option available on the home page. **Enrolment on the CPP Portal is free of charge.**
- (ii) During enrolment/ registration, the bidders should provide the correct/true information including valid email-id & mobile no. All the correspondence shall be made directly with the contractors/ bidders through email-id provided.
- (iii) As part of the enrolment process, the bidders will be required to choose a unique user name and assign a password for their accounts.
- (iv) For e-tendering possession of valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) is mandatory which can be obtained from SIFY /nCode/eMudra or any Certifying Authority recognized by CCA India on eToken/ SmartCard.
- (v) Upon enrolment on CPP Portal for e-tendering, the bidders shall register their valid Digital Signature Certificate with their profile.
- (vi) Only one valid DSC should be registered by a bidder. Bidders are responsible to ensure that they do not lend their DSCs to others which may lead to misuse and should ensure safety of the same.
- (vii) Bidders can than log into the site through the secured login by entering their user ID/ password and the password of the DSC/eToken.

SEARCHING FOR TENDER DOCUMENTS:

- (i) There are various search options built in the CPP Portal to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, organization name, location, date, value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as organization name, form of contract, location, date, other keywords, etc., to search for a tender published on the CPP Portal.
- (ii) Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
- (iii) The bidder should make a note of the unique Tender ID assigned to each tender; in case they want to obtain any clarification / help from the Helpdesk.

PREPARATION OF BIDS:

- (i) For preparation of bid, Bidders shall search the tender from published tender list available on site and download the complete tender document and should take into account corrigendum if any published before submitting their bids.
- (ii) After selecting the tender document same shall be moved to the 'My favourite' folder of bidders account from where bidder can view all the details of the tender document.
- (iii) Bidder shall go through the tender document carefully to understand the documents required to

- be submitted as part of the bid. Bidders shall note the number of covers in which the bid documents have to be submitted, the number of documents including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
- (iv) Any pre-bid clarifications if required, then same may be obtained online through the tender site, or through the contact details given in the tender document.
- (v) Bidders should get ready in advance the bid documents in the required format (PDF/xls/rar/dwf/jpg formats) to be submitted as indicated in the tender document/schedule. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
- (vi) Bidders can update well in advance, the documents such as experience certificates, annual report, PAN, EPF & other details etc., under "My Space/ Other Important Document" option, which can be submitted as per tender requirements. This will facilitate the bid submission process faster by reducing upload time of bids.

SUBMISSION OF BIDS:

- (i) Bidder should log into the site well in advance for bid submission so that he/ she upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay.
- (ii) Bidder should prepare the EMD if any as per the instructions specified in the NIT/ tender document. The details of the DD/BC/BG/ others physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected.
- (iii) While submitting the bids online, the bidder shall read the terms & conditions (of CPP portal) and accepts the same in order to proceed further to submit their bid.
- (iv) Bidders shall select the payment option as offline to pay the EMD if applicable and enter details of the DD/BC/BG/others.
- (v) Bidder shall digitally sign and upload the required bid documents one by one as indicated in the tender document.
- (vi) Bidders shall note that the very act of using DSC for downloading the tender document and uploading their offers is deemed to be a confirmation that they have read all sections and pages of the tender document without any exception and have understood the complete tender document and are clear about the requirements of the tender document.
- (vii) Bid documents may be scanned with 100 dpi with black and white option, which helps in reducing size of the scanned document. For the file size of less than 1 MB, the transaction uploading time will be very fast.
- (viii) If price quotes are required in XLS format, utmost care shall be taken for uploading Schedule of quantities & Prices and any change/ modification of the price schedule shall render it unfit for bidding.
- (ix) Bidders shall download the Schedule of Quantities & Prices i.e. Schedule-A, in XLS format and save it without changing the name of the file. Bidder shall quote their rate in figures in the appropriate cells. Thereafter, save and upload the file in financial bid cover (Price bid) only.
- (x) If the template of Schedule of Quantities & Prices file is found to be modified/corrupted in the eventuality by the bidder, the bid will be rejected and further dealt as per provision of clause no 23.0 of ITB including forfeiture of EMD if submitted.
- (xi) The bidders are cautioned that uploading of financial bid elsewhere i.e. other than in cover 2 will result in rejection of the tender.
- (xii) Bidders shall submit their bids through online e-tendering system to the Tender Inviting Authority (TIA) well before the bid submission end date & time (as per Server System Clock). The TIA will not be held responsible for any sort of delay or the difficulties faced during the submission of bids online by the bidders at the eleventh hour.
- (xiii) After the bid submission (i.e. after Clicking "Freeze Bid Submission" in the portal), the bidders shall take print out of system generated acknowledgement number and keep it as a record of evidence for

- online submission of bid, which will also act as an entry pass to participate in the bid opening.
- (xiv) Bidders should follow the server time being displayed on bidder's dashboard at the top of the tender site, which shall be considered valid for all actions of requesting, bid submission, bid opening etc., in the e-tender system.
- (xv) All the documents being submitted by the bidders would be encrypted using PKI (Public Key Infrastructure) encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128-bit encryption technology.
- (xvi) Bidder will be provided all the benefits under rule 153 GFR-2017.

