



COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH
Anusandhan Bhawan, Rafi Marg, New Delhi-110001 [INDIA]

NOTICE INVITING ONLINE TENDER

The Joint Secretary (Admn.), CSIR invites online Bids on CPP Portal <http://etenders.gov.in> in two bids (Technical Bid and Commercial Bid) from the reputed suppliers for Supply, Installation, Testing and commissioning of Audio/Video conferencing system at CSIR Hqrs. For details see our tender document.

(Stores & Purchase Officer)



Council of Scientific & Industrial Research

Anusandhan Bhawan, 2-Rafi Marg, New Delhi-110001

Telephone: 011-23353631, 011-23470417

Website: www.csir.res.in

Email: surenderkumar@csir.res.in

TENDER DOCUMENT

For

[Supply, Installation, Testing & Commissioning of Audio/Video Conferencing Systems](#)

Tender Notice **No. 13-2(81)/2017-18/Pur** Dated: 18/07/2018

Last date & time for submission of queries: 23/07/2018

Date of Pre Bid conference: - 24/07/2018 at 11:00 A.M.

Last Date & Time of Submission of Bid: 13/08/2018 upto 10:00 A.M.

Date of Opening (Technical Bid): 14/08/2018 at 11:00 A.M.

EMD: Rs. 1,50,000/- with technical bid.

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Supply, Installation, Testing & Commissioning of Audio/Video Conferencing Systems

For and on behalf of the Council of Scientific and Industrial Research New Delhi ,the Joint Secretary (Admin) CSIR, New Delhi invites sealed tenders in two bid system i.e.(Part-I Technical Bid and Part-II Price bid) for the supply, installation, testing & commissioning of Video conferencing systems at CSIR Hqrs and its premises located in New Delhi. The detailed specifications of the items & terms and conditions of the tender are as under: -

S. No.	Description of material	Qty.	Earnest Money Deposit /Bid Security (Rs)	Last date /Time of submission of bid/tender	Date/Time of opening of Technical part of bid)
01.	Supply, installation, testing & commissioning of Audio/Video Conferencing Systems along with technical support services	As per price-bid Annexure -III	Rs.1,50,000/-	23/07/2018 upto 10:30 A.M.	14/08/2018 At 11:00 A.M.

1.0 Instructions to the bidders (ITB)

For and on behalf of the Council of Scientific and Industrial Research New Delhi , The Joint Secretary (Admn.), CSIR, invites sealed tenders in two bid system for supply, installation, and commissioning of the material detailed in **Schedule of requirement as Annexure-I**. The bidders who desirous of downloading specifications from our website have to attach EMD/Bid Security only as stipulated above with the technical part of the bid. No tender document fee is applicable in the event the bidder downloads tender documents from website. Tenders received without EMD/Bid security will be summarily rejected.

1.1 Qualification criteria/Eligibility Criteria :-

This bid is open for firms/companies eligible to do business in INDIA, under relevant Indian Law as in force; except those who have been declared by Govt. of India/ Govt. of NCT Delhi, to be ineligible to participate, for Fraud, Corrupt, Fraudulent practices, for the period for which such ineligibility is declared. The bids can be submitted by the Firms/companies, who fulfill the following qualification/Eligibility criteria (Documentary Proofs must be submitted along with the Technical part of the bid).

1. The Bidder should be in similar business for last 3 years as on 31/03/18 for supply/commissioning of Audio / Video devices.
2. The Bidder should have a minimum annual turnover of **Rs. 5 crore** (Rs. Five crore) for last three consecutive years 2014-15 and 2015-16, 2016-2017. (Documentary proof of balance sheet needs to be submitted).
3. The bidder should have executed at least three orders for similar nature i-e of Audio / Video / IT related devices and Audio/Video Integration for any Govt./Public sector/autonomous body/financial institution /academics instt. in last 3 years.
4. The bidder should have valid authorization certificate from OEM for Audio/Video equipment (Annexure – I) for providing services (Valid documentary Proof may be attached).
5. The bidder should have presence in NCR/New Delhi, with service/ Maintenance Centre and service engineers. (Details of Service Centre's and Service engineers may be submitted).
6. The bidder should have valid ISO 9001:2008 or revised/higher certificate (Valid documentary proof may be attached).

7. The bidder should have valid documentary proof for GST No./Service Tax registration number, Income Tax registration (PAN). (The copies of relevant certificates along with valid Income Tax return filed for past three financial years i.e. 2014-15 and 2015-16, 2016-2017 must be submitted with Technical part of the bid).
 8. Undertaking on Company's Letterhead stating that all the tender conditions are acceptable to the bidder.
 9. The Bidder should supply the latest items as per the list mentioned in Annexure –I and Life Cycle/Roadmap details of the quoted items must be mentioned and submitted with the technical bid.
 10. CSIR reserves the right to verify/seek confirmation of all original documentary evidence submitted by vendors in support of above mentioned clauses of eligibility criteria. In case any information furnished by the bidder is found to be false /incorrect at any stage, the bid shall be summarily rejected and no correspondence on the same shall be entertained.
- **The bidder must have the facility for sales & services at New Delhi/NCR with trained engineers to provide service support. Proof of Service set up & qualification of engineers are required to be attached.**
 - The bidder will have to bear all costs associated with preparation and submission of the bid.
 - CSIR reserves the right to verify/seek confirmation of all original documentary evidence submitted by vendors in support of above mentioned clauses of eligibility criteria. In case any information furnished by the bidder is found to be false /incorrect at any stage, the bid shall be summarily rejected and no correspondence on the same shall be entertained.
 - The vendor must fulfil the above eligibility criteria/ pre-qualification conditions. Technical bid of vendors fulfilling the pre-qualification conditions will only be evaluated by the duly constituted technical evaluation committee. Bid of vendors not fulfilling the Eligibility – criteria given above will be summarily rejected. Undertaking for subsequent submission of any of the above documents will not be entertained under any circumstances.

1.2. Scope of Work:

The bidder is responsible for supplying, installation and commissioning of the items as per technical specifications/details enclosed at Annexure I and II along with technical

support services which include one RE on site. The vendor is to do the site visit for estimations of laying and conducting the cables.

The supplied items need to be integrated with following existing Audio/Video devices installed at the location (SSBH Auditorium) and VC infrastructure installed at CSIR Hqrs. and CSIR laboratories: –

1. Rack 27U (19" Standard) (1 Number)
2. Clock Audio Handheld Microphone (4 Numbers)
3. Clock Audio Lapel Microphone (1 Numbers)
4. Extron XPA -70V Amplifier (1 Numbers)
5. Extron F220T Speaker (8 Numbers)
6. Display 65" (1 Number)

The above said Audio/Video devices needs to be compatible with the existing VC infrastructure installed at CSIR and its CSIR laboratories such as Video Conferencing endpoints VSX 7000 series, HDX 4000 (Desktop VC), HDX 7000, HDX 8000, HDX 9000, Group 500 and Group 700 and real presence Desktop, RMX 2000, DMA 7000, RPRM, RPAD, RSS 4000 and display devices like Samsung LED 65", Panasonic 65" 4k, LG 84" etc.

The vendor needs to complete the overall installation and commissioning of the equipment's specified in Annexure –I and II with complete Accessories, Cables (HDMI, DVI, VGA, Microphone cables, LAN cables, Audio Cables, Power cord) and all type of connectors, etc. or any other accessory required to make the system integration functional. The cables supplied with the equipment's should be 4K compatible.

Deliverables

The contractor will be responsible for Supply /Installation / Commissioning, which will include the complete interfacing of VC equipment with all existing audio-visual & VC system (Detail of existing system is as mentioned above para 1.2) installed all across CSIR labs and CSIR Hqrs. in the VC studio /room, required configuration of system Software to make VC system functional at respective locations along with end testing, training and handholding as per the detailed Technical Specifications (Annexure II). The devices would be under 3 years' warranty and after completion of warranty it would be covered under 2 year CAMC contract along with technical support services.

- a. The contractor shall provide services along with technical support which will include operation, system maintenance, generation of reports etc. for VC/AV systems normally during office hours i.e. 9.00 AM to 5.30 PM along with onsite Technical Support Services, which includes the provisioning of one technical support staff/ resident engineer(REs) having adequate qualifications and experience at CSIR HQ during all working days at premises of CSIR Hqrs, to

keep the all equipment's in good working condition. If the same services are required at holidays, or after offices hours, the same will be provided at no extra cost during warranty period.

