

# अखिल भारतीय आयुर्विज्ञान संस्थान, रायपुर (छत्तीसगढ़)

All India Institute of Medical Sciences, Raipur (Chhattisgarh)

## <u>खण्डन / DISCLAIMER</u>

यह निविदा अखिल भारतीय आयुर्विज्ञान संस्थान, रायपुर (छ.ग.) के लिये बोलीदाताओं / फर्म / एजेंसी इत्यादी से प्रस्ताव नही बल्की प्रस्ताव प्राप्त करने का निमंत्रण है संविदात्मक दायित्व तब तक नही होगा जब तक औपचारिक अनुबंध पर हस्ताक्षर नही किया जाता और चयनित बोलीदाताओं / फर्म / एजेंसी इत्यादी के साथ एम्स रायपुर के विधिवत अधिकृत अधिकारियों के द्वारा निष्पादित किया गया हो।

This tender is not an offer by the All India Institute of Medical Sciences, Raipur, but an invitation to receive offer from bidders/firm/agency etc. No contractual obligation whatsoever shall arise from this tender process unless and until a formal contract is signed and executed by duly authorized officers of AIIMS, Raipur with the selected bidder/firm/agency.



## अखिल भारतीय आयुर्विज्ञान संस्थान, रायपुर (छ.ग) के टर्नकी बेसिस पर रोगी प्रबंधन सिमुलेशन और कौशल लैब की खरीद आपूर्ति हेतु निविदा आमंत्रण सूचना

## Notice Inviting Tender for "Procurement of Patient Management Simulation & Skill Lab on Turnkey Basis" <u>At</u>

## <u>All India Institute of Medical Sciences, Raipur</u>

Published Date	28.06.2019
Bid Document Download / Sale Start Date	29.06.2019 at 10:00 am
Clarification Start Date	29.06.2019 at 11:00 am
Clarification End Date	03.07.2019 at 17:00 pm
Pre bid meeting	05.07.2019 at 15:30 pm
Bid Submission Start Date	10.07.2019 at 10:00 am
Bid Submission End Date	20.07.2019 at 18:00 pm
Bid Opening Date	22.07.2019 at 15:30 pm

## **CRITICAL DATE SHEET**

Tatibandh, G.E. Road, Raipur -492099 (CG), Tele: 0771- 2577279, 07712971307 Website: www.aiimsraipur.edu.in/www.eprocure.gov.in Email: store@aiimsraipur.edu.in



अखिल भारतीय आयुर्विज्ञान संस्थान, रायपुर, छत्तीसगढ़

All India Institute of Medical Sciences, Raipur (Chhattisgarh) Tatibandh, GE Road, Raipur-492 099 (CG) Website : www.aiimsraipur.edu.in Tele: 0771- 2971307, e-mail: store@aiimsraipur.edu.in

S.No.	Name of the items	Qty.	EMD in ₹
1.	Procurement of Patient Management Simulation &	01	₹ 1490500.00
	Skill Lab on Turnkey Basis		

- Tenders in Two Bids (Technical & Financial Online bids) are invited on behalf of the, Director, All India Institute of Medical Sciences, Raipur from interested and eligible service providers under Open Tender for "Procurement of Management Simulation & Skill Lab on Turnkey Basis". Manual bids shall not be accepted.
- 2. Tender document may be downloaded from AIIMS web site www.aiimsraipur.edu.in (for reference only) and CPPP site https://eprocure.gov.in/eprocure/app as per the schedule as given in CRITICAL DATE SHEET as under.
- **3.** Bid shall be submitted online at CPPP website: https://eprocure.gov.in/eprocure/app.
- **4.** Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
- 5. Tenderer who has downloaded the tender from the AIIMS web site www.aiimsraipur.edu.in and Central Public Procurement Portal (CPPP) eprocurement website <u>https://eprocure.gov.in/eprocure/app</u> shall not tamper/modify the tender form including downloaded price bid template in any manner. In case if the same is found to be tempered/modified in any manner, tender shall be completely rejected and EMD would be forfeited and tenderer is liable to be banned from doing business with AIIMS Raipur.

The Technical bid should include the detailed specifications of main item/equipment and its accessories. All items should be numbered as indicated in the Annexure-I (Any deviation should be clearly mentioned and supporting document should be submitted).

## 6. Manual bid shall not be accepted in any circumstance.

- **7.** The complete bidding process in online bidding, Bidder should be possession of valid digital Signature Certificate (DSC) for online submission of bids. Prior to bidding DSC need to be registered on the website mentioned above.
- 8. Tenderers are advised to follow the instructions provided in the 'Instructions to the Tenderer for the e-submission of the bids online through the Central Public Procurement Portal for e Procurement at https://eprocure.gov.in/eprocure/app'.
- **9. Quotations should be valid for 180 days** from the tender due date i.e. tender opening date. The bidder should clearly indicate the period of delivery & other terms.

- **10.** Relevant literature pertaining to the items quoted with full specifications should be uploaded, where ever applicable.
- 11. Tenderer must provide evidence of having supplied government hospital/ reputed private hospital organizations in India similar nature of items of at least ₹ 2,48,40000.00 of Procurement of Management Simulation & Skill Lab on Turnkey Basis of Tender value in the last three years and the copy of the same should be uploaded.
- 12. The firm should be registered and should have the average annual turnover at least ₹ 4,96,80,000.00 of the bidder in the last three financial years. Copies of authenticated balance sheet for the past three financial years should be uploaded.
- **13.** The tender document must be accompanied by copy of PAN, Certificate of firm/company registration, GST registration.
- **14.** The GST registration details may please be furnished.
- **15.** The quantity shown against each item is approximate and may vary as per demand of the Institute at the time of placement of order.
- **16.** The bidder must be able to provide the product/items within specified time period as prescribed in the Purchase Order, failing which the EMD will be forfeited. Furthermore on completion of the stipulated time period, Purchase Order will be cancelled and award will be given to another qualified bidder with the negotiated terms & conditions as per Institutes norms.
- **17.** In the event of any dispute or difference(s) between the vendee (AIIMS Raipur) and the vendor(s) arising out of non-supply of material or supplies not found according to the specifications or any other cause what so ever relating to the supply or purchase order before or after the supply has been executed, shall be referred to the Director/AIIMS/Raipur who may decide the matter himself or may appoint arbitrator(s) under the arbitration and conciliation Act 1996. The decision of the arbitrator shall be final and binding on both the parties.
- **18.** The place of arbitration and the language to be used in arbitral proceedings shall be decided by the arbitrator.
- **19.** All disputes shall be subject to Raipur Jurisdiction only.
- 20. AIIMS Raipur reserves the rights to accept/reject any bid in full or in part or accept any bid other than the lowest bid without assigning any reason thereof. Any bid containing incorrect and incomplete information shall be liable for rejection.
- **21.** The Tender/Bid will be opened on Store office at AIIMS Raipur Premises.
  - i) Only those financial bids will be opened whose technical bids are found suitable by the expert committee appointed for the concerned instrument/equipment.
  - ii) No separate information shall be given to individual bidders. In incomparable situation, the committee may negotiate price with the technically and financially qualified bidder before awarding the bid.
- **22.** Copies of original documents defining the constitution or legal status, place of registration and principal place of business of the company or firm or partnership, etc.

## 23. <u>Award of Contract</u>

The Purchaser will award the contract to the bidder whose quotation has been determined to be substantially responsive and who has bided the lowest evaluated quotation price.

- i) Notwithstanding the above, the Purchaser reserves the right to accept or reject any quotations and to cancel the bidding process and reject all quotations at any time prior to the award of contract.
- ii) The bidder whose bid is accepted will be notified of the award of contract by the Purchaser prior to expiration of the bid validity period. The terms of the accepted bid shall be incorporated in the purchase order.
- **24.** Normal comprehensive warranty/guarantee and CMC (if applicable) shall be applicable to the supplied goods.
- **25.** Rates should be quoted inclusive of packing, forwarding, postage and transportation charges etc.
- **26.** The competent authority reserves all rights to reject the goods if the same are not found in accordance with the required description / specifications/quality.
- 27. A brochure displaying clearly the product is to be attached with the tender if required.
- 28. Earnest Money: Earnest money by means of a Bank Demand Draft/ FD, a scanned copy to be enclosed. It is also clarified that the bids submitted without earnest money will be summarily rejected. The DD/FD may be prepared in the name of "All India Institute of Medical Sciences, Raipur (AIIMS RAIPUR)". The EMD cost must reach at officer of the Stores Officer Gate no. 5, Medical College Building, 2nd Floor, AIIMS, Raipur before opening of tender.
- i) No request for transfer of any pervious deposit of earnest money or security deposit or payment of any pending bill held by the AIIMS Raipur in respect of any previous supply will be entertained. Tenderer shall not be permitted to withdraw his bid or modify the terms and conditions thereof. In case the tenderer fail to observe and comply with stipulations made herein or backs out after quoting the rates, the aforesaid amount of earnest money will be forfeited.
- ii) Tenders without Earnest Money will be summarily rejected.
- iii) No claim shall lie against the AIIMS Raipur in respect of erosion in the value or interest on the amount of EMD.
- iv) If MSME firm is registered for above tendered item, then the firm will be exempted for submission of EMD amount. Firm must upload scanned copy of following documents in support of exemption.
  - (1) National Small Industries Corporation (NSIC).
- v) The earnest money will be returned/refund to the unsuccessful tenderers after the tender is decided.
- vi) EMD should remain valid for a period of 45 days beyond the final bid validity period. When the tenderer agrees to extend the validity of bid, he shall also extend the validity of EMD suitably.
- 28. In case the supplier requires any elucidation regarding the tender documents, they are requested to contact to the Store Officer, AIIMS Raipur through e-

mail: store@aiimsraipur.edu.in on or before end date of clarification as per critical date sheet.