ASSISTANCE TO BIDDERS:

Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contract person indicated in the tender. The contact details for the helpdesk are: Phone:0512-259-7722, Email: ncg@iitk.ac.in.

Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24X7 CPP Portal Helpdesk. The 24 x 7 Help Desk Number 0120-4200462, 0120-4001002 and 0120-4001005. The helpdesk email id is support-eproc@nic.in

INSTRUCTION FOR e-PROCUREMENT

PREPARATION AND SUBMISSION OF BIDS:

- (i) The detailed tender documents may be downloaded from http://eprocure.gov.in/eprocure/app till the last date of submission of tender. The tender may be submitted online through CPP Portal http://eprocure.gov.in/eprocure/app
- (ii) The bidder should submit the bid online in two parts viz. Technical Bid and Financial Bid. Technical Bid should be uploaded online in cover-1 and Financial Bid in ".xls" should be upload online in cover-2

SUBMISSION OF THE BID:

All interested eligible bidders are requested to submit their bids online on CPP Portal: http://eprocure.gov.in/eprocure/app as per the criteria given in this document:

- a. Technical Bid should be uploaded online in cover-1.
- b. Financial Bid should be uploaded online in cover-2.

Both Technical and Financial Bid covers should be placed online on the CPP Portal (http://eprocure.gov.in/eprocure/app).

TECHNICAL BID:

Signed and scanned copies of the Technical Bid documents as under must be submitted online on CPP Portal: http://eprocure.gov.in/eprocure/app

List of Documents to be scanned and uploaded (Under Cover-1) within the period of bid submission:

- (i) Scanned copy of Bank details. (Bank details of principal supplier in case of Import shipments)
- (ii) Scanned copy of work experience. All Startups (whether MSE's or otherwise), falling within the time, are exempted from meeting the qualification criteria in respect of prior experience, prior turnover subject to their meeting the quality and technical specifications. However, all other eligibility criteria shall be applicable.
- (iii) Scanned copy of certificate of GST. (GSTIN of Indian Agent in case of Import Shipments)
- (iv) Scanned copy of tender acceptance letter and all other documents as per cover-1.
- (v) Scanned copy of specifications or brochures (if any).
- (vi) Scanned copy of other documents mentioned in tender document (if any)
- (vii) Scanned copies of (a) Tender compliance sheet and (b) authorization letter from OEM.

Please note that no indication of the rates/amounts be made in any of the documents submitted with the TC-BID.

FINANCIAL BID:

- (i) The currency of all quoted rates shall be in multi-currency.
- (ii) In preparing the financial bids, bidders are expected to take into account the requirements and conditions laid down in this Tender document. The financial bids should be uploaded online as per the

- specified ".xls" format i.e. Price Bid Excel sheet attached as '.xls' with the tender and based on the scope of work, service conditions and other terms of the Tender document. It should include all costs associated with the Terms of Reference/Scope of Work of the assignment.
- (iii) The Financial Proposal should be inclusive of all applicable taxes, duties, fees, levies, and other charges imposed under the applicable laws. The rates quoted in the Tender are inclusive of all applicable taxes, duties.

LAST DATE FOR SUBMISSION OF TENDER:

- (i) Online bids complete in all respects, must be submitted on or before the last date and time specified in the schedule of events.
- (ii) The IIT, Kanpur may, at its own discretion, alter/extend the last date for submission of tenders.

BID VALIDITY:

- (i) All the Bids must be valid for a period of 90 days from the last date of submission of the tender for execution of Contract. However, the quoted rates should be valid for the initial/ extended period of the Contract from the effective date of the Contract. No request will be considered for price revision during the original Contract period.
- (ii) A bid valid for a shorter period shall be declared as non-responsive.
- (iii) In exceptional circumstances, prior to expiry of the original time limit, the IIT may request the bidders to extend the period of validity for a specified additional period beyond the original validity of 90 days. The request and the bidders' responses shall be made in writing. The bidders, not agreeing for such extensions will be allowed to withdraw their bids without forfeiture of their Bid Security.

MODIFICATION / SUBSTITUTION / WITHDRAWAL OF BIDS:

- (i) No Bid shall be modified, substituted or withdrawn by the Bidder after the Bid's due Date.
- (ii) Any alteration/ modification in the Bid or additional information supplied subsequent to the Bid's due date, unless the same has been expressly sought for by the Authority, shall be disregarded.