- b. The technical support staff/resident engineer(s) to be posted must have the following qualifications /experiences: -
- c. The support staff / REs to be posted at CSIR Hq. should have Minimum Qualification (i) 10+2 with Four years of experience OR Diploma in Engineering with Two years of Experience OR Degree in Engineering for support and /or, operations and/or implementation of VC / AV system and well versed with LAN infrastructure and equipment
- d. The bidder needs to ensure that the resolution of any display device should not drop due to signal loss in HDMI cable.
- e. The vendor shall address the problem (if any) within 24 hours and in case of replacement of part /system/subsystem of the AV system shall rectify the problem within minimum 48 hours, after getting report of problem either through phone/fax/email. The contractor shall sign Service Level Agreement (SLA) as per the (Annexure-V) to provide smooth and seamless AV system services at CSIR. The penalty clause may be invoked by CSIR, if any equipment under contract remains faulty and non-functional beyond 48 hours of reporting of the problem.
- f. The contractor shall undertake preventive maintenance on quarterly basis. This would involve cleaning of AV system /sub-systems commissioned at CSIR during the entire warranty period.
- g. In emergency cases, the Contractor might be asked to provide services beyond normal working hours and on holidays at no extra cost.
- h. The Contractor shall make changes in the hardware system as per the reliability improvement notice, logic improvement notice, engineering improvement notice issued by manufacturer from time to time in the existing system.
- i) The vendor needs to supply all accessories like cables, connectors, IR probe, relays and wireless access point etc. for installation and commissioning. The items at SI no. 16, 17 in Annexure- I needs to be installed at separate location at CSIR hqrs and needs to be integrated with existing Video conferencing system (Polycom HDX 9000), Tata sky , desktop, laptop and Display unit (Panasonic LED ,65AX800D) .

The major responsibilities of the bidder shall include Supply, Installation, Acceptance Testing, Commissioning, and integration with existing VC system installed at CSIR Hq

and CSIR labs, Documentation, handholding and three years On-Site Comprehensive Warranty Maintenance of various VC equipment's and its components and to provide the ***Technical support services** on site, which include one onsite resident engineer for the VC system through qualified and trained engineers/personnel. The bidders need to provide the cables along with converter for connecting the display unit to codec for all the ports (DVI to VGA, DVI to HDMI etc.).

Technical Support Services Requirements:

Provisioning of one onsite Technical support staff for technical support services:

The successful Bidder, (herein referred to as service provider) for the purpose of Warranty, installation and commissioning and onsite technical support services for VC /AV system of CSIR, shall make available the onsite services of minimum one trained technical support staff /Resident engineers (REs) along with backend escalations on all working days between 9.00 AM to 5.30 PM at CSIR Hq. and the activities to be carried out by technical support staff/Resident Engineers (REs) for VC /AV facility are as following: -

- (a) The REs would be responsible for making VC sessions to and from all remote sites operational as and when required during the working hours of offices.
- (b) The REs shall take proactive measures to test the functionality of VC/AV equipment on daily basis and also the matter like working of VC/ AV equipment and connectivity etc. besides taking up the advice of any of the issues, if needed from escalations provided by contractor OR from the OEM and backend from Contractor.
- (c) The RE's services can be requisitioned on holidays or after office hours on emergent occasions without any charge.
- (d) The provision of the services to CSIR by the REs, shall not in case construe any right on him to claim any employment from CSIR.
- (e) The Service provider shall provide the replacement of the RE, if in case the current resident engineer fails to attend the site due to any unavoidable circumstances.
- (f) The contractor shall provide the replacement of the technical support staff/ RE, if in case the current resident engineer fails to provide the satisfactory services on the site.
- (g) The bidder would be providing the technical support services (Resident Engineer) for additional 10 working days after the expiry of contract without any extra cost.

1.3 Pre Bid Conferences: -

A pre bid conference will be held on **24/07/2018 at 11:00 A.M. in room no. 101** for discussion and clarification of the technical as well commercial aspects of the tender

against the queries if any raised by the bidders. All such queries must be reached to this office on or before **date: 23/07/2018** up to **10.30 AM**. So that same may be considered and clarified in the pre bid conference. The queries received after the deadline as mentioned above, will not be entertained at all.

1.4 The Bidding documents

- Bidding document should be in accordance with the prescribed bidding documents such as
 - a) Instruction to Bidders (ITB)
 - b) General conditions of Contract
 - c) Schedule of requirements
 - d) Bid security form
 - e) Manufacturer's authorization in the event bid is submitted by distributors/agents.
- Amendment to bidding documents prior to deadline for submission by CSIR New Delhi for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder resulting in modification of bidding document is the prerogative of CSIR New Delhi. All prospective bidders who have received bidding document will however be notified of the amendment which will be binding on them.

1.5 Bid & its preparation

- Online Bid on CPP should be made in two parts. Part-I (Technical) & Part-II (Commercial /Price Bid) separately.
- The bids should be submitted preferably in English language.
- The price should be mentioned in both figures and words.
- Unit price should be mentioned for each item in the schedule of requirement by the bidding party (item No. 01 to 17) of schedule of requirement as price-bid format))
- All charges towards duties, taxes and levies should be mentioned clearly in the bid.
- The latest INCOTERMS (2000) should be specified in the bid.
- The scanned copy of Bid security/EMD (returnable) should be attached with the technical part of the bid in shape of Bank guarantee/ /demand draft/FDR of

Nationalized /Scheduled Bank in India valid for a period of one year drawn in favour of the JS (Admn.) ,CSIR New Delhi.

- The bid security/EMD submitted in foreign currency should be in the shape of demand draft only drawn in favour of the JS (Admn.), CSIR New Delhi.
- Bid without bid security/EMD will be treated non responsive and will be rejected.
- The EMD of successful bidder will be returned/ on successful performance of the contract and the bid security of unsuccessful bidders will be returned after the notification of award of contract to the successful party/parties.
- The bid security will be forfeited if the bid is withdrawn during the period of its validity specified by the bidder on bid or in case the successful bidder fails to supply the material/goods in time.
- Bids are to remain valid for 90 days after its opening by the CSIR New Delhi and in exceptional circumstances the CSIR New Delhi may solicit the bidders consent in writing for extension of validity period. The bidder-granting request in any case may not be permitted to modify the bid.
- Bidders are also required to submit the **response** in respect of the following with bid:
 - a) Credentials as manufacturer/distributor/dealer
 - b) Clientele List
 - c) GST No./ PAN and Income Tax clearance documents, details of VAT Registration Number etc.

1.6 Submission of Bid

- The bids should be submitted online on CPP portal.
- The CSIR New Delhi may, at its discretion extend the dead line for submission for bids by amending the bid documents.
- Late/ delay bids will not be entertained.
- The bidder may withdraw the bid after its submission, provided that written notice of the modification or withdrawal is received by the CSIR New Delhi prior to the deadline prescribed for submission of bids.
- No bids will be modified subsequent to the deadlines for submission of bids.

- No bid is to be withdrawn in the interval between the deadline for submission and expiry of the period of bid validity specified by the bidder on the bid. Withdrawal of offer bid during this interval may result in the bidder's forfeitures of its bid Security /EMD.

1.7 BID OPENING AND EVALUATION OF BIDS

- The CSIR New Delhi will open all the bids (Technical part) so received before deadlines in the presence of bidder's representatives who choose to attend the bid opening process. They will sign the register/form maintained for invitation of bids evidencing their attendance. In case, the opening date happens to be holiday, the bids will be opened in the next working day.

1.8 Clarification of bids

- During evaluation of bids, CSIR New Delhi may, at its discretion, ask the bidders for clarification of bid for which a formal request will be made in writing and response will also be sought in writing but the clarification/clarifications so sought will not in any case result in change of price or substance of the bid.
- No verbal/ telephonic queries will be entertained by CSIR New Delhi or any matter relating to its bid from the time of its opening to the time of award of contract. However, any additional information by the bidder if he so wishes, is to be sent by him to CSIR New Delhi in writing. Any effort by the bidder to influence by CSIR New Delhi in its decision on bid evaluation, bid comparison or contract award decision may result in rejection of the Bidder's bid.

1.9 Evaluation & Comparison of Bids

- Prior to the detailed technical evaluation, the CSIR New Delhi will determine the substantial response of each bid. A substantially responsive bid is one, which conforms to all the terms and conditions of the Bidding Documents without material deviations
- The CSIR New Delhi will reject a bid which is not substantially responsive.
- The Pre-qualification /Bid evaluation will be done on the basis of [Clauses of ITB](#).
- The technical evaluation will be carried out in respect of only those eligible / pre-qualified bidders whose bids would be scrutinized and found responsive.

- A bid determined as not substantially responsive may be rejected by the CSIR and may not subsequently be made responsive by the Bidder by correction of the non-conformity.
- The bidders short-listed by CSIR, based on evaluation of their technical bids, may be called for detailed discussions / demonstrations for assisting in the evaluation of the quoted equipment's/products, which will be subjected to verifications of technical specifications as per Annexure-II using documentary evidences from OEM / bidder or industry standard testing. The bidder needs to submit the Annexure-IV along with documentary proof.
- The technical evaluation committee may at its own discretion decide to carry out surprise inspection of bidder's manufacturing facilities and/or maintenance and support Center(s)/network locations to evaluate and ascertain the details as furnished by the bidder in its technical bid, the technical competence to perform the offered services, capabilities, available facilities and resources of the bidder for effective and efficient execution of the project.
- The lowest bid would be decided by the sum of overall cost of the product & services.
- Bidders shall state their bid price for the payment schedule outlined in the clauses of GCC. Bid will be evaluated on the basis of the base price. Bidders are, however permitted to state an alternative payment schedule and indicate the reduction in bid price they wish to offer for such alternative payment schedule. The CSIR New Delhi may consider the alternative payment schedule offered by the selected Bidders but it may not be binding on the CSIR New Delhi
- CSIR New Delhi reserves the right to accept any bid and to reject any bid or to annul the bidding process and reject all the bids at any time prior to award of contract, without thereby incurring any liability to the affected bidder or bidders or any obligation to inform the affected Bidder or bidders of the grounds for the CSIR's action.