- 29. The EMD of the successful bidder will be returned to them without any interest after the submission of Security deposit/PSD.
- 30. Other terms and condition applicable as per manual for procurement of goods 2017, GFR-2017 etc.

Stores Officer, AIIMS, Raipur

## Other Terms & Conditions:

## 1. Pre-Qualification Criteria:

- a. Bidder should be the manufacturer/authorized dealer/Distributor/Trader/ Supplier. Letter of Authorization from Manufacturer for the same and specific to the tender should be uploaded in the prescribed place.
- b. An undertaking from the original Manufacturer is required stating that they would facilitate the bidder on regular basis with technology/ product updates and extend support for the warranty as well. The scanned copy of same to be uploaded. (if applicable).

## 2. Performance Security Deposit (PSD):

- a. The successful bidder shall have to submit a Performance Security Deposit (PSD) within 30 days from the date of issue of Letter of Award (LOA). Extension of time for submission of PSD beyond 30 days band up to 60 days from the date of issue of LOA may be given by the competent authority to sign the contract agreement however a panel interest of 15% per annum shall be charged for the delay beyond 30 days. i.e.  $31^{st}$  day after the date of issue of LOA. In case of the contract fails to submit the requisite PSD even after 60 days from the date of issue of LOA the contract shall be terminated duly forfeiting the EMD and other dues if any payable against the contract . The failed contractor shall be debarred from participating in re-tender (if any) for that item.
- b. Successful supplier/firm should submit Performance Security Deposit in favour of "AIIMS, Raipur" and to be received in the Store Office, 2<sup>nd</sup> Floor, Medical College Building, Tatibandh, Raipur (C.G) Pin-492099 before the date of commencement of supply or 30 days from the date of acceptance of the purchase order, whichever is earlier. The Performance Security Deposit to be furnished in the form of FDR/DD/Bank Guarantee & also performance guarantee bond as per given proforma of the tender documents, for an amount covering 10% of the contract value.
- c. The Performance Security Deposit should be established in favour of "AIIMS Raipur" through any Schedule Bank with a clause to enforce the same on their local branch at Raipur.
- d. Validity of the Performance Security Deposit shall be for a period of 60 days beyond of entire warranty period from the date of issue of installation & commissioning.
- e. After completing of warranty period a fresh BG/DD/FDR of 10% of CMC cost will be submitted (if applicable) by the supplier for performance security against CMC validity of this new BG/DD/FDR will be 60 days beyond CMC period. After submission of new security deposits, old security deposit will be released.
- **3. Delivery& Installation**: The successful bidder should strictly adhere to the following delivery schedule supply, installation & commissioning should be effected **within 45 days** from the date of purchase order and this clause should be strictly adhere to failing which administrative action as deemed fit under rules will be taken against the defaulter. Otherwise Liquidation Damages will be imposed as per clause no. 4. Purchase order will be placed as required by consignee.
- **4.** Purchase Order will be placed as per requirement of institute.

- **5. Penalty**: If the suppliers fails to deliver and place any or all the Equipment or perform the service by the specified date as mention in purchase order, penalty at the rate of 0.5% per week of delayed value of goods subject to the maximum of 10% of delayed goods value will be deducted, afterwards another penalty may be imposed.
- 6. Training and Demonstration (if required): Suppliers needs to provide adequate training and demonstration at AIIMS Raipur to the nominated person of AIIMS Raipur at their cost. AIIMS Raipur will not bear any training or living expenditure in this regard. The supplier should arrange for regular weekly visit to the AIIMS, Raipur campus by its technical team and assist in maintenance of the item/equipment within warranty period. Assistance limited to locking companies with manufacturer will not be considered sufficient.
- 7. **Right of Acceptance:** AIIMS, Raipur reserves the right to accept or reject any or all tenders/quotations without assigning any reason there of and also does not bind itself to accept the lowest quotation or any tender. AIIMS, Raipur also reserves the rights to accept all the equipment/instruments in the given tender or only part of it in any given schedule without assigning any reason.
- 8. Validity of the bids: The bids shall be valid for a period of 180 days from the date of opening of the tender. This has to be so specified by the tenderer in the commercial bid which may be extended, if required.
- 9. <u>Risk Purchase & Recovery of sums due:</u>
  - Failure or delay in supply of any or all items as per Requisition / Purchase Order, Specification or Brand prescribed in the tender, shall be treated as 'noncompliance' or 'breach of contract' and the order in part of full be arranged from alternative source(s) at the discretion of the hospital authority and the difference in price has to be recovered from the tenderer as mentioned elsewhere.
  - The amount will be recovered from any of his subsequent / pending bills or security Deposit.
  - In case the sum of the above is insufficient to cover the full amount recoverable, the contractor shall pay to the purchaser, on demand the remaining balance due.
- 10. Installation & Warranty Declaration: Suppliers must give the comprehensive onsite warranty for 05 years (as per the Annexure I) is required from the date of successful installation of item/equipment against any manufacturing defects. In the installation report the model number of instrument and all spares parts/ accessories numbers should be in the line of purchase order. And suppliers must be written in the warranty declaration that "everything to be supplied by us hereunder shall be free from all defects and faults in material, workmanship and shall be of the highest quality and material of the type ordered, shall be in full conformity with the specification and shall be completed enough to carry out the experiments, as specified in the tender document." If any item covered under warranty fails, the same shall be replaced free of cost including all the applicable charges (shipping cost both ways). Installation must be done within stipulated time period from the date of delivery of the item/ equipment as specified in the purchase order.

11. Guarantee/ Warranty, Service, Maintenance: The tenderers must quote for 5 years onsite warranty from the date of completion of the satisfactory installation as certified by the concern Department. The warranty charges shall not be quoted separately otherwise the offer shall be summarily rejected. Also the bidders should submit their quote for subsequent 5 years onsite CMC (include free labour, repair other services & spare parts) but it should not be more than 7% per year of quoted unit price otherwise offer may be summarily rejected. Failure to comply this condition will entail the rejection of the bids. The price comparison shall be taken into account on basic price and post warranty CMC. The amount of CMC would be released to the supplier on successful completion of the maintenance of that particular year duly certified by the user department. The supplier shall ensure regular maintenance service by the appropriate engineer having the technical know-how of the equipment. The supplier shall also ensure the presence of resident engineer in the geographical location of this city of Raipur so that he attends the call without loss of time.

The Supplier should arrange for regular weekly visit to the AIIMS, Raipur campus by its technical team and assist in maintenance of the item/equipment within warranty period. Assistance limited to locking companies with manufacturer will not be considered sufficient.

- **12. Communication of Acceptance:** AIIMS, Raipur reserves all right to reject any tender including of those tenderers who fails to comply with the instructions without assigning any reason whatsoever and does not bind itself to accept the lowest or any specific tender. The decision of this Institute in this regard will be final and binding.
- 13. Guarantee/Warranty, Service, Maintenance: The tenderers must quote for 05 year (as per the Annexure I) onsite warranty from the date of completion of the satisfactory installation as certified by the stipulated committee. The warranty charges shall not be quoted separately otherwise the bid shall be summarily rejected. **Product Quality Certificate** should be attached.
- **14. Insolvency etc.:** In the event of the firm being adjudged insolvent or having a receiver appointed for it by a court or any other under the Insolvency Act made against them or in the case of a company the passing any resolution or making of any order for winding up, whether voluntary or otherwise, or in the event of the firm failing to comply with any of the conditions herein specified AIIMS, Raipur shall have the power to terminate the contract without any prior notice.
- **15. Force Majeure:** If, at any time during the subsistence of this contract, the performance in whole or in part by either party of any obligation under this contract is prevented or delayed by reasons of any war or hostility, act of public enemy, civil commotion, sabotage, fire, floods, exception, epidemics, quarantine restriction, strikers lockout or act of God (hereinafter referred to as events) provided notice of happening of any such eventuality is given by party to other within 21 days from the date of occurrence thereof, neither party hall by reason of such event be entitled to terminate this contract nor shall either party have any claim for damages against other in respect of such non-performance or delay in performance and deliveries have been so resumed or not shall be final and conclusive.

Further, that if the performance in whole or in part of any obligation under this contract is prevented or delayed by reason of any such event for a period exceeding 60 days, AIIMS, Raipur party may, at least option to terminate the contract.