REJECTION OF THE BID:

The bid submitted shall become invalid and tender fee shall not be refunded if:

- (i) The bidder is found ineligible.
- (ii) The bidder does not upload all the documents as stipulated in the bid document.

Tender Document

National Centre in Geodesy

Indian Institute of Technology Kanpur

Kanpur (UP) 208016 India

Enquiry date: January 29th, 2020

Enquiry No: IITK/NCG/2019-20/18

Contact:

Prof. Onkar Dikshit

Department of Civil Engineering Indian Institute of Technology Kanpur Kanpur 208016 (UP), India

Online quotations are invited for ""Procurement and Installation of Video Conferencing System"

Terms and Conditions:

- All equipment must be compatible with Indian electrical standards and codes. Engineering documentation on the physical sizes and weights of all major and minor components must be submitted.
- Warranty & Support: Three years comprehensive on-site for both hardware and SW from OEM directly.
- 3. Quotations must be valid for 90 Days.
- 4. IIT Kanpur is fully exempted from payment of GST on Imported Goods against our DSIR certificate.
- 5. IIT Kanpur is partially exempted from payment of Customs Duty (We will provide Custom Duty Exemption Certificate, CD applicable is 5.5%)
- 6. Tender Specific Manufacturer Authorization Form from OEM is required.
- 7. The Institute reserves the right of accepting or rejecting any quotations without assigning any reason thereof.
- 8. All prices should be both FOB and CIP basis. IIT Kanpur has its own freight forwarder i.e., Balmer Lawrie & Co. Ltd.
- 9. IIT Kanpur is authorized to procure the equipment by opening the LC. Hence, procurement through opening of LC will be the preferred choice. All relevant documents to this effect will be provided by IIT Kanpur. However, one can also quote in Indian rupees as well. Therefore, it is desirable that the quotation is provided for procurement by both these arrangements.
- 10. Supply, installation and integration must be done by the OEM or authorized suppliers of the OEM.

- 11. Full details of the *standard* configuration of equipment along with *accessories* and *technical literature* should be provided. The standard configuration must be accompanied by associated brochure giving the complete and clear configuration of the system offered (e.g. part no., preferably photograph of the part, number of units, accessories: wires, connectors, etc.).
- 12. The vendor must provide a compliance document which should clearly specify how each technical requirement is satisfied by the system suggested by the vendor.
- 13. Various optional features with the equipment (along with their cost) should be specified.
- 14. The vendor is liable to update all the necessary software's and firmware's without any additional charges under warranty period.
- 15. Custom clearance/License/NOC from any Government agency required for Wireless, Bluetooth communication, if any, will be the responsibility of the vendor. However, necessary papers will be provided by IIT Kanpur, if required.
- 16. The vendor must bid for the latest equipment with a certificate from the manufacture that the equipment is still under production and not outdated.
- 17. The short-listed vendor(s) may be asked to demonstrate the functionality of quoted equipment and associated software at IIT-Kanpur. IIT Kanpur will provide a prior date for the same before the opening of the Financial bid.
- 18. The delivery of the equipment must be made within eight weeks after establishment of LC.
- 19. The service must be provided in-house within 24 hours of the complaint.
- 20. Please clearly mention the arrangements and cost of the following:
 - i) Warranty period of three years for equipment/ hardware from the OEM.
 - ii) Software maintenance period of three years.
 - iii) **Details of after-sales service (a) to be provided** which should include details of in-house facilities for the same, turn-around time with acceptable solution, availability of spare parts and their warranty and stand-by system.
- 21. The vendor should provide all operation, service and maintenance manuals (in English).
- 22. Hard copies of detailed manuals/brochures/demand drafts of tender processing fee and EMD should reach to the office of "Assistant registrar" (Store and Purchase) on or before technical bid opening date i.e. 20.02.2020 by 12 noon.
- 23. Bidder should bid for complete set of equipment and SW. Partial bidding shall be summarily rejected.

CRITERIA FOR QUALIFICATION

- a) The applicant should be an organization engaged in the related field of work. A minimum of **5 years** of experience is mandatory.
- b) The applicant must be a profit-making organisation continuously for last three years ending March 2019.
- c) The applicant must have an average annual turnover of Rs 10 Lakh in the previous 3 years ending March 2019.
- d) The applicant who is barred or blacklisted by any Central/State Government in India or abroad will not be eligible for qualification.
- e) The details of technical qualification are provided under level of work done and turnover (See Annexure 6 for more details).
- f) Even though an applicant may satisfy the above requirements, he/she would be liable to disqualification if he/she has:
 - i) Made misleading or false representation or deliberately suppressed the information in the forms, statements and enclosures required in the prequalification document.
 - ii) Record of poor performance such as abandoning work, not properly completing the contract, or financial failures / weaknesses etc.
- g) Persons who are individually or institutionally, in any manner, involved with the selection/ screening process of the tender and employees of IIT Kanpur, are ineligible for applying.
- h) Technical evaluation consists of fulfilment of pre-requisite qualifications and technical details of equipment and successful demonstration of equipment and SW. The technical bid shall be examined by the expert group of the Institute. The bidders shall be invited to make presentations before the expert group. Based on the presentations, the agencies shall be shortlisted for opening the financial bid. Technical bids without EMD and tender fee will be summarily rejected.