1.10 Award Criteria

The CSIR New Delhi will award the Contract to the successful Bidder whose bids have been determined to be substantially responsive and has been determined as the lowest evaluated bid provided further that the Bidder is determined to be qualified to perform the Contract satisfactorily. The overall L1 would be decided on the Total price of Column. E of Sl. No. 19 of the Price bid.
(Annexure-III)

1.11 Notification of Award

- Prior to the expiration of the validity period, the CSIR New Delhi will notify the successful Bidder in writing by letter, to be confirmed in writing by speed post or hand delivered letter, that its bid has been accepted. The notification of Award will constitute the formation of the Contract.

1.12 Factors Affecting the Award of Contract

- The bidder should have its own Contract support facilities. The support facilities should be “owned and managed by the bidder.
- Conformity with the Request for Bid/tender required and conditions.
- The assessment of the capability of the bidder to meet the terms and conditions.
- The list of CSIR Laboratories /Govt. organizations where similar material/equipment has been supplied/ installed.
- The cost and the discount offered, if any.
- All other things equal, preference will be given to the established well-known manufacturers of high quality and international repute, directly selling to the CSIR New Delhi

1.13 Fall clause

- The price quoted by the supplier should not be higher than the maximum retail price, if any, for the stores/materials/equipment and the same shall not be higher than the price usually charged by the supplier for stores of the same nature, class or description to any other party especially CSIR Laboratories.
- The price charged for the stores supplied under the contract by the supplier, shall in no event, exceed the lowest price at which the supplier sells the stores of identical description to any other person during the period till performance of all supply orders placed during the currency of the contract is completed. If at any time during the period the supplier reduces the sale price of such stores or sells such stores to any other person including his dealers at a price lower than the price chargeable under the contract, he shall forthwith notify such reduction or sale to the CSIR New Delhi and the price payable under the contract for these items of stores supplied after the date of coming into force of such reduction or sale shall stand correspondingly reduced.

- If it is discovered that the supplier has contravened the above conditions, then without prejudice to any other action which might be taken against him, it shall be lawful for the CSIR New Delhi to (a) revise the price at any stage so as to bring it in conformity with above clause, or (b) to terminate the contract and purchase the items of stores at the risk and cost of the supplier and in that event the provisions of relevant Clause of General Conditions of Contract shall, as far as possible, be applicable , or to recover the loss.

2.0 General Conditions of Contract (GCC)

2.01 Definitions & interpretations

- In this document, the following terms shall be interpreted as indicated:
- "The order" means the agreement entered into between the CSIR New Delhi and the Supplier including all the attachments and appendices referred to and all documents incorporated as per notification of award.
- "The Contract Price" means the price payable to the Supplier under the Contract for the full and proper performance of its contractual obligations;
- "The Goods/equipment/material" means all order items which supplier is required to supply to the CSIR New Delhi under the Contract so finalized between CSIR New Delhi and the supplier.
- "Services" means services ancillary to the supply of the Goods, such as transportation and insurance, and any other incidental services, such as installation, commissioning, provision of technical assistance training and other obligations of the Supplier covered under the Contract;
- "GCC" mean the General Conditions of Contract contained in this section.
- "The Council of Scientific & Industrial Research, New Delhi" is a apex body of R&D Institutes working under Ministry of Science & Technology, Govt of India
- "The Supplier" will mean the individual or a firm / company supplying the Goods and Services under the Contract as will be concluded.
- (h) "Day" means calendar day.

2.02 Application

These General Conditions shall apply to the extent that they are not superseded by provisions in other parts of the Contract.

2.03 Standards

- The Goods supplied under the Contract shall conform to the equivalent standards of items mentioned in the Schedule of Requirements and when no applicable standard is mentioned; to the authoritative standard appropriate to the Goods' country of origin and such standards shall be the latest issued by the concerned institution.

2.04 Use of Contract Documents and Information

- The Supplier shall not, without the CSIR New Delhi's prior written consent, disclose the Contract, or any provision thereof, or any specification, plan, drawing, pattern, sample or information furnished by or on behalf of the CSIR New Delhi in connection therewith, to any person other than a person employed by the / Supplier in performance of the Contract. Disclosure to any such employed person shall be made in confidence and shall extend only as far as may be necessary for purposes of such performance.
- The Supplier shall not, without the CSIR New Delhi's prior written consent, make use of any document or information except for purposes of performing the Contract.
- Any document, other than the Contract itself, shall remain the property of the CSIR New Delhi and shall be returned (in all copies) to the CSIR New Delhi on completion of the Supplier's performance under the Contract if so required by the CSIR New Delhi.

2.05 Patent Rights

- The Supplier shall indemnify the CSIR New Delhi against all third-party claims of infringement of patent, trademark or industrial design rights arising from use of the Goods or any part thereof in India.

2.06 Submission of the bids.

- All bids complete in all respect must reach the CSIR New Delhi within the last date and time of receipt of bid. No extension shall be allowed for any reason what so ever. Late tenders/delayed bids and tenders received without earnest money & cost of bidding documents (if applicable) etc. shall be rejected.

- Tender documents are available on CSIR New Delhi Website <http://www.csir.res.in> under reading tenders. Interested parties may download the tender documents.

2.07 Inspections and Tests

- The CSIR New Delhi or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Contract specifications at no extra cost to the CSIR New Delhi.
- The inspections and tests may be conducted at point of delivery and/or at the Goods on final destination.
- Should any inspected or tested Goods fail to conform to the specifications, the CSIR New Delhi may reject the goods and the Supplier shall either replace the rejected Goods or make alterations necessary to meet specification requirements free of cost to the CSIR New Delhi.
- The CSIR New Delhi 's right to inspect, test and, where necessary, reject the Goods after the Goods' arrival at its Site shall in no way be limited or waived by reason of the Goods having previously been inspected, tested and passed by the CSIR New Delhi or its representative prior to the Goods shipment.
- Nothing in GCC Clause shall in any way release the Supplier from any warranty or other obligations under this Contract.

2.08 Consequences of rejection

- If in the event the stores/equipment/material are rejected by the CSIR New Delhi at the destination and the supplier fails to make satisfactory supplies within the stipulated period of delivery, the CSIR New Delhi will be at liberty to:
 - ☐ Allow the supplier to resubmit the stores in replacement of those rejected, within a specified time without any extra cost to the CSIR New Delhi.
 - ☐ Rejecting the material, which shall be final and binding on the contractor.

2.09 Packing

- The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination as indicated in the Contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit and open storage. Packing case size and weights

shall take into consideration, where appropriate, the remoteness of the Goods' final destination and the absence of heavy handling facilities at all points in transit.

- The packing, marking and documentation within and outside the packages shall comply strictly with such special requirements as shall be provided for in the Contract including additional requirements, in any subsequent instructions ordered by the CSIR New Delhi.

2.10 Delivery and Documents

- Delivery of the goods shall be made by the Supplier with in mutually framed delivery period from the date of placement of purchase order in pursuance of notification of award of contract
- The delivery of Stores shall be affected at the premises of the CSIR New Delhi or agreed destination within the stipulated time and as may be elucidated in the confirmed order, accompanied by a delivery challan. No extension of time for delivery of Stores shall normally be accorded.
- Time and date of delivery the essence of the contract: The time for and the date of delivery of the stores stipulated shall be deemed to be of the essence of the contract and delivery must be completed not later than the date(s) specified as agreed between CSIR New Delhi & Supplier.

2.11 Insurance

- The Goods supplied under the Contract shall be fully insured in Indian Rupees against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery. The insurance shall be obtained by the suppliers or CSIR New Delhi as may be agreed mutually in an amount equal to 110% of the value of the goods from "warehouse to warehouse" (final destinations) on "all risks" basis including war risks and strikes.

2.12 Transportation

- Where the Supplier is required under the Contract to transport the Goods within India defined as CSIR New Delhi site, transport to such place of destination in India including insurance, as shall be specified in the Contract, shall be arranged by the Supplier, and the related cost shall be included in the Contract Price.