- **16. Breach of Contract:** In case of breach of any terms and conditions as mentioned in agreement/contract, the Competent Authority, will have the right to cancel the contract without assigning any reasons thereof and nothing will be payable by AIIMS, Raipur. In that event the security deposit shall also stand forfeited.
  - False declaration will be in breach of the code of integrity under rule 175 (1) (i) (h) of the General Financial Rules for which a bidder or its successors can be debarred for up to Two Years as per rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law.
- **17. Subletting of Contract**: The firm shall not assign or sublet the contract or any part of it to any other person or party without having prior permission in writing of AIIMS, Raipur, which will be at liberty to refuse if thinks fit. The tender is not transferable.
- **18. Right to call upon information regarding status of contract**: The AIIMS, Raipur will have the right to call upon information regarding status of contract at any point of time.
- **19.** Terms of payment:

## 19.1.

Payment shall be made subject to recoveries, if any, by way of liquidated damages or any other charges as per terms & conditions of contract in the following manner.

## A) Payment for Indigenous Goods

Payment shall be made in Indian Rupees as specified in the contract in the following manner:

- (a)**On delivery:** 70% payment of the contract price shall be paid on receipt of goods in good condition at the consignee premises and upon the submission of the following documents:
- i) Four copies of suppliers invoice showing contract number, goods description, quantity, unit price and total amount with revenue stamp.
- ii) Two copies of packing list identifying contents of each package
- iii)Certificate of origin and certificate of guarantee and warrantee.
- iv)Consignee receipt certificate in original issued by the authorised representative of the consignee.
- (b) **On Acceptance:** Balance 30% payment would be made against 'Final Acceptance Certificate' of goods to be issued by the consignees subject to recoveries, if any, either on account of non-rectification of defects/deficiencies not attended by the supplier or otherwise.

## B) Payment for Imported Goods:

Payment of foreign currency portion shall be made in the currency as specified in the contract in the following manner:

## (a) On Shipment:

Seventy (70) % of the FOR destination price of the goods shipped shall be paid through irrevocable, non-transferable Letter of Credit (LC) in favour of the supplier in a bank in his country in case of Foreign Tenderer and upon submission of documents specified here under:

(i)Four copies of supplier's invoice showing contract number, goods description,

quantity, Unit price and total amount with revenue stamp.

(ii)Original and four copies of the negotiable clean, on-board Bill of Lading/Airway bill, marked freight pre-paid and four copies of non-negotiable Bill of Lading/Airway Bill.

(iii)Four copies of packing list identifying contents of each package.

(iv)Insurance Certificate and a documents also to be submitted for payment of LC confirming that dispatch documents has already been sent to all concerned as per the contract within 24 hours.

(v)Manufacturer's/Supplier's warranty certificate.

(vi)Certificate of origin.

## (b) On Acceptance:

Balance payment of 30% of net FOR price of goods would be made against 'Final Acceptance Certificate' to be issued by the consignee through irrevocable, non-transferable Letter of Credit (LC) opened in favour of the Foreign Principal in a bank in his country, subject to recoveries, if any.

## (c) Payment of Indian Agent Commission:

Indian Agency Commission will be paid to the manufacturer's agent in the local currency for an amount in Indian rupees indicated in the relevant Price Schedule (as per prevailing rate of exchange ruling on the date of contract) and shall not be subject to further escalation/exchange variation. Payment shall be paid in Indian Rupees to the Indian Agent on proof of 100% payment to the Foreign Principal.

## d) Payment for Comprehensive Annual Maintenance Contract Charges:

The consignee will enter into CMC with the supplier at the rates as stipulated in the contract. The payment of CMC will be made on yearly basis after satisfactory completion of said period duly certified by the consignee on receipt of bank guarantee.

- a. The supplier shall not claim any interest on payment under the contract in any circumstance.
- **19.2**Where there is a statutory requirement for tax deduction at source, such deduction towards income tax and other tax as applicable will be made from the bills payable to the supplier rates as notified from time to time.
- **19.3** No payment shall be made for rejected stores. Rejected equipment's must be removed by the supplier within two weeks of the date of issue of rejection advice at their own cost & replace immediately. In case these are not removed these will be auctioned at the risk and responsibility of the suppliers without notice.
- **19.4**Where there is a statutory requirement for tax deduction at source, such deduction towards income tax and other tax as applicable will be made from the bills payable to the supplier rates as notified from time to time.
- **19.5** No payment shall be made for rejected stores. Rejected equipment's must be removed by the supplier within two weeks of the date of issue of rejection advice at their own cost & replace immediately. In case these are not removed these will be auctioned at the risk and responsibility of the suppliers without notice.

## 20. Compulsory Enlistment of Indian Agents

As per the Compulsory Enlistment Scheme of the Department of Expenditure, Ministry of Finance, it is compulsory for Indian agents who desire to quote directly on behalf of their foreign manufacturers/principals, to get themselves enlisted with the Department of Expenditure, through the Central Purchase Organization (e.g. DGS&D).

The compulsory enlistment of Indian Agents under the scheme of Ministry of Finance is simpler and differs from the registration of Indian Agents with the Central Purchase Organization (e.g. DGS&D) described in the earlier paragraphs.

The registration of the foreign manufacturer is not a must for enlisting the Indian Agent under this scheme. No Inspection Report in respect of the foreign manufacturer/principal is necessary.

The enlistment under the scheme is not equivalent to the Registration with DGS&D. Such firms do not enjoy the same status as that of DGS&D registered suppliers. A note to this effect is given in the Enlistment Letter to the firm.

## 21. Custom Duty on Imported Goods

In respect of imported goods, the tenderers shall also specify separately the total amount of custom duty included in the quoted price. The tenderers should also indicate correctly the rate of custom duty applicable for the goods in question and the corresponding Indian Customs Tariff Number. Where customs duty is payable, the contract should clearly stipulate the quantum of duty payable etc. in unambiguous terms. AIIMS, Raipur is exempted from payment of excise duty and is eligible for concessional rate of custom duty. Necessary certificate will be issued as demand. AIIMS, Raipur will not make necessary arrangements for clearance of imported goods at the airport.

## 22. Custom Duty Reimbursement:

The supplier will pay the customs duty wherever applicable, which will be reimbursed by purchaser as per documentary evidence. The custom duty exemption certificate will be provided to the supplier as and when required.

## 23. Good & Service Tax

GST rates applicable on your quoted item may please be informed. Please confirm if there is any (Upward/Reduction) in your Basic Price structure. And you are also requested to pass the Input Credit as per the following Anti Profiteering Clause of GST.

## <u>"Upon Implementation of GST, any reduction in the rate of tax on supply</u> of goods or service or the benefit of input tax credit shall be passed on to AIIMS Raipur by way of commensurate reduction in the prices".

## 24. Fall Clause:

1. Prices charged for supplies under Rate Contract by the supplier should in no event exceed the lowest prices at which he bids to sell or sells the stores of identical description to any other State Government/DGS&D/Public Undertaking during the period of the contract.

- 2. If at any time during the period of contract, the prices of tendered items is reduced or brought down by any law or Act of the Central of State government, the supplier shall be bound to inform Purchasing Authority immediately about such reduction in the contracted prices, in case the supplier fails to notify or fails to agree for such reduction of rates, the Purchasing authority will revise the rates on lower side. If there is a price increase for any product after quoting the rates, the bidder will have to supply the item as per quoted rates. This office will not accept any higher rates after wards.
- 3. If at any time during the period of contract, the supplier quotes the sale price of such goods to any other State Govt./DGS&D and Pubic Undertakings at a price lower than the price chargeable under the rate contract he shall forthwith notify such reduction to Purchasing Authority and the prices payable under the rate contract for the equipment's supplied from the date of coming into force of such price stands correspondingly reduced as per above stipulation.

Any deviation in the material and the specifications from the accepted terms may liable to be rejected and the suppliers need to supply all the goods in the specified form to the satisfaction/ specifications specified in the Purchase order and demonstrate at the their own cost.

## 25. Arbitration:

If any difference arises concerning this agreement, its interpretation on payment to the made there under, the same shall be settled out by mutual consultation and negotiation. If attempts for conciliation do not yield any result within a period of 30 days, either of the parties may make a request to the Director, AIIMS Raipur to settle the dispute by Sole Arbitrator. Sole arbitrator will be appointed by the Director, AIIMS Raipur. In case of such arbitrator refusing, unwilling or becoming incapable to act or his mandate having been terminated under law, another arbitrator shall be appointed in the same manner from among the panel of three persons to be submitted by the claimant. The provision of Arbitration and Conciliation Act, 1996 and the rule framed there under and in force shall be applicable to such proceedings.

## 26. Legal Jurisdiction:

The agreement shall be deemed to have been concluded in Raipur, Chhattisgarh and all obligations hereunder shall be deemed to be located at Raipur, Chhattisgarh and Court within Raipur, Chhattisgarh will have Jurisdiction to the exclusion of other courts.