The institute reserves the right to shortlisting of the agencies, subject to thorough verification of their credential and inspection of similar nature works carried out/in progress by them, through a Technical Committee of experts to be constituted by IIT Kanpur.

Procurement of Video Conferencing System

The detailed specification of the Video Conferencing is described below:

S No	Brief Description of item(s)	Unit/Quantity
1	VC Endpoint for Conference Room: Unit comprising of full HD 1080p codec, dual or more automatic voice tracking full HD 1080p cameras with 5x zoom, touch panel, 3 Microphones, wi-fi compatible, wireless and wired presentation sharing, 1+3 inbuilt multisite license. The system should be supplied with cloud-based web conferencing license.	1 Nos
2	VC Endpoint for Faculty: Integrated unit comprising of 23" touch screen, integrated full HD 1080p camera with privacy shutter, inbuilt speakers and microphone, $2 \times 10/100/1000$ Mbps Ethernet port, Wi-Fi compatible, wireless and wired presentation sharing. The system should be supplied with cloud-based web conferencing license	1 Nos
2	Display: 65" Monitor Screen for Display 1,920 x 1,080 (FHD), input HDMI (2), DVI-D, RGB, 16:09, Contrast Ratio (Typical) as per specification.	02 Nos

A.Technical Bid shall contain: All documents shall have duly stamped & signed by authorized signatory

1. Technical proposal with all the supporting documents as desired such as product datasheets etc.

The specification contains minimum hardware requirement. However, the bidder shall provide hardware with configuration equal or above to meet the technical, functional & performance requirement. Bidder shall provide any hardware /software that are required to meet functional, performance & availability requirement& the same shall be mentioned in the BOQ at the time of bid.

(1) Technical specification of Video Conferencing System

Features	Specifications
Video	
Video Standards	Latest video standards H.264/H.265
Video Frame Rate	Should support 60 fps with 1080p resolution.
Video Features	Ability to send and receive two live simultaneous video sources in a single call, so that the image from the main camera and PC or document camera can be seen simultaneously.
	Should support H.239 and BFCP protocols
	The system must have the ability to pair mobile devices such as Tablest and Smartphones based on iOS or Android platforms so that these devices can be used for: 1) View the Presentation that is being shown in the VC call. 2) Add and disconnect call.
	3) Take snapshot of the presentation being shown
	The system must have the ability to pair with laptop for sending content without any wires to the VC system.
	In case the above feature is not available natively, then additional components can be provided to achieve this.
Video Input	Should have at least 1 x HDMI inputs to connect Full HD cameras.
	Must have 2 HDMI inputs to connect two laptops/PC for presentations
	All inputs should support 1080p60
	Should support the ability to view and share presentations at a resolution of 3840×2160 (4K)
	The system must have the ability to pair with laptop for sending content without any wires to the VC system
Video Output	Should have at least 2 no.'s of HDMI output to connect Full High Definition display devices such as plasma and projectors for both Video and Content. (Dual Monitor Support)
	When not in a VC call, it should be possible to view presentation from two laptops on each of the screen so that users can collaborate.
Audio	

Audio standards supported	G.711, G.722, G.722.1, 64 kbps MPEG-4 AAC-LD or equivalent standard must be supported.	
Other Desirable features	Noise Reduction, Automatic Gain control, Acoustic Echo Canceller, Active Lip synchronization	
Audio Inputs	Should support 2 or Microphone inputs on the codec to connect 3 microphones.	
	The pickup of the microphones should be at least 10 feet from the microphone.	
	Echo Cancellation for every input must be available.	
Audio Outputs	Should support audio output	
Network Interfaces	1 LAN /Ethernet10/100/1000 Mbps full duplex	
Bandwidth	H323/SIP up to 6 Mbps point-to-point.	
Network Capabilities	Packet Loss Based Down speeding	
H.323/ IP Features	QoSDiffServe	
	IP adaptive bandwidth management (including flow control)	
	Auto Gatekeeper discovery	
	Auto Network Address Translation (NAT) support	
	Standards based- Packet Loss Recovery feature	
	System should support IPv4 and IPv6 from day one.	
	Should support URL Dialling	
	Support for H.245 DTMF tones in H.323	
Security		
Menu Control	Password protected system menu	
Encryption of video call	ITU-T standards-based Encryption of the video call	
	Call should be encrypted end-to-end on IP	
	Should support Standards-based: H.235 v3 and AES Encryption via Automatic key generation and exchange. The same should be available in a call with Video with presentation (dual video)	
	Ability to manually turn encryption ON/ OFF should be there.	
	Automatic key generation and exchange	