2.13 Warranty

- The Supplier warrants that the Goods supplied under this Contract are new, unused, of the most recent or current models/latest technology and that they incorporate all recent improvements in design and materials unless provided otherwise in the Contract. The Supplier further warrants that all Goods supplied under this Contract shall have no defect arising from design, materials or workmanship or from any act or omission of the Supplier that may develop under normal use of the supplied Goods in the conditions prevailing in India.
- This warranty shall remain valid for **36 months** on site after the Goods or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the Contract, unless specified otherwise.
- The CSIR New Delhi shall promptly notify the Supplier in writing of any claims arising under this warranty.
- Upon receipt of such notice, the Supplier shall with all reasonable speed, repair or replace the defective Goods or parts thereof, without any extra cost to the CSIR New Delhi.
- If the Supplier, having been notified, fails to remedy the defect(s) within a reasonable period, the CSIR New Delhi may proceed to take such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the CSIR New Delhi may have against the Supplier under the Contract.

2.14 TERMS OF PAYMENT:-

a) For Indigenous supplies

The payment shall be made within 30 days from the date of receipt of invoice after satisfactory inspection, installation and acceptance of material subject to submission of PBG equivalent to 10 % amount of order value valid for warranty period plus two months. The Supplier's request(s) for payment shall be made to the CSIR New Delhi in writing, accompanied by an Tax/Retail invoice describing,

as appropriate, the Goods delivered and the Services performed, and by documents, submitted pursuant to GCC Clauses, and upon fulfillment of other obligations stipulated in the contract.

Payment shall be made in Indian Rupees through e-payment mode namely Electronic Clearance System (ECS) ; National Electronic Fund Transfer (NEFT); Real Time Gross Settlement (RTGS) ; Net Banking by direct credit to the account of the beneficiary (vendors/Service Providers).

No advance payment will be made.

b) For import supplies

As a standard practice In case of import by CSIR New Delhi, payment shall be made through an irrevocable letter of credit to the extent of 90% on production of shipping documents and proof of dispatch and the balance 10% will be paid after completion of installation, commissioning and acceptance of the systems/equipment to the entire satisfaction of council/ CSIR New Delhi and on production of performance bank guarantee for 10% of F.O.B value valid for warranty period plus two months from the date of acceptance of material either by the manufacturer or their Indian subsidiary/agents. Payment terms by the bidders must be mentioned explicitly in the bid document.

Consideration of any other terms regarding payment will be prerogative of CSIR New Delhi.

2.15 Prices

Prices charged by the Supplier for Goods delivered and Services performed under the Contract shall not vary from the prices quoted by the Supplier in his bid. Change Orders

The CSIR New Delhi may at any time, by written order given to the Supplier, make changes within the general scope of the Contract in anyone or more of the following:

- a) Drawings, designs, or specifications, where Goods to be furnished under the Contract are to be specifically manufactured for the CSIR New Delhi;
- b) The method of shipping or packing;
- c) The place of delivery; and/or
- d) The services to be provided by the Supplier.

If any such change causes an increase or decrease in the cost, or the time required for, the Supplier's performance of any provisions under the Contract, an equitable adjustment shall be made in the Contract Price or delivery schedule, or both, and the Contract shall accordingly be amended. Any claims by the Supplier for adjustment under this clause must be asserted within thirty (30) days from the date of the Supplier's receipt of the CSIR New Delhi 's change order.

2.16 Contract Amendments

- Subject to the relevant GCC Clauses, no variation or modification of the terms of the Contract shall be made except by written amendment signed by the parties.

2.17 Assignment

- The Supplier shall not assign, in whole or in part, its obligations to perform under the Contract, except with the CSIR New Delhi 's prior written consent.

2.18 Subcontracts

- The Supplier shall notify the CSIR New Delhi in writing of all subcontracts awarded under this Contract if not already specified in the bid. Such notification, in his original bid or later, shall not relieve the Supplier from any liability or obligation under the Contract.

2.19 Delays in the Supplier's Performance

- Delivery of the Goods and performance of the Services shall be made by the Supplier in accordance with the time schedule specified by the CSIR New Delhi as per GCC clauses.
-
- If at any time during performance of the Contract, the Supplier or its sub-contractor(s) encounter conditions impeding timely delivery of the Goods and performance of Services, the Supplier shall promptly notify the CSIR New Delhi in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the Supplier's notice, the CSIR New Delhi shall evaluate the situation and may, at its discretion, extend the Supplier's time for performance with or without liquidated damages, in which case the extension shall be ratified by the parties by amendment of the Contract.
- Except as provided under GCC, a delay by the Supplier in the performance of its delivery obligations shall render the Supplier liable to the imposition of penalty pursuant to GCC Clauses, unless an extension of time is agreed upon pursuant to GCC without the application of liquidated damages.

2.20 Liquidated Damages.

- Subject to GCC Clauses if the Supplier fails to deliver any or all of the Goods or to perform the Services within the period(s) specified in the Contract, the CSIR New Delhi shall, without prejudice to its other remedies under the Contract, deduct from the supplier's bill, as penalty, a sum equivalent to 1 % per week and the maximum deduction is 10% of the contract price of the delivered price of the delayed Goods, delayed installations or unperformed Services for each week or part thereof delay until actual delivery or performance. Once the maximum is reached. the CSIR New Delhi may also consider termination of the Contract pursuant to GCC Clause .

2.21 Termination for Default

- The CSIR New Delhi may, without prejudice to any other remedy for breach of contract, by written notice of default sent to the Supplier, terminate the Contract in whole or part:
- If the Supplier fails to deliver any or all of the Goods within the period(s) specified in the purchase order, or within any extension thereof granted by the CSIR New Delhi pursuant to GCC Clause. or
- If the Supplier fails to perform any other obligation(s) under the Contract.
- If the Supplier, in the judgment of the CSIR New Delhi has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.
- 'For the purpose of this Clause:
- "Corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution.
- "Fraudulent practice: a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non- competitive levels and to deprive the Borrower of the benefits of free and open competition; ",
- In the event the CSIR New Delhi terminates the Contract in whole or in part, pursuant to GCC Clause, the CSIR New Delhi may procure, upon such terms

and in such manner as it deems appropriate, Goods or Services similar to those undelivered, and the Supplier shall be liable to the CSIR New Delhi for any excess costs for such similar Goods or Services. However, the Supplier shall continue the performance of the Contract to the extent not terminated.

2.22 Force Majeure

- Notwithstanding the provisions of GCC Clauses, the Supplier shall not be liable for imposition of liquidated damages or termination for default, if and to the extent that, its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.
- For purposes of this Clause, "Force Majeure" means an event beyond the control of the Supplier and not involving the Supplier's fault or negligence and not foreseeable. Such events may include, but are not limited to, acts of the CSIR New Delhi either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.
- If a Force Majeure situation arises, the Supplier shall promptly notify the CSIR New Delhi in writing of such conditions and the cause thereof. Unless otherwise directed by the CSIR New Delhi in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

2.23 Termination for Insolvency

- The CSIR NEW DELHI may at any time terminate the Contract by giving written notice to the Supplier, if the Supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the Supplier, provided that such termination will not prejudice or affect any right of action or remedy, which has accrued or will accrue thereafter to the CSIR New Delhi.

2.24 Termination for Convenience

- The CSIR New Delhi, by written notice sent to the Supplier, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the CSIR New Delhi's convenience, the extent to which performance of the Supplier under the Contract is terminated, and the date upon which such termination becomes effective.

- The Goods that are complete and ready for shipment within 30 days after the Supplier's receipt of notice of termination shall be accepted by the CSIR New Delhi at the Contract terms and prices.

2.25 Resolution of Disputes

- The CSIR New Delhi and the supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.
- If, after thirty (30) days from the commencement of such informal negotiations, the CSIR New Delhi and the Supplier have been unable to resolve amicably a Contract dispute, either party may require that the dispute be referred for resolution to the formal mechanisms as specified below. These mechanisms may include, but are not limited to, conciliation mediated by a third party, adjudication in an agreed national or international forum, and national or international arbitration.
- In case of Dispute or difference arising between the CSIR New Delhi and a supplier relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Arbitration and Conciliation Act, 1996. The dispute shall be referred to the Director General, Council of Scientific & Industrial Research and if he is unable or unwilling to act, to the sole arbitration of some other person appointed by him willing to act as arbitrator. The award of the arbitrator so appointed shall be final, conclusive and binding on all parties to this order.

2.26 Governing Language

- The contract shall be written in English language. Subject to GCC Clauses, English language version of the Contract shall govern its interpretation. All correspondence and other documents pertaining to the Contract which are exchanged by the parties shall be written in the same language.

2.27 Applicable Law

- The contract shall be governed by the Law of Contract for the time being in force Irrespective of the place of delivery, the place of performance or place of payment under the contract, the contract shall be deemed to have been made at the place from which the acceptance of tender has been issued i.e. CSIR New Delhi.

2.28 Jurisdiction of Courts:

- The courts of the place from where the acceptance of tender has been issued shall alone have jurisdiction to decide any dispute arising out of or in respect of this contract. One month notice will be given by either party for termination of Contract during the tenure of Contract for breach of Clause or otherwise.