# L1 firm will be decided on the basis of total price of each item including on-site CMC 05 Year.

Stores Officer, AIIMS Raipur

## **Technical Bid**

The following documents are required to upload by the Bidder along with Technical Bid as per the tender document:

- a) Scanned Copy of EMD Cost must be uploaded.
- b) Please mention that the bidder is Manufacture /Distributor /Dealer / Trader/Supplier relevant document should be uploaded.
- c) In case of distributor/dealer/trader/supplier must be upload tender specific authorization certificate from OEM/ manufacturer (Form C) should be uploaded.
- d) Copy of PAN Card should be uploaded.
- e) Firm/Company registration certificate should be uploaded.
- f) Safety certification from a competent authority BIS or European CE or US (FDA) should be uploaded.
- g) The GST registration details may please be furnished.
- h) Income Tax Return of last three years should be uploaded.
- i) Tenderer must provide evidence of experience/supplied materials as mentioned in tender document should be uploaded
- j) Annual turnover & balance sheet of last three year duly certified by CA as mentioned in tender document should be uploaded.
- k) "Declaration by the Bidder "(Form B) should be uploaded as mentioned in tender document should be uploaded.
- 1) Relevant brochure/catalogue pertaining to the items quoted with full specifications etc.
- m) Tenderer must provide a certificate on letter head that proprietor/firm has never been black listed by any organization should be uploaded.
- n) Form A with duly filled by bidder should be uploaded.
- o) Technical Specifications Compliance Report.
- p) Have you previously supplied these items to any government/ reputed private organization? If yes, attach the relevant poof. Please provide a certificate on letter head that you have not quoted the price higher than previously supplied to any government Institute/Organisation/reputed Private Organisation or DGS&D rate in recent past. If you don't fulfil this criteria, your tender will be out rightly rejected.
- q) An undertaking of manufacturer as per serial no. 1b of tender document page no. 07 in case of Distributor /Dealer / Trader/Supplier should be uploaded.

## PRICE BID

- 1. Price bid in the form of BOQ\_XXXX .xls.
- 2. Custom Duty tariff in the form PDF.
- 3. CMC Price Bid in the form of PDF.
- 4. Miscellaneous sheet in the form of PDF.

## PARTICULARS FOR PERFORMANCE GUARANTEE BOND

**(To be typed on Non-judicial stamp paper of the value of Indian Rupees of Two Hundred)** (TO BE ESTABLISHED THROUGH ANY OF THE SCHEDULED BANK (WHETHER SITUATED AT RAIPUR OR OUTSTATION) WITH A CLAUSE TO ENFORCE THE SAME ON THEIR LOCAL BRANCH AT RAIPUR. BONDS ISSUED BY CO- OPERATIVE BANKS ARE NOT ACCEPTED)

To, The Director All India Institute of Medical Sciences (AIIMS), Tatibandh, GE Road, Raipur-492 099 (CG)

#### LETTER OF GUARANTEE

WHERE AS All India Institute of Medical Sciences (AIIMS) Raipur (Buyer) have invited Tenders vide Tender No.....for purchase of.....AND WHERE AS the said tender document requires the supplier/firm(seller)whose tender is accepted for the supply of instrument/machinery, etc. in response there to shall establish an irrevocable Performance Guarantee Bond in favour of "AIIMS Raipur" in the form of Bank Guarantee for Rs......[10% (ten percent) of the purchase value] which will be valid for entire warranty period from the date of installation & commissioning, the said Performance Guarantee Bond is to be submitted within 30(Thirty) days from the date of Acceptance of the Purchase Order.

This Bank further agrees that the decision of All India Institute of Medical Sciences (AIIMS) Raipur (Buyer) as to whether the said supplier/firm (Seller) has committed a breach of any of the conditions referred in tender document/ purchase order shall be final and binding.

We,.....(name of the Bank& branch) here by further agree that the Guarantee herein contained shall not be affected by any change in the constitution of the supplier/firm(Seller)and/or All India Institute of Medical Sciences (AIIMS) Raipur(Buyer).

Not with standing anything contained herein:

b. This Bank Guarantee shall be valid upto...... (date) and **Claim period should** be beyond six months from the date of validity i.e.(b) above.

Yours truly,

Signat	ure and seal of the Guarantor
Name of the Bank:	
Complete Postal Address:	

## <u>Form-A</u>

## PARTICULARS FOR REFUND OF EMD TO SUCCESSFUL/UNSUCESSFUL BIDDER RTGS/National Electronic Fund Transfer (NEFT)Mandate Form

1	Name of the Bidder	
2	Permanent Account No(PAN)	
3	Particulars of Bank Account	
	a) Name of the Bank	
	b) Name of the Branch	
	c) Branch Code	
	d) Address	
	e) City Name	
	f) Telephone No	
	g) NEFT/IFSC Code	
	h) RTGS Code	
	i) 9 Digit MICR Code appearing on the cheque book	
	j) Type of Account	
	k) Account No.	
4	Email id of the Bidder	
5	Complete Postal Address of the bidder	

## FORM-B

## Declaration by the Bidder:

- 1. I/We have downloaded the tender from the internet site and I/We have not tampered /modified the tender documents in any manner. In case the same is found tampered/ modified, I/We understand that my/our offer shall be summarily rejected and I/We are liable to be banned from doing business with AIIMS Raipur and/or prosecuted as per laws.
- 2. I/We have read and fully understood all the terms and conditions contained in Tender document regarding terms & conditions of the contract& rules and I/we agree to abide them.
- 3. The bidder should not have been blacklisted before at any government organisation
- 4. No other charges would be payable by Client and there would be no increase in rates during the Contract period.

Place:	(Signature of Bidder with seal)
Date:	Name :
	Seal :
	Address :

## Form-C

## MANUFACTURER'S / PRINCIPAL'S AUTHORIZATION FORM

To The Stores Officer, All India Institute of Medical Sciences Raipur

(Name)

For and on behalf of M/s. \_\_\_\_\_ (Name of manufacturers)/Principal

## ANNEXURE-I DETAILED SPECIFICATION

## 1. SPECIFICATIONS FOR UNDERSTANDING PATHO-PHYSIOLOGY THROUGH CARDIO PULMONARY SIMULATOR - 01 Nos.

- i. Simulator must have the following AR features and supplied with necessary software, hardware and Hololens
- ii. Simulator must have the capability that Students should be able to interact with holograms of human anatomy as they learn how to obtain ultrasound views and assess patients.
- iii. Capable to improve learning process for students as they study ultrasound and anatomy.
- iv. Facility to Elevate the AR Simulator hologram above the body to demonstrate interrelated anatomy, heart, lungs, abdomen, circulatory, respiratory and skeletal structures
- v. Facility to walk around the manikin to gain different perspectives of the holographic anatomy.
- vi. Hologram anatomy can be displayed inside the manikin or elevated above the manikin
- vii. Hologram anatomy can be isolated, enlarged, rotated at eye level
- viii. Hologram anatomy can display ultrasound cut plane in real time with the ultrasound transducer
- ix. Hologram anatomy can be overlayed with ultrasound image updated in real time.
- x. 3D Holograms of anatomy using AR Simulator with HoloLens

## A) Echocardiography Module for TTE and TEE

## **Training Modules:**

- Trans Esophageal Echocardiography TEE : System should have at least 30-40 basic task training exercises for students such as:
- a) Basic Probe Movement & Orientation: Time bound exercise, with/without the aid of reference image to help understanding of basic probe handling and movements with metrics.
- b) Setting, Adjustment: Facilitate trainees to optimize best image settings for different views, with adjustments of DOF, Beam angle, Gain & Contrast. Expert can verify the outcome after completion of exercise.
- c) Target Cut Plane: Trainees recognize standard views with this exercise and after completion expert can evaluate the performance.
- **Transthoracic Echocardiography TTE**: System should have at least 60-70 basic task training exercises such as
- a) Basic Probe Movement & Orientation: Time bound exercise, with/without the aid of reference image to help understanding of basic probe handling and movements with metrics.
- b) Measurement: Facilitates the trainees to get the idea about how to use different measurement tools, with/without reference image.

<u>Multimedia Training Course –</u> System should be endorsed and recognized by the reputed and renowned international societies for the standardized courseware

- a) **Focussed Transthoracic Echo Curriculum** System should be supplied with at least 7-8 hours of course content covering principals and applications of TTE examinations to provide learning in a systematic, organized way, the elements of echocardiography that are required in order to achieve competence in focused transthoracic echocardiography.
- b) **Focussed TEE Curriculum-** System should be supplied with at least 7-8 hours of course content covering the principles and application of TEE examinations to provide learning in a systematic, organized way, the elements of transesophageal echo that are required in order to achieve competence in focused transesophageal echocardiography.

## System should have the following features for ultrasound scanning:

- 3D animated augmented reality feature shows ultrasound beam and target structures.
- Spilt screen display with corresponding 2D image.
- Realistic scanning environment(Apart from heart it should renders the liver, ribs, sternum, superior and inferior vena cava, aorta, lungs and vertebral bodies.
- Surrounding anatomical structures (i.e. liver, lungs, and sternum artifacts) are displayed and may be toggled on and off depending on learner's level of comfort.
- Software includes tutorial features to help users identify anatomical structures on augmented reality display.
- Heart rate can be modified on the fly.
- Includes single lead ECG tracing.
- Target Cut Plane feature allows learners to visualize corrects probe positioning.
- Matrix for evaluation of student's performance.
- 3D view includes animated display of organ being scanned, surrounding structures, and 360° view
- Lung and rib artifacts can be toggled on/off
- Ability to load pathologies in stealth mode to hide the name of the pathology from learners
- Software includes tutorial feature to help users identify anatomical structures
- Software includes supporting content for pathologies such as case presentations, medical references
- Intuitive instructional content menu with self-directed learning exercises including probe movement
  - Ability to help learners identify structures with labeled anatomy
  - Ability to freeze the view
  - Self-directed learning tasks include: probe manipulation, obtaining standard views, optimizing image settings and performing measures
- Metrics, reports, images, and video captures may be exported to a USB storage device
- Multimedia ICCU course on point of care ultrasound included with the simulator.
- Mannequin should have ability to be placed in the tilted left lateral decubitus position.