Management	System Management using HTTPS and SSH
Camera	
	Should have at least two or more HD cameras to automatically detect active speakers in the conference room. The camera should also have face detection mechanism to enable automatic framing of participants.
	The camera should automatically detect who in the room is speaking and select the best camera framing for that person. And when no one is speaking it should automatically select the best group framing.
	Should have the ability to turn OFF speaker tracking if need be.
	The cameras should be suitable for a large conference room of about 25-30ft in length.
	1920 x 1080 pixels progressive @ 60fps
	The Camera and codec should be from the same manufacturer.
	Should have at least 80 degrees horizontal field of view.
Directory services	Should support Local and Global directories
	Should support LDAP and H.350 protocols for directory transfer.
User Interface	In order to provide a good user experience, the unit must be equipped with an intuitive Touch Screen/Panel for controlling the VC unit.
	Must have ability to browse the directory, search a contact, Enable / disable speaker tracking, change layouts, mute/ unmute, increase-decrease volume.
	The user should have the ability to select between two presentation sources such as a fixed PC and a laptop from the user interface. Users should also have the ability to share presentation wirelessly.
Inbuilt Multisite license	The VC Endpoint should be supplied with inbuilt 1+3 multisite license with each site connecting at HD 720 p or better resolution

License for Internet Based Web Conferencing	Each VC endpoint should be supplied with a Internet cloud based Web Conferencing license. This license should have the ability for connecting up to 1000 participants/attendees in a single meeting. These attendees should be able to join a meeting room based VC devices, from WebRTC enabled browser on Windows, Mac, Linux desktop/laptops and via an APP from ios, android based smart devices. The solution should have capabilities such as presentation sharing, two way content annotation, private and public chat, raise hand, integrated VoIP audio, recording, remote desktop control, invite and remind, polling and support for PSTN call back . PSTN call back may be required to be activated in future. This license and VC endpoint should be from same OEM
---	--

(2)Technical Specification for Personal Video conferencing system for faculty

Features	Specifications
General	
	Must support IPv4 and IPv6 from day one.
	Must have the following physical buttons for ease of use 1. Mute/ Unmute 2. Volume Increase/ decrease
Video	
Video Standards	Minimum H.264 and above
	The system should support SIP protocol.
	Must support desktop sharing SIP calls
Video Frame Rate	Must support 1080p 30 fps
Video Features	Ability to send and receive two live simultaneous video sources in a single call.
	The unit must support layout control for video and presentation on a single LCD screen.
Video Input	Should have HDMI or DVI (Digital Video Interface) input to connect PC/ Laptop directly to the Video conferencing system and display a resolution of XGA/SXGA.
	The user must be able to toggle between the Laptop/PC mode and

	the Video conferencing mode at a push of button/icon.
Video Resolution	CIF (352 x 288 pixels) VGA, 240p, 360p, 480p 720p (1280 x 720 pixels) 1080p (1920x1080 pixels)
Dual Stream	Must support H.239 and BFCP for resolutions up to 1080p
Firewall Traversal	Should support firewall traversal solution using the H.460.18 and H.460.19 protocol.
Audio	
	Audio System: The system should have two stereo front speakers with inbuilt microphones, wideband speakers.
	G.722, G.711, MPEG 4 AAC or better - which supports 20 KHz audio must be supported
Other Features	Noise Reduction/Echo Cancellation, Automatic Gain control, Automatic Audio mixer
Network Interfaces	
LAN	1 x LAN / Ethernet10/100/1000
	$1 \times \text{LAN}$ /Ethernet10/100/1000 to connect a PC (i.e. built in switch)
Wi-Fi	Must support 802.11a/b/g/n
SIP/H.323/ IP Features	
	Must support Standard based Packet loss recovery algorithm to handle packet loss.
	QOS
	Should support URI Dialling
	Must support SIP and H.323
Data Collaboration	
	Presentation through presence of DVI/HDMI Input port

