

BIDDING DOCUMENT

(Two Bid System for Machinery & Equipment)

FOR
NATIONAL CANCER INSTITUTE
ALL INDIA INSTITUTE OF MEDICAL SCIENCES
(JHAJJAR CAMPUS)

NIB Ref: HITES/PCD/NCI-AIIMS/09/17-18



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SECTION - I**NOTICE INVITING BIDS (NIB)****ALL INDIA INSTITUTE OF MEDICAL SCIENCES**

Ansari Nagar, New Delhi-110 029

NOTICE INVITING BIDS (GLOBAL)**NIB Ref: HITES/PCD/NCI-AIIMS/09/17-18****Dated: 01.01.2018**

Procurement & Consultancy Services Division of **HLL INFRA TECH SERVICES LIMITED** (a fully owned subsidiary of HLL Lifecare Ltd., a Govt. of India Enterprise) for and on behalf of **Director, AIIMS - New Delhi**, invites e-tenders in two bid system (technical and price bid) from the reputed, eligible & qualified firms/manufacturers for purchase/supply of following goods at **National Cancer Institute Jhajjar, Haryana (AIIMS, New Delhi-29)**.

Sl. no.	Rfx no.	Short Description of goods	Quantity	Bid Security (BS) (Rs.)	Tender Processing Fee incl. GST (Rs.)
1	3000002575	Paperless Critical Care and Anaesthesia Solution	1	30,00,000	5,900
2	3000002576	CSSD System	1	12,00,000	5,900
3	3000002577	Laundry System	1	8,00,000	3,540
Pre-bid conference meeting with prospective bidders		Venue for pre-bid meeting	Sr. no. of goods		Date & Time of pre-bid meeting
		Committee Room (No. 149), 1st Floor, Dr. BRA IRCH Building, AIIMS, New Delhi-29.	Item no. 01		11.01.2018 at 12:00 Noon
			Item no. 02		16.01.2018 at 12:00 Noon
			Item no. 03		16.01.2018 at 12:30 PM
Last date and time of online submission of tender			01.02.2018 at 12:00 Noon		
Last date and time of physical submission of EMD, Tender processing Fee, any other document specified in the Bidding Document			01.02.2018 at 2:00 PM		
Date of tender Opening			01.02.2018 at 2:30 PM		
Contact Person			Project Officer - DVP(PCD), HITES Email: hll.ncij@hllhites.com		
<p>2. Interested bidders are advised to download the complete Tender Enquiry document from the websites www.hllhites.com or www.lifecarehll.com or www.eprocure.gov.in/cppp or https://etender.lifecarehll.com/irj/portal for complete details.</p> <p>3. The prospective bidders have to register with the E-procurement system of HLL at https://etender.lifecarehll.com/irj/portal. On completion of the registration</p>					

- process, the bidders will be provided user ID and password within 48 hours (excluding non-working days). In order to submit the bids electronically, bidders are required to have a valid Class 3-B Digital Signature Certificate (signing and encryption/ decryption certificates).
4. Bidders are requested to read the bidders help document on e-tender web site link before proceeding for bidding.
 5. Post receipt of User ID & Password, Bidders can log on for downloading & uploading tender document.
 6. The bidders shall submit the required Tender Processing Fee (in form of Demand Draft or Banker's Cheque) and EMD (as per GIT clause no. 19.3) in physical form in favour of '**HLL Infra Tech Services Limited**' at the scheduled time and venue. Tender processing Fee is required from all the bidders irrespective of their registration with NSIC or any other Govt. organisation.
 7. The online submission of tender(s) can only be done through <https://etender.lifecarehll.com/irj/portal>
 8. All prospective bidders (maximum two representative of a firm bearing ID proof issued by their firm) may attend the Pre-bid conference meeting. The venue, date and time indicated above.
 9. Bidders shall ensure that their tender(s), complete in all respects, are submitted online through HLL's e-portal (as described above) **ONLY. No DEVIATION is acceptable.**
 10. Tender Processing Fee and Bid Security (BS) in original should be deposited within the scheduled date & time in the Tender Box located at: **HLL Infra Tech Services Limited, Procurement and Consultancy Services Division, B-14 A, Sector-62, Noida-201307, Uttar Pradesh.**
 11. Prospective bidders are advised to browse the above websites regularly before submission of their bids as any further amendments will be published in these websites only.