## System should have Realistic Echo Environment:

- Electronic callipers, Area measurements, Contour Measurement, Circumference Measurement, Gain and contrast settings, Depth of field adjustment, Angle Settings.
- M-Mode Bi-Plane Mode Color Doppler Spectral Doppler (Pulsed Wave and Continuous Wave)

## System must have following Pathologies:

Dilated Cardiomyopathy – Severe Biventricular Systolic Dysfunction, Hyperdynamic Left Ventricular Systolic Function, Normal Heart, Recent Anterior Myocardial Infarction with Pericardial Effusion, Anterior Myocardial Infarction in a COPD Patient, Biologic Prosthetic Valve in Aortic Position, Dilated Cardiomyopathy – Mild Left Ventricular Systolic Dysfunction, Dilated Cardiomyopathy – Very Severe Left Ventricular Systolic Dysfunction in a COPD, Patient, Left Pleural Effusion, Left Ventricular Apical Aneurysm with Thrombus, Mechanical Prosthetic Valve (Bileaflet) in Aortic and Mitral Position, Mechanical Prosthetic Valve (Tilting Disk) in Mitral Position, Normal Heart in a COPD Patient, Tamponade, Acute Anterior Myocardial Infarction, Acute Lateral Myocardial Infarction in a COPD Patient, Aortic Valve Infective Endocarditis, Coarse Ventricular Fibrillation, Dilated Cardiomyopathy -Very Severe Left Ventricular Systolic Dysfunction, Dilated Cardiomyopathy – Mild Left Ventricular Systolic Dysfunction in a COPD Patient, Coarse Ventricular Fibrillation, Fine Ventricular Fibrillation., Pulmonary Hypertension, Pulmonary Hypertension in a COPD Patient, Acute Inferior Myocardial Infarction, Acute Lateral Myocardial Infarction, Acute Right Ventricular Myocardial Infarction, Aortic Dissection – Type B, Aortic Stenosis – Valvular, Ballooning Mitral valve – two leaflets, Bicuspid Aortic Valve, Dilated Cardiomyopathy – Severe Left Ventricular Systolic Dysfunction, Myxoma, Right Pleural Effusion, Acute Inferior and Right Ventricular Myocardial Infarction with Ventricular Septal Defect, Acute Inferior Myocardial Infarction with Right Ventricular Myocardial Infarction, Aortic Insufficiency, Atrial Septal Defect – small, Ballooning Mitral Valve, Cardiac Arrest Standstill in a COPD patient, Coronary Artery Disease – Wall Motion Abnormalities in the 3 Coronary Territories, Dilated Cardiomyopathy – Moderate Biventricular Systolic Dysfunction, Left Atrial Appendage Thrombus, Thrombus in Transit Patent Foramen Ovale, Amyloidosis, CMP - Dilated, CMP - Hypertrophic, Ebstein's Anomaly - ASD, LV Apical Thrombus, Mitral Valve Prolapse, Mitral Valve - Rheumatic Disease, Myxoma, Takotsubo, VSD (CIV) Post-Infarct,

Abdominal Compartment Syndrome, Dynamic Right Ventricular Outflow Tract Obstruction, Floating Pulmonary Embolism, Full Stomach, Inferior Vena Cava Stenosis, Isolated Right Arterial Tamponade, Left Ventricular Outflow Tract Obstruction, Mechanical Right Ventricular Outflow Tract Obstruction, Reduced Mean Systemic Pressure (Reduced Preload) From Liver Abscess, Reduced Mean Systemic Pressure (Respiratory Variation Of Superior Vena Cava, Right Pneumothorax And Right Heart Collapse, Right-sided Carbon Dioxide Or Air Embolism

## Basic Equipment's (Hardware):

- Mannequin
- Computer Including keyboard, mouse, cable and screen
- 21" TFT monitor
- Transducers:a) Phased Array Transthoracic Echocardiography (TTE) Probe
   b) Trans Esophageal Echocardiography (TEE) Probe
   c) Router and Hololens

<u>Mannequin</u>: Should have realistic tactile features for enhance learning, depressible abdomen, palpable ribs and sternum & depressible interspaces. Should have ability to be placed in the tilted left lateral decubitus position

## Downloadable Software Upgrades:

• Capable of downloading automatic software updated from the central server.

# B) Focussed Assessment Sonography for Trauma with TTE and TEE facility (Customer must be able to use any make of Ultrasound Machine)

- FAST, TEE and TTE Training Model
- Should be an extremely realistic combination TTE, TEE, pericardiocentesis and Focused Assessment with Sonography for Trauma FAST exam ultrasound training model
- Should be excellent for training users to develop and practice the skills necessary to perform transthoracic echo (TTE), transoesophageal echo (TEE), pericardiocentesis and FAST trauma exams using ultrasound imaging
- Model should have realism that makes training better: all structures match the sonographic acoustic characteristics of real human tissue providing uncompromising image quality
- Must be a life size ultrasound training model should contain anatomically correct anatomy including; non-beating heart, lungs, ribs, liver, articulating head and jaw, and pericardial fluid
- Heart should contain accurate anatomy including left & right ventricle, left and right atria, mitral valve, tricuspid valve, aortic valve, pulmonic valve, left atrial appendage, pulmonary arteries, pulmonary veins, ascending aorta, SVC, and IVC for extremely realistic imaging
- Model should offer the same imaging challenges as found in a human patient as applying the adequate transducer pressure in order to obtain images, bowel gas and intercostal access
- Should have adjustable internal bleeding levels allow users to individually vary the training scenarios based on the scenarios being presented
- Should have dynamically adjust internal bleeding states around the liver, spleen, heart, and bladder simulating a wide range of pathological scenarios
- Should be a fully image able upper and lower torso; contains the liver, gallbladder, kidneys, spleen, heart, pericardial fluid, lungs, ribs, bowel, bladder, stomach, and skeleton allowing users to image the internal organs while encountering the imaging challenges found in the human patient
- Should be excellent for 2-D, 3-D, and 4-D training
- Should be able to train clinicians to develop and practice cardiac ultrasound echocardiography exams and pericardiocentesis procedures
- Should perform well using any medical ultrasound imaging system equipped with an abdominal transducer.
- Should have 5 years Warranty and CMC for 5 years.

## Note: User Training must be provided by trained faculty. (Train the Trainer Program).

## 2. SPECIFICATION FOR WIRELESS MEDICAL AND TRAUMA MANAGEMENT SIMULATOR (ADULT MALE WITH VALIDATED PHYSIOLOGY) - 01 Nos

The human patient simulator should comprise of a life like adult male mannequin, integrated with CPR analysis which must be compliant with American Heart Association's 2015 guidelines with correct hand placement, depth, and rate of compressions being captured with following specifications :-.

- 1. It should employ multiple models of validated human physiology including cardiovascular system, pulmonary system, neuromuscular system, and central nervous system. The models should allow the patient to exhibit clinical signs (e.g., spontaneous breathing, eyelid blinking) and monitored parameters (e.g., electrocardiogram, blood pressure) and should automatically respond to therapeutic intervention without any/ minimal input from the instructor.
- 2. The mannequin should be controlled completely wirelessly and should not be connected to any control system/instructor computer through wires/hoses.
- 3. The mannequin should have a realistic skeletal structure, providing true-to-life articulated motion.
- 4. The simulator should have facilities to teach the following skills
  - a. Intravenous cannulation
  - b. Head tilt-chin lift, Jaw thrust methods
  - c. Airway skills
    - i. Controllable open / closed airway, automatically or manually controlled
    - ii. Suctioning (Oral and Nasopharyngeal)
    - iii. Bag-Valve mask ventilation
    - iv. Orotracheal intubation
    - v. Nasotracheal intubation
    - vi. Combitube placement
    - vii. LMA placement
    - viii. Endotracheal tube intubation
    - ix. Right Mainstream
    - x. Retrograde intubation
    - xi. First grade fiber-optic intubation
    - xii. Light wand intubation
    - xiii. Needle cricothyrotomy
    - xiv. Surgical cricothyrotomy
  - d. External pacing
- 5. The patient simulator should have a cardiovascular system that automatically calculates dependent variables (e.g., blood pressure, heart rate) in response to changing cardiovascular system status (e.g., bleeding, intravenous fluid administration), including the following:
  - A. A baroreceptor reflex that compensates both centrally (e.g., heart rate, cardiac contractility) and peripherally (e.g. systemic vascular resistance, venous capacitance) to maintain circulation and perfusion.
  - B. A myocardial oxygen supply (e.g., diastolic blood pressure, arterial oxygen partial pressure) and demand (e.g., cardiac contractility, heart rate) that yields appropriate cardiac response (e.g., cardiac rhythm, cardiac contractility) to myocardial ischemia. Untreated myocardial ischemia should automatically result in cardiovascular decompensation with accompanying cardiac rhythms (e.g., ST- segment depression, ventricular tachycardia, ventricular fibrillation, asystole) and ultimately, cardiovascular collapse.
  - C. Arterial blood gases (e.g., PaO2, PaCO2, and pH) and mixed venous gases (e.g., PvO2, PvCO2) that realistically change.