	The system must have the ability to pair mobile devices such as Tablets and Smartphones based on iOS or Android platforms so that these devices can be used for: 1) View the Presentation that is being shown in the VC call. 2) Add and disconnect call, move the call from mobile device to/from video unit The system must have the ability to pair with laptop for sending content without any wires to the video unit. In case the above feature is not available natively, then additional components can be provided to achieve this functionality.
Security	
Security	
	Password protected system menu
	Meetings both point and point and multipoint, should be password protected and the same should be possible for SIP networks
	Encryption of video call: ITU-T standards based Encryption of the video call using Advanced Encryption Standard (AES)
	Call should be encrypted end-to-end on IP calls
	The unit must support the option of disabling the secondary network port if not in use.
Camera	
	Should be full HD 1080p camera, with privacy shutter
	Must support 1080p resolution.
	60 degrees horizontal Field of View
	35 degrees vertical field of view
	Must have a privacy shutter
	The VC unit must allow the camera to be used as a document camera to capture hard copies and transmit it to the far end site.
Directory Services	
	Should support Local and Global directories
	Should support LDAP and H.350 protocols for directory transfer.
License for Internet Based Web	Each VC endpoint should be supplied with a Internet cloud based Web Conferencing license. This license should have the ability for

~ (•	
Confe	erencing	ζ

connecting up to 1000 participants/attendees in a single meeting. These attendees should be able to join a meeting room based VC devices, from WebRTC enabled browser on Windows, Mac, Linux desktop/laptops and via an APP from ios, android based smart devices.

The solution should have capabilities such as presentation sharing, two way content annotation, private and public chat, raise hand, integrated VoIP audio, recording, remote desktop control, invite and remind, polling and support for PSTN call back . PSTN call back may be required to be activated in future. This license and VC endpoint should be from same OEM

(3) Technical Specification for Display 65' inch.

S. No.	Parameter	Detail Description
1	Screen Size	65 inches
2	Resolution	1,920 x 1,080 (FHD)
3	Aspect Ratio	16:09
4	Brightness	350
5	Contrast Ratio (Typical)	1100:01:00
6	Viewing Angle (H/V)	178° / 178°
7	Response Time	9ms
8	Direct Lit	Yes
9	9 Input	HDMI(2), DVI-D, RGB,
		Audio
10	Output	Audio
11	External Control	RS232C in/out, RJ in, IR Receiver, USB
12	Built-in Speakers	10W + 10W
13	Without Stand (W x H x D)	1238mm x 714.9mm x 54mm(38.6mm:Thinnest Part)
14	Bezel Width	11.9mm (T/R/L), 18mm (B)

B HOW TO APPLY

Bidders should submit bids through online mode on CPPP. Any other mode is not accepted in any case. The documents as listed below (but not limited to) should be submitted in two respective covers as given below.

Cover 1:

- a) A Demand Draft (DD) towards tender processing fees (non-refundable) of Rs. 1000/- plus Rs. 180/- GST (a Total of Rs. 1180/). This DD should be in favour of Registrar, IIT Kanpur.
- b) For EMD, a demand draft of Rs. 20,000/- (refundable) in favour of Registrar, IIT Kanpur should be submitted.
- c) Covering letter as well as Authority letter as per Annexure 1
- d) Affidavit for registration of firm/company and an undertaking of not being blacklisted as per Annexure 2
- e) Organization structure as per Annexure 3
- f) Details of In-house services as per Annexure 4
- g) Brief Biodata of Key professionals as per Annexure 5
- h) The copies of valid registration/incorporation certificate of the firm(s) along with the copies of relevant documents.
- i) The authorization certificate and propriety certificates must be attached with the offer.
- j) The document establishing that the applicant has a work and qualifying experience of more than five(5) years in the related field as per Annexure 6.
- k) The applicant shall attach work performance certificates of the works completed as per the requirement of minimum qualification criteria. The details be submitted as per Annexure 7.
- l) Copy of the audited balance sheet for last three (3) financial years starting 2015 2016. The details be submitted as per Annexure 8.
- m) Technical specification compliance report per proposal (Annexure 9).
- n) Technical proposal as per the scope of the work.

Cover-2:

Financial bid: The financial bid shall be submitted as per BOQ.

Note:

- 1. The terms of payments:
 - a) 80% after the supply of equipment.
 - b) 20% after the installation and integration and successful demonstration/training.
- 2. No advance payment without bank guarantee of equal amount shall be admissible.
- 3. Incorrect, incomplete, inadequate information may lead to rejection of the application. Canvassing in any form may lead to summarily rejection of application.
- 4. IIT Kanpur reserves the right to reject any application without disclosing the reason.
- 5. IIT Kanpur also will not provide any explanation to the applicants related to the short listing and selection process. The decision of IIT Kanpur in this respect shall be final and binding on all applicants.
- 6. All disputes are subject to Kanpur jurisdiction only.