2.29 Taxes and Duties

- Suppliers shall be entirely responsible for all taxes, duties, license fees, octroi, road permits especially in Indian supplies incurred until delivery of the goods under contract to the CSIR New Delhi /or as per mutually agreed terms on this aspect.
- For the purpose of all notices, the following shall be address of the CSIR New Delhi and supplier.

**The Joint Secretary (Admn),
Council of Scientific & Industrial
Research, Anusandhan Bhawan, 2-Rafi
Marg,**

New Delhi-110001

Supplier ..

Bid Form Performa 1.1

(On the letter head of the firm submitting the bid document)

To

Joint Secretary (Admin.)
Council of Scientific & Industrial Research,
Anushandan Bhawan, 2-Rafi Marg,
New Delhi-110001

Ref: Tender No.....

Date:..... 2018

Sir,

Having examined the bidding documents and having submitted bid for the same, we, the undersigned, hereby submit the bid for supply of goods and services as per the schedule of requirements and in conformity with the said bidding documents.

We hereby offer to supply the Goods/Services at the prices and rates mentioned in the enclosed schedule of requirement.

We do hereby undertake that, in the event of acceptance of our bid, the supply of Goods/Services shall be made as stipulated in the schedule of requirement and that we shall perform all the incidental services.

We enclose herewith the complete Bid as required by you. This includes: Price Schedule as per schedule of requirement as per Annexure I. Statement of deviations. if any in technical specifications (Proforma 1.2)

We agree to abide by our offer for a period of 90 days from the date fixed for opening of the bid documents and that we shall remain bound by a communication of acceptance within that time. We have also carefully read and understood the terms and conditions of the bid document and we do hereby undertake to supply as per these terms and conditions. It is also Certified that the bidder is: .

A sole proprietorship firm and the person signing the bid document is the sole proprietor/constituted attorney of sole proprietor, Or

A partnership firm, or a company and the person signing the bid document is a partner of the firm and he has authority to refer to arbitration disputes concerning the business of the partnership by virtue of the partnership agreement/by virtue of general power of attorney, Signature of Bidder & Full Address Dated this..... day of 2018.

Details of enclosures:

Telephone No. Fax No. E-mail:

COMPANY SEAL

Perform 1.2 -BID PARTICULARS TO BE ATTACHED WITH THE TECHNICAL BID

1. Name and address of the bidder:
2. Name and address of Manufacturer :
2. Name and address of the Office/person to whom all reference/
Correspondence shall be made for technical Coordination and expediting.
4. Place of Manufacturing.
5. Place of delivery/Place of shipment :
6. Service facilities available.
7. Name & qualification of Technical personals :-
8. Availability of spare parts.
9. Bidder's Proposal number and date:

Signature:

Name:

Designation:

Company:

Date:

COMPANY SEAL

Proforma 1.3

Bid Security Form

Whereas----- “(herein called the bidder) has submitted its bid dated-----

for the supply of ----- herein called the bid

KNOW ALL PEOPLE by these presents that WE -----

country), having our registered office at ----- *(name of bank) of (name Of
(address of bank) (hereinafter
called*

"the Bank"), are bound unto ----- *(name of Purchaser) (hereinafter called "the CSIR
New Delhi ") in the sum of-----*

for which payment well and truly to be made to the said CSIR New Delhi, the Bank binds itself, its successors, and assigns by these presents. Sealed with the Common Seal of the said Bank this _____Day _____ of 2018.

THE CONDITIONS of this obligation are:

1. If the Bidder withdraws its Bid during the period of bid validity specified by the Bidder on the Bid Form; or

2. If the Bidder, having been notified of the acceptance of its bid by the CSIR New Delhi during the period of bid validity:

(a) Fails or refuses to execute the Contract Form if required; or

(b) Fails or refuses to furnish the performance security, in accordance with the Instruction to Bidders.

We undertake to pay the Purchaser up to the above amount upon receipt of its first written demand~ without the Purchaser having to substantiate its demand, provided that in its demand the CSIR New Delhi will note that the amount claimed by it is due to it, owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to and including forty-five (45) days after the period of the bid validity, and any demand in respect thereof should reach the Bank not later than the above date.

Authorized signatory of the
Bank)

Name of Bidder

Proforma 1.4

MANUFACTURER'S AUTHORIZATION FORM

[The Bidder shall require the Manufacturer to fill in this Form in accordance with the instructions indicated. This letter of authorization should be on the letterhead of the Manufacturer and should be signed by a person with the proper authority to sign documents that are binding on the Manufacturer.]

Date: *[insert date (as day, month and year) of Bid Submission]*

Tender No.: *[insert number from Invitation For Bids]*

To: *[insert complete name and address of Purchaser]*

WHEREAS

We *[insert complete name of Manufacturer]* , who are official manufacturers of *[insert type of goods manufactured]* , having factories at *[insert full address of Manufacturer's factories]*, do hereby authorize *[insert complete name of Bidder]* to submit a bid the purpose of which is to provide the following Goods, manufactured by us *[insert name and or brief description of the Goods]* , and to subsequently negotiate and sign the Contract.

We hereby extend our full guarantee and warranty in accordance with Clauses of the General Conditions of Contract, with respect to the Goods offered by the above firm.

Signed: *[insert signature(s) of authorized representative(s) of the Manufacturer]*

Name: *[insert complete name(s) of authorized representative(s) of the Manufacturer]*

Title: *[insert title]*

Duly authorized to sign this Authorization on behalf of: *[insert complete name of Bidder]*

Dated on _____ day of _____, _____ *[insert date of signing]*

|

List of Items

S.No.	Name of Items	Qty.	Technical Specification (Enclosed as per Annexure)
1	Video Conference System (Codec, Camera, Mic, along with Additional Camera, Digital Extender, Long Camera Cable & Camera Mount Slab.	01	Annexure - II
2	Projector along with ceiling mounts kit approx. 6 feet.	02	Annexure - II
3	Wireless Presentation System	01	Annexure - II
4	PTZ Camera	01	Annexure - II
5	Audio Mixer (Rack Mountable)	01	Annexure - II
6	Multiformat twisted pair Transmitter	02	Annexure - II
7	Digital Matrix Switcher & AV Control System	01	Annexure - II
8	HDMI & Control twisted pair Receiver	04	Annexure - II
9	HDMI & Control twisted pair Transmitter	01	Annexure - II
10	7" Tabletop Control touch panel with PoE adapter	01	Annexure - II
11	H.264 Recording processor	01	Annexure - II
12	Gooseneck Microphone (Detachable)	02	Annexure – II
13	Wireless Gooseneck Microphone	04	Annexure – II
14	Motorized Projection Screen	02	Annexure - II
15	Tablet / I-Pad	01	Annexure - II
16	Scaler (VGA Audio to HDMI)	01	Annexure – II
17	4x4 HDMI 4K Matrix Switcher	01	Annexure - II

Technical Specifications – Video Conferencing (Quantity – 1)

S.No. (1)	<u>Video Conferencing System (5 Party or more)</u>			
	Detailed Specification	Compliance	Compliance	Deviation if any / Remarks
1	Package	2 x Full HD 1080p cameras, Full HD 1080p Codec, Microphone, Cables, and Wireless Remote Control		
2	Protocols	H.323 and SIP Compliant		
(a)		H.261, H.263, H.264. The system should support higher Video Compression protocols such as H.264 SVC, H.264 High Profile/H.265, H.239, BFCP, H.263 & H.264 Video error concealment, G.711, G.722, G.722.1 audio protocols, far end camera control		
3	Video Inputs	It should have 2 x HD Camera Interface.		
(a)		It should have another inbuilt 3 x HDMI/DVI/VGA port for PC, Document Camera etc.		
4	Video Outputs	It should have atleast 2 x HDMI/DVI ports to connect displays.		
(a)		It should have additional 1 x HDMI/DVI Port to connect to 3rd display or Recording device.		
5	Main Video Resolutions	Shall work in high definition video resolution of 1080p60fps for live video for both Transmit and receive		
6	Content Resolutions	The system should support 1080p30fps content		
7	Camera	Full HD 1080p 60 fps. 1280 x 1080p CCD/CMOS imager Optical Zoom - 10X or more		
(a)		Field of View - 65 Degrees or Higher Horizontal FOV and 38 Degrees or Higher Vertical Field of View, Camera Should support PAN Range - +/-90° and TILT Range - +/-20°		
(b)		2 cameras need to be supplied - one with 10 mts cable and second with 30mts cable along with OEM supplied Camera wall mounts with necessary extender of same OEM.		
(c)		It should be capable of enhancing video conferencing experience (by adding additional hardware/software in future) with advanced speaker-tracking technology such that it automatically scans the room and seamlessly commands the main camera to appropriately frame the speaker during a call without any manual intervention. The speaker tracking camera should be from the same OEM as the Codec.		
(d)		Both Codec and Camera should be controlled using same remote control.		
(e)		The camera should support minimum 10 Presets		
8	Audio Inputs	It should support 4 nos of Omni Directional Microphones either directly or through array. One Mics should be supplied day one.		
(a)		It should have additional Audio Input for PC Audio, Line in for Integration with external audio systems		
9	Audio Outputs	It should have atleast 1 x HDMI port, 1 x 3.5mm/RCA Stereo Line-Out port for External Audio Integration		
10	Network	Should have 100/1000 Mbps auto speed Ethernet port		
(a)		Support Data Rate of 6 Mbps or more on IP (H.323 and SIP)		
11	Multipoint	The solution should have capability to connect to 4 more locations at up to HD resolution (1+4) from day 1. This can be done by either an internal multipoint license.		
12	Other Ports	Serial/Ethernet control port for integrating with external control system		