- D. Hematocrit should be automatically calculated to reflect oxyhemoglobin saturation and administration of a variety of intravenous fluids, such as whole blood, packed red cells, colloids, and crystalloids.
- E. A complete hemodynamic monitoring package that includes the capability to measure and monitor the following: ABP, Left ventricular blood pressure, CVP, Right atrial pressure, Pulmonary artery pressure, Pulmonary artery occlusion (wedge) pressure, cardiac output.
- 6. The patient simulator should have a pulmonary system that automatically calculates alveolar and arterial gas partial pressures in response to ventilation, fraction of inspired oxygen, intrapulmonary shunt fraction, and metabolic gas exchange (For example, apnea orhypoventilation should automatically result in hypercarbia, hypoxemia, decreasing oxyhemoglobin saturation and tachycardia)
- A. During spontaneous ventilation, the patient mannequin should breathe with a spontaneously controlled respiratory rate and tidal volume to maintain normocarbia and adequate oxygenation.
- B. Positive pressure ventilation or return of spontaneous ventilation should automatically reverse apnea with the response appropriate to the rate and tidal volume or ventilation.
- C. The Patient Simulator should automatically responds to the fraction of inspired oxygen present, such as with smoke inhalation or supplemental oxygen.
- D. Should have pre-cut for Bilateral chest tube insertion for saving skin replacement.
- E. Chest tube insertion with fluid output and automatic resolution of physiology.
- 7. The patient simulator should have a pharmacology system model with automatic calculation of pharmacokinetics and pharmacodynamics for all commonly used intravenous and inhaled medications, yielding appropriate changes in patient clinical signs and monitored parameters. All patient responses to drug administration should be automatic, dose dependent, and follow an appropriate time course even in case of students errors.
- 8. Patient outcome should be solely based on patient physiology and the treatment administered (e.g., ventilation, oxygen therapy, drug therapy) and should not be influenced by subjective assessment of the operator thus providing objective evaluation of clinical performance and reducing risk of negative training transfer.
- Patient simulator should be equipped with a simulated monitor capable of displaying all of the following parameters: ECG, Invasive Blood Pressures (ABP, CVP, PAP, WedgePressure), Cardiac Output, SpO2, PR/HR, ETCO2, Body and Blood Temperature, NIBP
  - A. The simulated monitor should have configurable alarm limits with accompanying sounds for each parameter.
  - B. The frequency of the pulse tone should be synchronized with the cardiaccycle and the pitch should correlate with the SpO2 value.
- 10. The mannequin should have a realistic airway (mouth, oropharynx, larynx, esophagus, trachea, carina) resembling to that of an actual human patient.
  - A. Depending on head positioning, choice of clinical tools, and other maneuvers, it should be possible to achieve anywhere from a Cormack Class I (e.g., easy intubation) to a Cormack Class IV (e.g., difficult intubation) airway.
  - B. The mannequin airway should allow use of airway adjuncts (e.g., combitube, laryngeal mask airway) as they are used in real patients, without any special adjustments by the instructor (e.g., activation of posterior swelling to seat the LMA).
  - C. The success or failure of airway management should be automatically reflected in the resulting ventilation, oxyhemoglobin saturation, and overall cardiopulmonary stability.

- 11. The patient simulator should have trauma simulation capabilities, such as:
  - A. Surgical cricothyroidotomy
  - B. Articulated mandible
  - C. Articulation in elbow, wrist, knees and elbows
  - D. Simultaneous bleeding at different sites linked to physiology
  - E. Secretions from eyes, ears, mouth.
  - F. Bi-lateral pneumothorax needle decompression at the clinically appropriate location
  - G. Bi-lateral chest tube insertion (with fluid return) at the clinically correct location.
     Each trauma capability should require minimal instructor input and physiological
    - consequences (e.g., improvement in blood pressure, ventilation, and oxyhemoglobin saturation) should be automatic.
- 12. The patient simulator should have fully independent left and right lungs.
  - A. One-sided pneumothorax should result in chest distention on one side, with the other side rising and falling with spontaneous breathing.
  - B. The simulator should have independent breath sounds linked to ventilation of each lung for both spontaneous and mechanical ventilation.
  - C. One-lung ventilation should automatically result in appropriate breath sounds, chest excursion, and pulmonary gas exchange.
  - D. Independent bilateral trauma feature (needle decompression / chest tube)
- 13. The patient simulator should have independent blinking eyes and reactive pupils. Eye blinking should be automatic and dependent on the underlying patient physiology (i.e., level-of-consciousness, level of neuromuscular blockade). It should be possible to easily set the pupils to different settings (i.e., pinpoint, reactive, non reactive, blown).
- 14. The patient simulator should be capable of physically shaking, giving a visible clue of convulsions, tremors, or other similar conditions.
- 15. The patient simulator should have touch activated, bi-lateral palpable pulses in the following locations: Carotid, Brachial, Radial, Femoral, Popliteal, Pedal (dorsalis and tibialis)
- 16. The patient simulator should have an advanced cardiac life support system in which:
  - A. Effective chest compressions automatically yield artificial circulation, cardiac output, central and peripheral blood pressures, palpable pulses, and exhaled CO2.
  - B. Ineffective chest compressions yield inadequate cardiac output and circulation and an absence of exhaled CO2.
  - C. Defibrillation energy is automatically identified, quantified, and logged
  - D. Pacing current is automatically identified, quantified, and logged, with appropriate physiological response.
- 17. The patient simulator should include independent simulations of patients (e.g., young healthymale, pregnant female, elderly patient with coronary artery disease) and injury/disease scenarios (e.g., anaphylactic shock, ruptured spleen, subdural hematonia.)

- A. It should be possible to combine any patient with any scenario, creating a wide variety of clinical care simulations.
- B. It should be possible to run multiple conditions simultaneously to create multi-trauma care simulations.
- C. It should be possible to run multiple injury/disease scenarios simultaneously on a particular patient to create multi-trauma simulations
- 18 Trauma kit must include:
  - A. One Adominal Evisceration, One Calf Avulsion, One Open Head Wound,
  - B. One Lacerated Thigh, One Compound Fracture (Arm), Three Bruising Patches,
  - C. Six Bullet Holes, Three Lacerations, Two Fire Burns, Three Electrical Burns,
  - D. One Spider Bite/Decubitus Ulcer, One Blood Pumping System, Simulated Blood and
  - E. One Set of Wound/Treatment Cards.
  - F. One partial and one fully amputated Arm.
  - G. One Partial and one Fully amputated leg.
- 19. Simulator must have the following in build learning Module Scenarios:
  - A. Advanced Cardiac Life Support (ACLS)-in accordance with AHA 2015 guideline.
     i. ACLS 2015 Mega Code 1-11
  - B. Airway Management.
    - i. Abdominal Sepsis.
    - ii. Acute Papillary Muscle Rupture.
    - iii. Alcohol Intoxication.
    - iv. Anastomotic Leak
    - v. Postoperative Hypoxemia
    - vi. Severe Community Acquired
    - vii. Pneumonia
    - viii. Severe COPD Exacerbation
    - ix. Unplanned Extubation

## C. CARDIOPULMONARY Critical Situations (CCS)

- i. Acute Allergic Reaction
- ii. Acute Asthma
- iii. Burns with Airway Compromise
- iv. Heroin Overdose
- v. Inferior-Posterior Myocardial Infarction
- vi. Ludwig's Angina
- vii. Stab Wound to the Upper Neck
- viii. Tricyclic Antidepressant Overdose
- D. Emergency Medical Services (EMS)
  - i. Abdominal Aortic Aneurysm
  - ii. Alcohol Gastritis/Bleeding Ulcer/Esophageal Varices
  - iii. Chlorine Poisoning
  - iv. Cold Water Drowning and Hypothermia
  - v. Motorcycle Crash with Traumatic Evisceration
  - vi. Nerve Agent Organophosphate Poisoning
  - vii. Rattlesnake Bite
  - viii. Sickle Cell Crisis
  - ix. Spontaneous Abruptio Placentae
  - x. Stoma Patient

Complete system must be supplied with following:

- i. Wireless Adult Male Mannequin
- ii. Laptop with validated physiology software.
- iii. Simulated clinical Patient Monitor
- iv. Tablet with instructor control software
- Should have 5 years Warranty and CMC for 5 years.

# **3. SPECIFICATIONS FOR PAEDIATRIC PATIENT SIMULATION SYSTEM WITH VALIDATED PHYSIOLOGY - 01 Nos.**

1. The simulator mannequin must be anatomically correct to replicate a real life sized pediatric patient with anatomical landmarks.