CEO (HITES)

SECTION - II
GENERAL INSTRUCTIONS TO BIDDERS (GIB)
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GENERAL INSTRUCTIONS TO BIDDERS (GIB)**A. PREAMBLE****1. Definitions and Abbreviations**

1.1 The following definitions and abbreviations, which have been used in these documents shall have the meanings as indicated below:

1.2. Definitions:

- i. "Purchaser" means means HLL INFRA TECH SERVICES LIMITED (HITES) for and on behalf of The Director, AIIMS, New Delhi.
- ii. "Bid" means Quotation / Tender received from a Firm / Tenderer / Bidder.
- iii. "Bidder" means Tenderer/ the Individual or Firm submitting Bids / Quotation / Tender
- iv. "Supplier" means the individual or the firm supplying the goods and services as incorporated in the contract/purchase order.
- v. "Goods" means all articles, material, commodity, livestock, furniture, fixtures, raw material, spares, instruments, machinery, equipment, vehicles, medicines, assemblies, sub-assemblies, accessories, intangible products like software, technology transfer, licenses, patents or other intellectual properties purchased or otherwise acquired for the use of Government but excludes books, publications, periodicals, etc. for a library. The term 'goods' also includes works and services which are incidental or consequential to the supply of such goods, such as, transportation, insurance, installation, commissioning, training and maintenance.
- vi. "Services" means services allied and incidental to the supply of goods, such as transportation, installation, commissioning, provision of technical assistance, training, after sales service, maintenance service and other such obligations of the supplier covered under the contract.
- vii. "Bid Security" (BS) means Earnest Money Deposit / monetary or financial guarantee to be furnished by a bidder along with its tender.
- viii. "Contract" means the written agreement entered into between the purchaser and the supplier, together with all the documents mentioned therein and including all attachments, annexure etc. therein.
- ix. "Performance Security" means monetary or financial guarantee to be furnished by the successful bidder for due performance of the contract placed on it. Performance Security is also known as Security Deposit.
- x. "Consignee" means the Center/Hospital/Department/Sections /person to whom the goods are required to be delivered as specified in the Contract.
- xi. "Specification" also called Technical Specifications means the document/standard that prescribes the requirement with which goods or service has to conform.
- xii. "Inspection" means activities such as measuring, examining, testing, gauging one or more characteristics of the product or service and comparing the same with the specified requirement mentioned in the contract to determine conformity.
- xiii. "Day" means calendar day.

1.3 Abbreviations:

- (i) "NIT" means Notice Inviting Tenders.
- (ii) "GIB" means General Instructions to Bidders
- (iii) "SIT" means Special Instructions to Bidders

- (iv) "GCC" means General Conditions of Contract
- (v) "SCC" means Special Conditions of Contract
- (vi) "LC" means Letter of Credit
- (vii) "DP" means Delivery Period
- (viii) "BG" means Bank Guarantee
- (ix) "GST" means Goods & Service Tax
- (x) "CD" means Custom Duty
- (xi) "BL" means Bill of Lading
- (xii) "FOB" means Free on Board
- (xiii) "CIF" means Cost, Insurance and Freight
- (xiv) "CIP (Destinations)" means Carriage and Insurance Paid up to named port of destination. Additionally the Insurance (local transportation and storage) would be extended and borne by the Supplier from ware house to the consignee site for a period including 3 months beyond date of delivery.
- (xv) "INCOTERMS" means International Commercial Terms as on the date of Bid Opening
- (xvi) "CAMC" means Comprehensive Annual Maintenance Contract (labour, spare and preventive maintenance)