TENDER ACCEPTANCE LETTER

(To be given on Company Letter Head)

Date:
Го,
Sub: Acceptance of Terms & Conditions of Tender.
Tender Reference No:
Name of Tender / Work:
Dear Sir,
1. I/ We have downloaded / obtained the tender document(s) for the above mentioned 'Tender/Work'
from the web site(s) namely:
as per your
advertisement, given in the above mentioned website(s).
2. I / We hereby certify that I / we have read the entire terms and conditions of the tender document
from Page No to (including all documents like annexure(s), schedule(s), etc.), which for
part of the contract agreement and I / we shall abide hereby by the terms / conditions / clauses containe
therein.
3. The corrigendum(s) issued from time to time by your department/ organization too have also bee
taken into consideration, while submitting this acceptance letter.
4. I / We hereby unconditionally accept the tender conditions of above-mentioned tender document(s)
corrigendum(s) in its totality / entirety.
5. I / We do hereby declare that our Firm has not been blacklisted/ debarred/ terminated/ banned by an
Govt. Department/Public sector undertaking.
6. I / We certify that all information furnished by our Firm is true & correct and in the event that the
information is found to be incorrect/untrue or found violated, then your department/ organisation sha
without giving any notice or reason therefore or summarily reject the bid or terminate the contract
without prejudice to any other rights or remedy including the forfeiture of the full said earnest mone
deposit absolutely.
Yours Faithfully,

(Signature of the Bidder, with Official Seal)

Annexures

All Annexures from 1 to 9 are to be filled, signed and executed by all the applicants. No blank is to be left empty. In case the blank is not applicable, then that is to be mentioned as "NOT APPLICABLE".

TO BE SWORN ON A NON-JUDICIAL STAMP PAPER OF RS.100/-

Note: Deponent will be the authorized signatory of the Applicant

AFFADAVIT
*I/we*Director/Proprietor/Partner o (mention name of organization and its complete address) do
hereby solemnly affirm and declare as under:-
1.That *I/we
2. That *I/we have applied in response to the Request for ""Procurement and Installation of Video Conferencing System"
DEPONENT VERIFICATION
I/we the above-named deponent do hereby verify that the contents of the aforesaic paragraphs 1 and 2 are true and correct to the best of *my/our knowledge and belief and nothing is concealed therefrom.
Verified at (place) this
(Strike off whichever is not applicable)
DEPONENT

TO BE SWORN ON A NON-JUDICIAL STAMP PAPER OF RS.100/-

AFFADAVIT
*I/we*Director/Proprietor/Partner of(mention name of organization and its complete address) do
hereby solemnly affirm and declare as under:-
1. That (Mention name of organization) is eligible to submit the aforesaid proposal as neither the applicant has been barred and/or blacklisted by the Central Government and/or any State Government of India at any time prior to the date of submitting this affidavit.
2. That (mention name of organization) or any of its constituents during the last three years has neither failed to perform on any agreement nor was expelled from any project or agreement nor any agreement terminated for any breach by the applicants or any of its constituents.
3. That an annexure attached to this affidavit gives list of all contracts of
DEPONENT
VERIFICATION
*I/we the above-named deponent do hereby verify that the contents of the aforesaid paragraphs 1 to 3 are true and correct to the best of *my/our knowledge and belief and nothing is concealed therefrom.
Verified at
(Strike off whichever is not applicable)

DEPONENT

Note: Deponent will be the authorized signatory of the Applicant

Pro forma: ORGANISATIONAL STRUCTURE

(This form to be furnished not only by the Prime Consulting firm applying for the prequalification, but also furnish separately for sub-consultants who would be associated with this project work)

also fı	urnish separately for sub-consultants who would be associated	with this project work)
1	Name & Address of the applicant with Telephone No./Fax No./ Email ID	
2	a. Year of Establishment	
	b. Date & Year of commencement of practice.	
3	Legal status of the applicant (attach copies of original document defining the legal status)	
	A proprietary firm	
	A firm in partnership	
	A limited company or Corporation	
4	Names of Directors & other executives with designation	
5	Designation of individuals authorized to act for the organization	
6	Total No. of professional staff (In house): -	
7	Was the applicant ever required to suspend the project for a period of more than six months continuously after you commenced the planning? If so, give the name of the project and reasons of suspension of project.	
8	Has the applicant, or any partner in case of partnership firm, ever abandoned the awarded project before its completion? If so, give name of the project and reasons for abandonment.	
9	Has the applicant or any constituent partner in case of partnership firm, ever been debarred/black listed for competing in any organization at any time? If so, give details.	
10	Has the applicant or any constituent partner in case of partnership firm, ever been convicted by a court of law? If so, give details.	
11	In which field of work the applicant has specialization & interest	
12	Any other information considered necessary but not included above.	
13	Address of local office if any	

DETAILS OF IN-HOUSE SERVICES AVAILABLE FOR THE ASSIGNMENTS

S. No.	In-house Service	of Services	Nos. of In-house Staff with experience		
			Experience of 10 years & above	Experience of 5 -10 years	Experience of less than 5 years
1	Repair	Yes/No			
2	Calibration	Yes/No			
3	Temporary replacement for faulty equipment	Yes/No			
4		Yes/No			
5		Yes/No			
6	Add other services as appropriate for this tender	Yes/No			
7		Yes/No			
8		Yes/No			
9		Yes/No			
10		Yes/No			
11		Yes/No			

If no in-house service is available, explain how it is proposed to be provided to IIT-Kanpur, if required

_				
ı	`	\sim	+0	٠.