2. The simulator must have functional pupils that blink and can be adjusted for pupil dilation and restriction

3. The simulator must have automatic physiology response models that can objectively confirm airway management without the need for visual observation by an instructor

4. The simulator must have a hematology model for hemorrhage control showing the impact of progressive blood loss and compensation to the patient in real time

5. The simulator must have the capability to integrate a blood / secretions flow model for representation of trauma conditions to the patient

6. The simulator must have automatic physiological and pharmacological response models with responses to reflect the actual effects of the drug or multiple sets of drugs

7. The simulator and its accompanying components must be portable and easily stored when necessary.

8. The simulator must include a simulated patient monitor which has the capability to display the parameters below in addition to custom configurations

- ECG I, II, III and V and heart rate
- Arterial Blood Pressure
- Pulmonary Artery Pressure
- Pulmonary Capillary Wedge Pressure
- Central Venous Pressure
- Mean Arterial Pressure
- Non Invasive Blood pressure
- CO2 Capnography
- SPO2
- Heart rate
- Thermolidution cardiac output and continuous cardiac output
- Blood temperature
- Body temperature

## AIRWAY

1. Simulator must have a life like intubation head with a flexible tongue, epiglottis, aryepiglottic fold, cuneiform tubercle, corniculate tubercle ,laryngeal inlet, vocal cords , esophagus and simulated lungs for spontaneous breathing and realistic chest movement and compressions

- 2. Simulator must have tracheal access through the neck for cricothyrotomy ,tracheostomy
- 3. The simulator must have the following standard ALS airway skills:
- Bag/ valve/mask ventilation
- Oral intubation
- Nasal intubation
- Esophageal intubation
- Combitube placement
- LMA Placement

•	etrograde intubation		
•	Fiber optic intubation		
•	Light wand intubation		
• (	ricothyrotomy		
• (	Propharyngeal and nasopharyngeal airway placement		
4.	xhaled CO 2 Flow to confirm placement of airway devices with in the trachea		
5. 9	igns of spontaneous respiration to include:		
•	ndependent right and left chest movement		
• 1	xhalation of air from mouth		
•	xhaled CO2 Capability.		
6. 5	imulator must have a respiratory rate that is physiologically modeled or may be manually		
cont	olled by an instructor.		
7.	he simulator must be able to accommodate the following airway features:		
•	haryngeal obstruction		
•	Aultiple levels of swollen tongue		
•	aryngospasm		
•	eft & right broncheal obstruction		
• :	tomach decompression		
• (	annot intubate, can ventilate		
• (	Cannot intubate, cannot ventilate		
CAR	DIOVASCULAR SYSTEM:		
	1. The simulated patient should generate heart sounds including a range of pathological ones which are synchronized to the QRS complex of the ECG and should be audible with a standard stethoscope over the left and right upper sternal border. left lower sternal border		
	and apex.		
	2 The simulator must have an integrated IV training arm with replaceable skin and veins, IV		
	insertion into peripheral veins of forearm, anticubital fossa and the dorsum of the hand.		
	simulated blood flash back on cannulation. IV Bolus or infusion		
	simulated blood hash back on cannulation, iv bolds of infusion.		
	3. 5 Lead ECG capability emitted from the appropriate positions on the patient's chest for display on a standard monitor		
	<ol> <li>Palpable carotid, radial, brachial, femoral, popliteal and pedal pulses which are synchronous to the ECG.</li> </ol>		
	5. Simulator pulses must be dependent on BP of the patient and must be independently		
	Controlled on left & right side of the body		
	controlled of field of the body		
	6. A standard blood pressure cuff and sphygmomanometer can be used to assess systolic blood		
	pressure by palpation or by auscultating Korotkoff sounds.		
7 The invasive hemodynamic monitoring package should provide the capability to measure and			
mon	tor the following:		
• ,	arterial blood pressure		

- Left ventricular pressure
- Central venous pressure
- Right atrial pressure

- Right ventricular pressure
- Pulmonary artery pressure
- Pulmonary artery occlusion (wedge) pressure
- Thermodilution cardiac output

## TRAUMA FEATURES:

Simulator must have the ability to perform the following trauma functions:

- Bi-Lateral Pneumothroax needle decompression
- Bi-lateral chest tube placement
- Blinking eye with adjustable pupil size

## IV DRUG ADMINISTRATION:

1. Simulator must have an intensive drug library that includes ACLS drugs.

2. The simulators response to drugs administered must be automatically linked to physiology and will not rely on manual input.

## CARDIAC FUNCTIONS:

- 1. The simulator package must include an ECG library that contains an extensive library of physiological modeled cardiac rhythm variations
- 2. The simulator must be able to accommodate the following:
- Live defibrillation from an AED and a manual defibrillator
- Cardiac monitoring with blood pressures and cardiac output
- 5 Lead ECG Monitoring
- External pacing with various pacing threshold
- Produce chest compression artifacts on ECG
- Show a displayed heart rate and ECG on a compatible simulated monitor

## **BLOOD PRESSURE:**

- 1. The simulator must have a blood pressure that can be taken either automatically, by auscultation or palpated.
- 2. The simulator must include a blood pressure arm that has Korotkoff sounds, which can be used for auscultation and palpation of the blood pressure.
- 3. The blood pressure must be able to be displayed on a compatible simulated monitor.

## GENITOURINARY

- 1. The simulator must include both male and female genitalia which are interchangeable and anatomically correct
- 2. The genitalia must have the ability to be catheterized with the ability to produce urinary output.

## NEUROLOGIC SYSTEM

1 Should model Cardiovascular and respiratory responses to sympathetic and parasympathetic activities

## ADVANCED CARDIAC LIFE SUPPORT (ACLS) SYSTEM

1 **Airway Management and Ventilation:** Alveolar and arterial gas concentrations should appropriately reflect the efficacy of the employed ventilatory technique, such as mouth-to-mouth, bag-valve-mask, endotracheal intubation and transtracheal catheter ventilation. Administration of supplemental

oxygen should extract automatic and appropriate patient clinical responses.

2 **Chest Compression: Should allow chest compression** In accordance with ACLS guidelines, effective chest compression of the patient's sternum should result in artificial circulation, cardiac output, central and peripheral blood pressures, palpable pulses and CO2 return and Pressure fluctuations should be visible on invasive catheter waveforms..

2 **Cardiac Arrhythmias:** The instructor should be able to select and maintain a desired arrhythmia and control the simulated patient's response to clinical interventions.

3 Electrical Therapy: Both conventional defibrillators and automatic external defibrillators (AEDs) can

be applied to the simulator generating appropriate patient response in real-time. Capable of applying transcutaneous pacemakers

4 **Pharmacological Therapy:** All IV drugs required by the ACLS algorithms should be supported. **SOUNDS AND PHONATION:** 

The simulator must have the ability to produce the following sounds:

Speaking through the instructor microphone

- Heart sounds which are synchronized with the ECG
- Independent left and right sounds
- Bowel Sounds
- Heart, lung and bowel sounds auscultated with a stethoscope.
- Independent volume adjustment

## PATIENT & SCENARIOS

- Should be delivered with pre-programmed patients. System should have patient editor software to edit/ modify preconfigured patient profiles or to create new patient profile.
- Should be delivered with pre-programmed scenarios. System should have scenario editor software to edit/ modify preconfigured scenarios or to create new scenario.
- At any point during a simulation session it should be possible to capture the current state of a patient which can be used as a new patient.
- Should be capable of running multiple patients simultaneously to create multiple patient care simulations

## EVENT LOG:

1. The simulator must include physiological, pharmacological event data that is logged and timed stamped.

- 2. The log must automatically calculate and log the following items:
- Alveolar and blood gases
- Cardiac Output
- Heart rate
- SPO2
- Invasive blood pressure
- Hematocrit and hemoglobin values
- Temperatures
- 3. The event long must be able to be saved and printed.

## CONTROL SYSTEM :

Control system should be comprised of

• Instructors wireless remote control capable driving all software programme

## • Instructor wireless remote control must be expandable for future software up-gradation. Simulator must be includes the following leaving modules :

## Emergency Medical Services.

- Abdominal Pain
- Basic Assessment
- Closed Head Injury
- Epiglottitis
- Femur Fracture
- Multi Trauma
- Sepsis
- Supraventricular Tachycardia
- Upper Respiratory Infection

Croup

## PEDIATRIC ADVANCED LIFE SUPPORT (PALS)

- Asthma Attack
- Asystole
- Bradycardia
- Ingestion
- Motor Vehicle Crash
- PEA
- Septic Shock
- Shock
- Supraventricular and Ventricular
- Tachycardia
- Ventricular Fibrillation

## PEDIATRIC EMERGENCIES

- Burn Injury
- Electrocution
- Envenomation
- Gunshot Wound
- Meningitis
- Methamphetamine Exposure
- Submersion Injury
- Traumatic Brain Injury

## PEDIATRIC NURSING

- Abnormal Variations in Heart Rate in a Six-Year-Old Patient
- Acetaminophen Poisoning
- Amputation Secondary to Osteosarcoma
- Asthma Attack in the Pediatric Patient
- Care of a Young Child with Meningitis
- Cystic Fibrosis
- Diabetic Ketoacidosis and Pneumonia
- Fluid and Electrolyte Imbalance
- Foreign Body Aspiration
- Fractured Radius with Compartment Syndrome

- Near Drowning
- Postoperative Care with Complications: Seizures and Allergic Reaction
- Renal Dysfunction Secondary to Acute Streptococcal Glomerulonephritis
- Septic Pediatric Patient Secondary to a Ruptured AppendiX
- Terrorism by Chemical Agent
- Traumatic Brain Injury

## Complete system must be supplied with following:

- i. Pediatric Mannequin
- ii. Laptop with validated physiology software.
- iii. Simulated clinical Patient Monitor
- Should have 5 years Warranty and CMC 5 years.