13	Other Features	Should work with IPv4 and IPv6 addressing schemes		
(a)		Should support QOS (Quality of Service) definitions		
(b)		Should support H.460.X Firewall traversal protocol		
(c)		Global Directory / Centralized directory support		
14	Power	Should operate on 230v, 50 Hz Power supply		

Technical Specifications – Projector (Quantity – 2)

S.No. (2)	<u>Projector</u>		
	Detailed Specification	Compliance	Deviation if any / Remarks
1	3 LCD projector with 0.76” LCD Panel		
2	Brightness (White / Colour): 7000 Lumens or better		
3	Contrast Ratio: 10,000:1 or more		
4	Native Resolution: WUXGA, 1920 x 1200		
5	Motorised Zoom facility & Lens Factor: 1 - 1,6. There should be an option to change the lens with an Ultra Short throw lens as & when required		
6	Analog Input: VGA, BNC/Composite		
7	Digital Input: 2 HDMI/ 2 DVI, 1 x HD Base T (RX); RJ45 x 1 (with HDCP 2.2)		
8	Output Terminal: VGA / HDBT		
9	Audio Input: Stereo Mini Jack 3x		
10	Control I/O: RS-232C		
11	Others: USB Type A 1 (Wireless LAN, Firmware Update		
12	The projector should have Features like Multi-PC Projection, Split screen, Remote access to check the health of Projector lens etc.		

Technical Specifications – Wireless Presentation System (Quantity – 1)

S.No. (3)	<u>Wireless Presentation System</u>		
	Detailed Specification	Compliance	Deviation if any / Remarks
1	The Wireless Presentation Device to be interfaced with the Auditorium Video switching system over HDMI		
2	The Device should be capable of creating its own Wi-Fi network- user configurable at 2.4 and 5 GHz bands		

3	The Device should be able to display two laptop / desktop / Tabs simultaneously. The laptops should be able to display their contents on the screen with the use of a clickable USB button without any need to interact with organization's local area network		
4	The connected laptops should simultaneously be able to remain connected to internet through their own Wi-Fi		
5	The device should come bundled with minimum two such buttons.		
6	The video transmission should be supported up to 30 fps with synchronized audio		
7	The device should be compatible with Mac, Windows & Linux OS through button and with iOS & Android Tab devices through a freely downloadable app or Airplay feature		
8	The device should support extended display features of laptops		
9	The device should be WPC approved Wireless transmission protocol: IEEE 802.11 a/g/n		
10	Reach: Adjustable with signal strength modulation; max. 30m (100 ft)		
11	Connections: 1x Ethernet LAN 2x (back) + 1x (front) USB Audio analog line out on mini jack socket (3.5mm), digital S/PDIF		
12	The device should be FCC/CE certified		

Technical Specifications – PTZ Camera (Quantity – 1)

S.No. (4)	<u>PTZ Camera</u>		
	Detailed Specification	Compliance	Deviation if any / Remarks
1	Sensor	1/2.8 -3- 2 MP or more	
2	Optical Zoom	Min. 20X or More	
3	Panning Angle	+170 ~ -170° or better	
4	Tilting Angle	+90 ~ -30°	
5	Preset Positions	Min. 100	
6	Video Output (HD) Interface	Ethernet, HDMI, 3G-SDI	
7	Video Output Format support	1080p 60/50 fps, 1080i 60/50 fps, 1080p 30/25fps, 720p 60/50fps, 720p 30/25fps, NTSC/PAL	
8	Camera Control Interface/Protocol	RS-422 / RS232 / Ethernet, Supports PoE	

9	Video S/N Ratio	> 50dB		
10	Shutter Speed	1/1~1/10,000 or better		
11	Focal Length	f=5~94mm		
12	Horizontal Viewing Angle	63° or better		
13	Aperture	F1.6~3.5		
14	Minimum Illumination	Min. 5lux		

Technical Specifications – Audio Mixer (Quantity – 1)

S.No. (5)	<u>Audio Mixer</u>		
	Detailed Specification	Compliance	Deviation if any / Remarks
1	Digital signal processor of reputed make complete with Power Cord, User Manual as per specs below		
2	Inputs & Outputs : 16 balanced or unbalanced Mic/Line level or better		
3	16 independent channels of high performance AEC, as well as selectable noise cancellation.		
4	Selectable 48 volt phantom power for the 16 inputs, allowing the use of condenser microphones		
5	32/64-bit floating point audio DSP processing		
6	Studio grade 24-bit/48 kHz analog-to-digital and digital-to-analog converters		
7	Input to output latency should be low		
8	Parameters for DSP processing, levels, or audio routing should be saved as presets.		
9	Digital I/O ports to be provided, so that the DSP can be programmed to sense and then respond to external triggers such as mic activation, muting, and recall of presets.		
10	Should be accessible/control the various port parameters through built in Web Server.		
11	Cross talk: <-110 dB, 20-20,000 Hz, 1kHz, channel to-channel		
12	Latency: Mic/Line inputs to outputs: 20 ms, AEC and NC processing enabled		
13	Acoustic Echo Cancellation Span: 200 ms		
14	The DSP should be provided with a telephone interface card to enable connectivity on PSTN line for audio Conference		

Technical Specifications – Multiformat twisted pair Transmitter (Qty. – 2)

S.No (6)	<u>Multiformat twisted pair Transmitter</u>			
	Descriptions	Specifications	Compliance	Deviation if any / Remarks
1	Type	Two or more input twisted pair transmitter, Wall plate type.		
2	Video Inputs:	1 HDMI, 1 VGA		
3	Video Output	1 Twisted pair/ HDBaseT on RJ 45		
4	Audio Inputs:	1 stereo analog audio, embedded audio on HDMI/Display port input		
5	Switching	Should have Automatic switching /Auto adjusting between inputs		
6	Transmission Distance	For audio, video, power: 70 mtrs or more		
7	HDCP & EDID	Should be HDCP compliant & have EDID management		

Technical Specifications –/ Digital Matrix Switcher & AV Control System - (Quantity – 1)

S. No (7)	<u>Digital Matrix Switcher & AV Control System</u>			
	Description	Specifications	Compliance (YES/NO)	Deviation if any / Remarks
	Switcher			
1	Input	6 or more HDMI, 2 or more Twisted pair / HDBaseT on RJ45		
2	Output	3 or more HDMI , 3 or more Twisted pair / HDBaseT on RJ45		
3	Resolution Support	4K or better		
4	Audio Input / Output	Input: Embedded for all HDMI input Output: Minimum 2x or more Stereo balanced/unbalanced audio		
5	HDMI audio Features	Support HDMI audio de-embedding		
6	HDCP & EDID	Should be HDCP compliant & have inbuilt EDID management		
7	Twisted Pair Input/output	Should support transmission of audio, video, control & power up to 70mtrs or more over single shielded twisted pair cable		
8	Scaling	Should have scaled Twisted pair output or Scaling capability in the HDMI & Control Twisted pair receiver mentioned in BOQ		
9	Controls	Front panel buttons with indication, Ethernet/ RS 232		
10	AV Control System			
11	Control System	The Control Processor and Switcher should be of same make.		
12	Control Ports	Should have min 3x RS232, 2 or more IR, 4 or more Relay, 2 or more IO port, 1 x Ethernet control port		
13	Memory	SDRAM: 512 MB or more, Flash: 4GB or more		

Technical Specifications – HDMI & Control twisted pair Receiver (Qty. – 4)

S.No. (8)	<u>HDMI & Control twisted pair Receiver</u>			
	Descriptions	Specifications	Compliance (YES/NO)	Deviation if any / Remarks
1	Input	1 Twisted pair/HDBaseT on RJ 45		
2	Output	HDMI, Analog Audio, Controls (RS 232/IR)		
3	Range	For audio, video, power, control: Atleast 70mtrs or more		
4	HDCP & EDID	Should be HDCP & EDID compliant		
5	Resolution	4K or more		
6	Scaling	Should have scaling feature or inbuilt in twisted pair/HDBaseT output of Digital matrix switcher		

Technical Specifications – HDMI & Control twisted pair Transmitter - (Qty. – 1)