Maximum two-page CV of each main member and key expert shall be furnished as per Annexure 7.

BRIEF BIO-DATA OF KEY PROFESSIONALS

(with emphasis on providing technical support, calibration, repairs)

(This form to be furnished not only by the principal member of the firm applying for the prequalification, but also furnish separately for sub-consultants who would be associated with this project work)

Name of Firm:
Professional:
Date of Birth:
Years with Firm:
Nationality:
Membership in Professional Societies:
Detailed Task Assigned:

Key Qualifications: [Give an outline of staff member's experience relevant to responsibility in context of assignment. Describe degree of responsibility held by staff member on relevant previous assignment and give dates and location. Use up to half a page.]

Education: [Summarize college/university and other specialized education of staff member, giving names of schools, dates attended, and degree(s) obtained. Use up to a quarter page.]

Employment Record: [Starting with present position, list in reverse order every employment held. List all positions held by staff member since graduation, giving dates, name(s) of employing organization(s), title of positions held and location of assignments. For experience in last ten years, also give type of activities performed and client references, where appropriate. Use up to three quarter of a page.]

Languages: [Indicate proficiency in speaking, reading and writing of English language: excellent, good, fair, or poor.]

Certification: I, the undersigned, certify that to the best of my knowledge and belief, these biodatas correctly describe my qualifications, my experience and myself.

DETAILS OF QUALIFYING PROJECTS HANDLED/COMPLETED DURING THE LAST FIVE (5) YEARS.

	Description			
S. No.		Work No.1	Work No. 2	Work No. 3
1	Name of work / Project and location			
2	Name & Address of Employer / Organization, Telephone no. of officer to whom reference may be made.			
3	Cost of work in Rs. Lakhs (Attach copy of Work Order) and the Site Area			
4	Date of commencement as per contract			
5	Stipulated date of completion			
6	Actual date of completion			
7	Litigation / arbitration pending / in progress with details *			
	Service rendered			
8	In-house teams			
	Associated Consultants			
9	Names of Project In charge & Key staff & nos. of staff involved.			
10	Any other information			

^{*} Indicate gross amount claimed and amount awarded by the Arbitrator.

The Applicant may provide in this annexure, details of maximum 3 projects, which in his/her opinion, best present his/her ability to participate in this tender (qualifying project referring to the project).

To qualify, one must have satisfactorily completed the following works (in the area of tender):

- (i)At least one work of 80% of the cost (approximately Rs. 10Lakh.) OR
- (ii) At least two works of 50% each of the cost (approximately Rs. 10Lakh.)

CLIENT WISE PERFORMANCE REPORT OF WORKS

1	Name of work/Project & Location	
2	Agreement No.	
3	Estimated Cost	
4	Tendered Cost	
5	Date of start	
6	Date of completion	
	Stipulated date of completion	
	Actual date of completion	
7	Amount of compensation levied for delayed completion, if any	
8	Amount of reduced rate items, if any	
9	Performance Report	
	Quality of work	Very Good/Good/Fair/Poor
	Financial soundness	Very Good / Good / Fair / Poor
	Technical Proficiency	Very Good / Good / Fair / Poor
	Resourcefulness	Very Good / Good / Fair / Poor
	General Approach & Behaviour	Very Good / Good / Fair / Poor

Dated:

Signature & Seal of

Executive engineer or equivalent

AVERAGE ANNUAL FINANCIAL TURN OVER (GROSS) OF LAST THREE YEARS

Financial Analysis -

Details to be furnished duly supported by figures in balance sheet/profit and loss account for the last three years duly certified by the Chartered Accountant, as submitted by the applicant to the Income Tax Department (copies to be attached).

Particulars	Financial Year		
	Year 2016-17	Year 2017-18	Year 2018-19
Gross Annual turnover on construction work. (In Lakhs)			
Profit / Loss			
Certified by			

	l arrangement			

The following certificates are enclosed:

Current Income Tax Clearance Certificate / Profit & Loss account

Signature of Chartered Accountant with Seal

SPECIFICATION COMPLIANCE REPORT

S. No.	Equipment/SW	Specification	Complied (Yes/No)	Part/Catalogue/page No.

Certified that the q	uoted equipment	and SW satisfies all s	pecifications as	per tender document
----------------------	-----------------	------------------------	------------------	---------------------

Seal and Signature of the Bidder