2. Introduction

- 2.1 The Purchaser has issued these Bidding Documents for purchase of goods and related services as mentioned in Section – VI – "List of Requirements", which also indicates, *interalia*, the required delivery schedule, terms and place of delivery.
- 2.2 This section (Section II - "General Instructions to Bidders") provides the relevant information as well as instructions to assist the prospective bidders in preparation and submission of bids. It also includes the mode and procedure to be adopted by the bidder for receipt and opening as well as scrutiny and evaluation of bids and subsequent placement of contract.
- 2.3 The bidder shall also read the Special Instructions to Bidders (SIB) related to this purchase, as contained in Section III of these documents and follow the same accordingly. Whenever there is a conflict between the GIB and the SIB, the provisions contained in the SIB shall prevail over those in the GIB.
- 2.4 Before formulating the bid and submitting the same to the purchaser, the bidder should read and examine all the terms, conditions, instructions, checklist etc. contained in the Bidding Document. Failure to provide and/or comply with the required information, instructions etc. incorporated in these Bidding Documents may result in rejection of its Bid.

3. Availability of Funds

- 3.1 Expenditure to be incurred for the proposed purchase will be met from the funds available with the purchaser/consignee.

4. Language of Bid

- 4.1 The bid submitted by the bidder and all subsequent correspondence and documents relating to the bid exchanged between the bidder and the purchaser, shall be written in the English language. However, the language of any printed literature furnished by the bidder in connection with its bid may be written in any other language provided the same is accompanied by an English translation and, for purposes of interpretation of the bid, the English translation shall prevail.

5. Eligible Bidders

- 5.1 This Invitation for Tenders is open to all bidder who fulfil the eligibility criteria specified in these documents.

6. Eligible Goods and Services

- 6.1 All goods and related services to be supplied under the contract shall have their origin in India or any other country with which India has not banned trade relations. The term “origin” used in this clause means the place where the goods are mined, grown, produced, or manufactured or from where the related services are arranged and supplied.

7. Bid Expense

- 7.1 The bidder shall bear all costs and expenditure incurred and/or to be incurred by it in connection with its bid including preparation, mailing and submission of its bid and for subsequent processing the same. The purchaser will, in no case be responsible or liable for any such cost, expenditure etc. regardless of the conduct or outcome of the bidding process.

B. TENDER ENQUIRY DOCUMENTS**8. Content of Tender Enquiry Documents**

- 8.1 In addition to Section I – “Notice Inviting Tender” (NIT), the Bidding Documents include:

Section II	– General Instructions to Bidders (GIB)
Section III	– Special Instructions to Bidders (SIB)
Section IV	– General Conditions of Contract (GCC)
Section V	– Special Conditions of Contract (SCC)
Section VI	– List of Requirements
Section VII	– Technical Specifications& General Points
Section VIII	– Qualification Criteria
Section IX	– Bid Form
Section X	– Price Schedules
Section XI	- Check List
Section XII	– Bank Guarantee Form for Bid Security
Section XIII	– Manufacturer’s Authorization Form
Section XIV	– Bank Guarantee Form for Performance Security/CAMC Security
Section XV	– Contract Forms A & B
Section XVI	– Proforma of Consignee Receipt Certificate
Section XVII	– Proforma of Consignee Acceptance Certificate by the consignee

- 8.2 The relevant details of the required goods and services, the terms, conditions and procedure for bidding, bid evaluation, placement of contract, the applicable contract terms and, also, the standard formats to be used for this purpose are incorporated in the above-mentioned documents. The interested bidders are expected to examine all such details etc to proceed further.

9. Amendments to a Bidding documents

- 9.1 At any time prior to the deadline for submission of bids, the purchaser may, for any reason deemed fit by it, modify the Bidding Documents by issuing suitable amendment(s) to it.

- 9.2 Such an amendment will be notified through CPPP (eprocure.gov.in/cppp) and/or www.hllhites.com and/or www.lifecarehll.com and will be binding on them.
- 9.3 In order to provide reasonable time to the prospective bidders to take necessary action in preparing their bids as per the amendment, the purchaser may, at its discretion extend the deadline appropriately for the submission of bids and other allied time frames, which are linked with that deadline.