S.No. (9)	<u>HDMI & Control twisted pair Transmitter</u>			
	Descriptions	Specifications	Compliance (YES/NO)	Deviation if any / Remarks
1	Video Inputs:	HDMI, Controls (RS 232/IR)		
2	Video Output	1 Twisted pair/ HDBaseT on RJ 45		
3	Resolution	4k or more		
4	Transmission Distance	For audio, video, power: 70 mtrs or more		
5	HDCP & EDID	Should be HDCP compliant & have EDID management		

Technical Specifications – 7" Tabletop Control touch panel with PoE adapter-(Qty. -1)

S.No. (10)	<u>7" Tabletop Control touch panel with PoE adapter</u>			
	Description	Specification	Compliance (YES/NO)	Deviation if any / Remarks
1	Type	7" or more Diagonal, capacitive touchscreen or better with table top mounting, of the same make of AV Control system for proper compatibility		
2	Touch Screen	Capacitive / Resistive		
3	Resolution	1024x600 or better		
4	Brightness	350 cd/m2 (Nits) or better		
5	Contrast	700:1 or better		
6	Backlit	LED		
7	PoE	Should support Power over Ethernet & supplied with a PoE adapter		
8	Memory	2 GB or more		

Technical Specifications – H.264 Streaming & Recording processor - (Qty. -1)

S.No. (11)	<u>H.264 Streaming & Recording processor</u>			
	Description	Specifications	Compliance (YES/NO)	Deviation if any / Remarks
1	Inputs Signal	HDMI / DVI digital video (HDCP compliant), 1x HDMI/DVI/ HD-SDI, 1 x analog input		
2	Input resolution support	640x480 upto at least 1920x1200 including 1080p/60		
3	Output	HDMI/DVI for local output, 1 RJ45 streaming & network recording output		
4	Audio Input	1 or more stereo		
5	Recording	30 GB or more HDD / through Memory card, USB for external drive upto at least 1TB and defined network storage directory		
6	PIP	Should have two HD input PIP and picture by picture capability and have high quality inbuilt scaling		
7	Streaming Capability	Yes with resolution support upto 1080p, H.264 or better compression supporting protocol RTP/RTSP/RTMP		
8	Controls	RS232/ Ethernet, Front button panel / LCD		

Technical Specifications Gooseneck Microphone (Detachable) - (Qty. -2)

S.No. (12)	<u>Gooseneck Microphone</u>			
	Description	Specifications	Compliance (YES/NO)	Deviation if any / Remarks
1	Microphone type	Pre-polarised condenser microphone		
2	Microphone Pick-up pattern	Hypercardoid/Supercardoid		
3	Frequency response	50 Hz –17 kHz		
4	Nominal impedance @ 1KHZ	50 Ohm or more		
5	Max. sound pressure level	122 db to 130db		
6	Eqvt Noise Level	Less than 27 db		
7	Operating Voltage	24V to 48V DC Phantom Power		
8	Goose Neck Length	The length of the gooseneck microphone should not be more than 10"		
9	Design	The Mic should be supplied with OEM Base stand with switch. The switch should be programmable. The base should be with indicator		
10	LED Indicator	The Mic should have color LED ring indicator		

Technical Specifications – Wireless Gooseneck Microphone - (Qty. 4)

S.No. (13)	<u>Wireless Gooseneck Microphone</u>			
	Description	Specifications	Compliance (YES/NO)	Deviation if any / Remarks
1	Microphone Type	Cardoid condenser Mic		
2	AF Frequency response	20Hz to 15 KHz		
3	Max Sound Pressure Level	122db-130db @1 Khz		
4	Eqvt Noise Level	27 Db		
5	Signal-to-noise ratio	> 90 dB(A)		
6	Goose neck length	> 40cm		
7	Audio output level (balanced)	max. 18 dBu		
8	RCA output level (unbalanced)	max. +6 dBu		
9	RF sensitivity	< -90 dBm		
10	Dynamic range	> 100 dB(A)		

11	Display	LED		
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Technical Specifications – Motorized Projection Screen - (Qty. 2)

S.No. (14)	Motorized Projection Screen			
	Specifications	Compliance (YES/NO)	Deviation if any / Remarks	
1	123" Diagonal, 16:10 Aspect, Motorised Projection Screen (Approximate 9'x5.5') The Screen should Have built in control relays & remote.			

Technical Specifications – Tablet - (Qty. 1)

S.No. (15)	Tablet/I PAD			
	Specifications	Compliance (YES/NO)	Deviation if any / Remarks	
1	9.5 inch or more with IPS Technology, 2048x1536-pixel resolution or better			
2	32 GB Internal Storage			
3	2 GB RAM			
4	8 MP Primary Camera 1.2 MP Front or more			
5	The device should have WIFI built in Wi-Fi (802.11a/b/g/n/ac); dual band (2.4GHz and 5GHz);			
6	The device shall have app for room control system			

Technical Specifications – VGA + Audio to HDMI Scaler - (Qty. 1)

S.No (16)	VGA + Audio to HDMI Scaler			
	Descriptions	Specifications	Compliance (YES/NO)	Deviation if any / Remarks
1	Video Inputs/Type:	1 female 15 pin HD		
2	Video Type	RGBHV/Component		
3	Video Output	1 female HDMI		
4	Resolution Supports	From 640x480 upto 1080p or more		
5	Audio Input	1 unbalanced stereo on 3.5 mm mini stereo jack or captive screw		
6	Audio Output	HDMI Audio embedding		
7	EDID	Should have EDID emulation for proper communication with VGA source		
8	Control	Should have RS232 control		

Technical Specifications – 4x4 HDMI 4K Matrix Switcher - (Qty. 1)

S.No (17)	4x4 HDMI 4K Matrix Switcher			
	Description	Specifications	Compliance (YES/NO)	Deviation if any / Remarks
1	Input	4x HDMI or more		
2	Output	4 x HDMI or more		
3	Resolution Support	4K		
4	Audio Input / Output	Input: Embedded for all HDMI input		

		Output: Minimum 2x Stereo balanced/unbalanced audio (inbuilt or external through audio de-embedder)		
5	HDMI audio Features	Support HDMI audio de-embedding inbuilt or through external de-embedder		
6	HDCP & EDID	Should be HDCP compliant & have inbuilt EDID management		
7	Controls	Front panel buttons, Ethernet/ RS 232		
8	Scaling	Should have 1 or more 4K scaled output inbuilt or provided with external 4K scaler of same make		

Price Bid Format

S.No.	Name of Items	Qty. (a)	Price per Unit (b) (in Rs.)	Total Price $c=(a*b)$ (in Rs.)	Taxes (if any) (d) (in Rs.)	Total price (in Rs.) $e= (c+d)$
		A	B	C	D	E
1	Video Conference System (Codec, Camera, Mic, along with Additional Camera, Digital Extender, Long Camera Cable & Camera Mount Slab.	01				
2	Projector along with ceiling mounts kit (approx. 6 feet.)	02				
3	Wireless Presentation System	01				
4	PTZ Camera	01				
5	Audio Mixer (Rack Mountable)	01				
6	Multiformat twisted pair Transmitter	02				
7	Digital Matrix Switcher & AV Control System	01				
8	HDMI & Control twisted pair Receiver	04				
9	HDMI & Control twisted pair Transmitter	01				
10	7" Tabletop or more Control touch panel with PoE adapter	01				
11	H.264 Recording processor	01				
12	Gooseneck Microphone (detachable)	02				
13	Wireless Gooseneck Microphone	04				
14	Motorized Projection Screen	02				
15	Tablet / I-pad	01				
16	Scaler (VGA Audio to HDMI)	01				
17	4x4 HDMI 4K Matrix Switcher	01				
18	Total (In amount and Words)					

Optional Item (AMC Cost for above items for Two years after expiry of 3 year Warranty Period)-

S.No.	Name of Items	Quantity	Taxes (if any) (d) (in Rs.)	Total price (in Rs.)
1	AMC for the 4 th years along with technical support services	01		
2	AMC for the 5 th years along with technical support services	01		
	Total (In amount and Words)			

NOTE:-

- 1) The quantity mentioned above are indicative , however payments would be made on actual basis .
- 2) The overall L1 would be decided on the Total price of Column. E of Sl. No. 18 of the Price bid.
- 3) In case of any discrepancy in Numeric and words, the words would be considered as final Quote.