## 4. CENTRALISED CLASS MANAGEMENT SYSTEM - 01 Nos.

# 1. Centralized Class room Management system should be able to connect the following Hi fidelity simulators through their web based briefing and debriefing systems

- a. Wireless Medical and Trauma management system with trauma kit (Adult Male)
- b. Pediatric Patient Simulator

## 2. The system should have following specification

- a) The system should be able to create a unified system for the simulation center
- b) Should be able to connect up to two briefing and debriefing systems.
- c) Should have provision for scalability upto 100 rooms
- d) Should have capability to Centralize all videos and data to the web-based software
- e) Should have facility to Store 12,000 hours of HD video recording
- f) Should also have Pre-configured briefing and debriefing with software
- g) Should be supplied with Latest configuration computer
- h) Should be supplied with one HD LED 52" Display

# 3. The system should be supplied with web-based Audio-visual System for briefing and debriefing system:

1. Should have all in one, compact, server appliance includes the hardware and software necessary for an integrated digital audio-video recording system.

A total of 2 systems should be provided for

- c. Wireless Medical and Trauma management system with trauma kit (Adult Male)
- d. Pediatric Patient Simulator
- 2. Each Server should have following specification

3. Should have One server appliance offers a 1:1 ratio between recording areas, simulator and recording appliances with the following built-in components:

- a) Should be able to simulate record up to 5 video sources per server (4 cameras + 1 monitor)
- b) Should be supplied with 2 cameras with each system
- c) Should have Input of 4 PoE IP cameras
- d) Should have Input of 1 VGA, DVI or HDMI video source
- e) Should have WiFi connection to simulators
- f) Should have Input for institution network cable
- g) Should have Built-in digital audio kit
- h) Should have Input for a secondary microphone

- i) Should have Built-in speaker to broadcast in-room intercom announcements
- j) Should have 1,000 hours of HD video recordings
- k) Should have Pre-configured with briefing and debriefing software
- I) Each system should be supplied with a latest configuration PC
- m) Each system should be supplied with 52" HD LED Display

4. Each server Should have briefing and debriefing Software with following specification : Should have all in one web -based software application that includes all center management features on one platform without requiring user licenses, site licenses or add-on software modules. Software features should includes:

- a) Recording
- b) Review
- c) Reports
- d) Case Manager
- e) Activities
- f) Calendar
- g) Schedules
- h) Resource Manager
- i) User Manager
- j) System Manager
- k) Light weight directory access protocol LDAP Integration

## 5. Streaming

- a) Should be able to Live broadcasts with industry leading latency (<1sec)
- b) Should have facility to connect Up to 4 concurrently displays, and synchronized, camera streams, plus 1 simulator in each room
- c) Should be able to show Live stream videos to any number of remote sites
- d) Widescreen HD video broadcast and recording, full screen mode
- e) On-screen PTZ controls: click on image to panand tilt, drag image to zoom in and out; from multior single room views
- f) DVR-type functionality to pause, rewind, and forward; even during live recording

## 6. Record

- a) Full camera control (pan/tilt/zoom) from both live(single room) and a center overview (all rooms)available in-browser from any client workstation
- b) Pause live or recorded view and continue where you stopped ("time shifted live view")
- c) Manually start / stop recording or set recording tooccur, based on a schedule or on user actions
- d) Save and restore custom layouts of thesimulation/exam room views including size and positioning of individual video streams per room

## 7. Review

- a) Immediate access to recorded data in order toreview complex recordings of all camera, simulator, and peripheral device feeds assigned to he room
- **b)** Access and control all recorded videos on one page (debriefing, deleting, downloading, renamingor reassigning videos)

## 8. Assess

- a) Intuitive interface for creating custom checklists / rubrics for Learners, Faculty or SPs
- b) Faculty / Staff can complete user-customized assessment rubrics, while watching live or recorded video
- c) "What you see is what you get" content editor forthe easiest, most streamlined, checklistbuildingprocess ever

- d) Learners can interact with a variety of the dataentry (i.e. SOAP Note, Step II CS write-up, handoff note, etc.)
- e) Case evaluation, as well as, self and peerevaluations
- f) Control Learner data entry with timer
- g) Faculty / Staff can grade any write up or shortanswer question, submitted by Learners
- h) Standardized Patients can complete checklists, assessing the Learners, as well as each other

Search, preview, and have the ability to reuse allquestions

## 9. Report

- a) Generate and export custom reports, coveringboth the group and individual performance, or useone of the many predefined report options
- b) Give Learners access to their reports at home oron campus
- c) Export data from system to work withoutside of system (excellent system forresearchers)
- d) Review Faculty and Standardized Patientperformance reports for quality assurance and consistency
- e) Follow Learner progress in key skill areas, throughout their career, within your program

## 10. Activities

- a) All activity cases, event dates, times, and rooms atone glance
- b) Define participant groups (Learners, Faculty, SPs)with a quick link to add new group
- c) Link Activities to Calendar events, for a first glanceoverview on the daily / weekly / monthly program
- d) Allow Faculty to submit booking requests forspecific room / resources within the simulation

center, to be managed by center administration

e) Assign resources, activities and participants to onetime or recurring calendar events

## 11. Manage

- a) User management tools; with the ability to defineroles, access privileges, and group memberships
- b) Batch upload large groups of users at once
- c) Email notifications for Learners and SP's tochoose preferred sessions, in times that are indicated / available for assessments
- d) Advanced scheduling capabilities, to automaticallyadjust station schedules and extend rotations, asSP and learner availability changes
- e) Pre-scheduled recording, start / stop times, and intercom announcements, to coordinate with apre-defined exam schedule, for a fully automated recording system

## 12. Track

- a) Track the use of simulation center resources(rooms, simulators, personnel, etc.) by client
- b) Generate reports quarterly / by semester / yearly
- c) Generate and export utilization and allocationreports (tools to justify expansion, funding, etc.)

## 13. Integrate

 a) Connect with any patient simulator to capture 360° live simulation data Connect any simulated or real patient monitor forcapturing and broadcasting HD screen image

- b) Optical character recognition, to turn the videosignal from monitor into real-time data streams, forvisual trendcharts and searchable physiologicaldata
- c) Use predefined layouts or define your own, foridentifying key captured values on the connectedscreen
- d) Remote site configurations

## 14. Access / Security

- a) LDAP is a standard feature without requiring amodule site license
- b) LDAP authentication through your active directory, automated way of importing or updating useraccounts from an LDAP directory service LDAP for SSO (Single Sign-On) remove the requirement tomaintain multiple passwords for users.
- c) Authenticate users in system against an LDAP directory
- d) Shibboleth for SSO (Single Sign-On): authenticateusers against a Shibboleth service, toprovidesingle sign-on capabilities, without the requirementfor multiple passwords
- e) View any configured rooms with signed SSLcertificates for secured connection
- Should have 5 years Warranty and CMC for 5 years.

## Instructions for Online Bid Submission:

The bidders are required to submit soft copies of their bids electronically on the CPP Portal, 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.

More information useful for submitting online bids on the CPP Portal may be obtained at: https://eprocure.gov.in/eprocure/app.

## REGISTRATION

- 1) Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: https://eprocure.gov.in/eprocure/app) by clicking on the link "Online bidder Enrolment" on the CPP Portal which is free of charge.
- 2) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- 3) Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
- 4) Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify/nCode / eMudhra etc.), with their profile.
- 5) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.
- 6) Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.

## SEARCHING FOR TENDER DOCUMENTS

- 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.
- 2) 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.
- 3) 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**

1) Bidder should take into account any corrigendum published on the tender document before submitting their bids.

- 2) Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the
- 3) 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.
- 4) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF/JPG formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
- 5) To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Space" or "Other Important Documents" area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

## SUBMISSION OF BIDS

- 1) Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- 2) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- 3) Bidder has to select the payment option as "offline" to pay the tender fee / EMD as applicable and enter details of the instrument.
- 4) Bidder should prepare the EMD as per the instructions specified in the tender document. The original should be posted/couriered/given in person to the concerned official, latest by the last date of bid submission or as specified in the tender documents. The details of the DD/any other accepted instrument, 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.
- 5) Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BoQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BoQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BoQ file is found to be modified by the bidder, the bid will be rejected.
- 6) The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.

- 7) The documents being submitted by the bidders would be encrypted using PKI encryption all 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. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key.
- 8) Further this key is subjected to asymmetric encryption using buyers/bid opener's public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 9) The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 10) Upon the successful and timely submission of bids (ie after Clicking "Freeze Bid Submission" in the portal), the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- 11) The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

## **ASSISTANCE TO BIDDERS**

- 1) 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 contact person indicated in the tender.
- 2) 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 number 0120-4200462, 0120-4001002.