Check list

S No.	Documents submitted with Technical Bid (Part – 1)	Compliance Yes /no	Remarks/ deviation , if any
1.0	Have you submitted the EMD?		
2.0	Eligibility /pre- qualification Conditions		
	The Bidder should be in similar business for last 3 years for as on 31/03/18 for supply/commissioning of Audio / Video devices. (Documentary proof viz Registration as Company/Partnership deed, along with two purchase orders of Audio/ Video devices)		
a	The Bidder should have a average annual turnover of Rs. 5 Crore (Rupees Five crore) for last three consecutive years 2014-15 and 2015-16, 2016-2017 (Documentary proof of balance sheet needs to be submitted).		
c	The bidder should have executed at least three orders for similar nature i-e of Audio / Video / interface or Audio/Video Integration related devices for any Govt./Public sector/autonomous body/financial institution /academics instt. in last 3 years.		
d	The bidder should have valid authorization certificate from OEM for Audio/Video equipment (Annexure – I) for providing services (Valid documentary Proof may be attached).		
e	The bidder should have presence in NCR/New Delhi, with service/ Maintenance Centre and service engineers. (Details of Service Centre's and Service engineers may be submitted).		
f	The bidder should have valid ISO 9001:2008 or revised/higher certificate (Valid documentary proof may be attached).		
g	The bidder should have valid documentary proof for GST No./Service Tax registration number, Income Tax registration (PAN). (The copies of relevant certificates along with valid Income Tax return filed for past three financial years i.e., 2014-15 and 2015-16, 2016-2017 must be submitted with Technical part of the bid).		
h	Have you attached the life cycle/Roadmap details of Quoted Items as per Annexure-I.		
i	Undertaking on Company's Letterhead stating that all the tender conditions are acceptable to the bidder.		

SLA (Service Level Agreement)

The successful bidder has to enter into a SLA as per the terms and conditions as mentioned below:-

3.1 Purpose

The purpose of this Service Level Agreement (SLA) will be to formalize an agreement between CSIR and the vendor to provide the Warranty and technical support services, at agreed-upon cost. This document will be intended to provide warranty and support services with general terms & conditions as mentioned hereunder: -

3.2 Technical Support Services Requirements:

Provisioning of onsite Technical support staff for Warranty and technical support services:

The successful Bidder, (herein referred to as service provider) for the purpose of Warranty and onsite technical support services for VC /AV system of CSIR, shall make available the onsite services of minimum one trained technical support staff /Resident engineers (REs) along with backend escalations on all working days between 9.00 AM to 5.30 PM at CSIR Hq. and the activities to be carried out by technical support staff/Resident Engineers (REs) for VC facility are as following: -

- The REs would be responsible for making VC sessions to and from all remote sites operational as when required during the working hours of offices.
- The REs shall take proactive measures to test the functionality of VC equipment on daily basis and also the matter like working of VC/ AV equipment and connectivity etc. besides taking up the advice of any of the issues, if needed from escalations provided by contractor OR from the OEM and backend from Contractor.
- The REs shall submit the report (mentioning the VC session, failure of event etc.) on regular basis to IT Division and his services can be requisitioned on holidays or after office hours on emergent occasions without any charge.
- The provision of the services to CSIR by the REs, shall not in case construe any right on him to claim any employment from CSIR.
- The Service provider shall provide the replacement of the RE, if in case the current resident engineer fails to attend the site due to any unavoidable circumstances.

- The contractor shall provide the replacement of the technical support staff/ RE, if in case the current resident engineer fails to provide the satisfactory services on site.

3.3 Time Frame to rectify faults, replacement of parts/subsystem and Penalties

- Comprehensive Maintenance Service calls, for all the equipment shall be attended to within 2 (Two) hours of receipt of the service call, either over phone or in person in case the parts gets faulty.
- In case the complaint is not addressed within 24 hours of raising the complaint the Bidder has to provide a standby system within 48 hours for satisfactory operation, failing which a penalty may be charged @0.25% of the contract value per day subject to a maximum of 10% of the warranty charges of that system/item for delayed period.
- The contractor shall ensure that the equipment is in good working condition and is with full configuration while handing over at the end of the contract period.

3.4 Vendor warrant and represents to the CSIR that:

- ☐ There shall be no limitation of liability in case of any damages for bodily injury (including death) and damage to real property and tangible personal property, consequent to jobs undertaken by the contractor.
- ☐ Neither this Agreement nor the SLA grants or creates any rights, benefits, claims, obligations or causes of action in, to or on behalf of any person or entity other than between the respective Parties to this Agreement or the SLA, as the case may be.

3.5 Excusable Calls:

- ☐ Any Failure, which is agreed due to uncontrollable parameters, like Power. Network Jam, etc...
- ☐ Downtime planned for prescheduled changes / Maintenance activities
- ☐ Any failure that is due to end user operational errors, non-standard products
- ☐ Unavoidable natural / unnatural calamities, accidents etc...

3.6 Contract Period:

- The warranty contract will be signed initially for the period of 3 years, which can be extended for further period of two year on 1+1 basis per year under AMC subject to the satisfactory performance and approval by CSIR and the bidder would be

providing the technical support services for additional 10 working days after the expiry of warranty contract without any extra cost.

- The contract can be terminated at any point of time, without any notice Period, if the performance is found to be unsatisfactory.
- CSIR reserves the right to change of resources if not found capable or Competent to perform the assigned functions.

3.7 Preventive Maintenance & Breakdown in services

- Regular preventive maintenance visits shall be made by the firm at least once in THREE MONTHS to ensure upkeep of the equipment. This would involve cleaning of the VC systems, upgradation of Software version. Any fault brought to the firm's notice either during such routine calls or otherwise informed by CSIR officials, shall be arrange to be responded.
- The preventive maintenance of the system should be carried out in the presence of the CSIR's personnel.
- A schedule for preventive maintenance will be drawn by the contractor and submitted to the IT Division well in advance. It will be in such a manner that all the equipment falling within the purview of the contract is covered in a systematic manner every three months.
- Suitable reports will be submitted to the CSIR at weekly intervals or intervals as specified by the CSIR.
- Unscheduled on-call corrective and remedial maintenance services are to be given to rectify the malfunctioning of the system. This will include supply and replacement of parts.

3.8 Other General term & Conditions

- For provision of the above maintenance services, Service Engineer shall attend to the service calls at various sites within CSIR and its premises as per locations mentioned in annexure I. The charges quoted shall include the cost of the services of resident engineers. No TA/DA is admissible.
- CSIR reserves the right to qualify the service engineer. Before posting the resident service engineer to CSIR's site, clearance should be taken, duly furnishing the bio-data of the engineer to be posted along with his experience particulars.

- Resident engineers posted by the contractor shall be available throughout the working hours on all working days. Replacement service engineer shall be posted, if the regular service engineer is on leave etc. In case of absence of any service engineer at the site, due to whatever reason, a penalty of Rs.500 respectively per day will be levied.
- All leave and/or absence of the Service Engineer posted at CSIR will have to be planned in advance and proper replacement to be made available. In order to meet the contingency arising out of sudden and unplanned absence, the Service Provider may get the profile of panel of Engineer proposed to be substituted, approved from CSIR at the commencement of the contract and at such intervals as required.
- CSIR reserves the right for addition OR withdrawal of equipment/system/subsystem during the contract period. For addition of any new equipment, the maintenance charges for similar additional items listed under category will be as per the rates quoted for those items. For withdrawal of equipment, the rates will be deducted on pro-rata basis for the period not covered. The maintenance charges for any similar additional items will be as per the rates quoted and will be on pro-rata basis where the period of maintenance support is lesser than the contract period of 01 year. In case of withdrawal of equipment by CSIR, from the purview of the contract, the maintenance charges will be reduced as per the rates quoted for such items for such periods. Acceptance of this condition shall be clearly mentioned with the quotation.
- CSIR also reserve the right to upgrade the equipment to meet its changing needs, as and when required. The VC/AV system and accessories, being assets of CSIR may be subjected to intra-departmental transfer of assets including relocating them at a different place. The bidder should extend the service to install the system at the new location without additional cost. The tenderer should undertake such up-gradation/ replacement/ transplantation of such components without additional cost. In case of replacement the replaced device should be of the same make (if available) as of faulty device otherwise feature of the device either be of equivalent or higher.
- **Quantities:** The quantities of various items given in the Schedules (Annex– I) for provision of warranty and technical support services are only indicative and are for

the guidance of the contractor. As far as possible, they have been assessed correctly but are likely to vary during the execution of the work. However, the allied services to be provided is independent of the number / type / make of the equipment's available at the locations mentioned in the schedule and shall also include all the equipment's to be added in the future, during the currency of the contract. No increase in the service charges is permissible for such addition of equipment

- **Safety Norms:** The Following Safety Norms must be followed by the Contractor
 - (a) The contractor should take all precautionary measures in order to ensure the protection of his own personnel moving about or working on the CSIR premises, and should conform to the rules and regulations of the CSIR.

The Contractor should abide by all CSIR regulations in force from time to time and ensure that his representatives, agents or sub-contractors or workmen follow the same.

The contractor should ensure that unauthorized, careless or inadvertent operation of installed equipment, which may result in accident to staff, and / or damage to equipment does not occur.

The Contractor should indemnify and keep the purchaser indemnified and harmless against all actions, suits, claims, demands, costs, charges or expenses arising in connection with any accident, death or injury, sustained by any person or persons within the CSIR premises and any loss or damage to property belonging to the CSIR, sustained due to the acts or omissions of the contractor irrespective of whether such liability arises under the workmen's compensation act or the fatal accidents act or any other statute in force from time to time.