10. Clarification of Bid document

- 10.1 A bidder requiring any clarification or elucidation on any issue of the Bidding Documents may take up the same with the purchaser in writing. The purchaser will respond in writing to such request provided the same is received by the purchaser not later than ten days (unless otherwise specified in the SIB) prior to the prescribed date of submission of Bids.

C. PREPARATION OF BIDS

11. Documents comprising the e-Bid

- 11.1 The bid(s) shall only be submitted online as mentioned below:

1. Technical Bid (Consisting of Techno-Commercial bids in excel format provided with the tender enquiry along with the supporting documents i.e. scanned copies of Tender Processing Fee, BID SECURITY, Eligibility Criteria & Technical Specifications viz. Product Specification Sheets/Brochures, OEM Certificate, etc.) have to be attached in the C-folder of e-tendering module. Bidders have to ensure that the documents uploaded in pdf format are legible.
2. Price Bid has to be submitted in the prescribed excel format provided with the tender enquiry.

Note:

- a. The tender Processing fee and BID SECURITY has to be submitted in physical form as per Section – I, Notice Inviting Tender of this tender enquiry.
- b. The bidders have to follow the steps listed in Bidding Manual – Attachment Modem available in the Bidder Help Documents of e-tender portal login screen for uploading the Techno-Commercial Bid.

A) Techno-commercial Bid (Un-priced Bid)

(Bidders shall furnish the following information along with technical tender in pdf format):

- i) Bid Security furnished in accordance with GIB clause 19.1 alternatively, documentary evidence as per GIB clause 19.2 for claiming exemption from payment of Bid Security.
- ii) Bid Form as per Section IX (without indicating any price).
- iii) Documentary evidence, as necessary in terms of clauses 5 and 17 of GIB establishing that the bidder is eligible to submit the bid and, also, qualified to perform the contract if its bid is accepted.
- iv) Bidder who quotes for goods manufactured by other manufacturer shall furnish Manufacturer's Authorisation Form. While giving authorization to agent, to quote on their behalf, manufacturer has to give the reasons for not quoting directly against this bid in the Manufacturer's Authorisation Form.

- v) Power of Attorney in favor of signatory and/or who is digitally signing the bidding documents and signatory of Manufacturer's Authorization Form.
- vi) Documents and relevant details to establish in accordance with GIB clause 18 that the goods and the allied services to be supplied by the bidder conform to the requirement of the bidding documents.
- vii) Performance Statement as per section VIII along with relevant copies of orders and end users' satisfaction certificate.
- viii) Price Schedule(s) as per Section X filled up with all the details including Make, Model etc. of the goods offered with prices blank (without indicating any prices).
- ix) Documents confirming to Sole Proprietorship/Partnership/Private Limited Firm in the country of origin as the case may be.
- x) Checklist as per Section XI.
- xi) Copies of GST registration certificate and PAN Card.
- xii) Copies of annual report, audited balance sheet and profit & loss account as per tender requirement.
- xiii) Non conviction /no pending conviction certification issued by Notary on non-judicial stamp paper for preceding three years.
- xiv) Notarized affidavit that bidder does not have any relation with the person authorized to evaluate technically or involve in finalizing the tender or will decide the use of tendered items.
- xv) A self-declaration on Rs. 10/- non-judicial Stamp Paper that the rates quoted in the tender are the lowest and not quoted less than this to any Government Institution (State/Central/ other Institute in India).
- xvi) Technical and Commercial Compliance statement in excel format provided in the e-tender portal.
- xvii) Product catalogues/original Data Sheets for all quoted items.
- xviii) Copies of quality certificates, if applicable, namely, BIS, ISO, FDA, CE, etc.

B) Price Tender:

Prices are to be quoted in the prescribed Price Bid format in excel provided along with the tender enquiry in the e-tender portal. The price should be quoted for the accounting unit indicated in the e-tender document.

Note:

- a) The bidder has to be diligent while filling up the Techno-commercial Bid and Price Bid provided in excel formats and must not tamper the contents of the sheets.
- b) It is the responsibility of bidder to go through the TE document to ensure furnishing all required documents in addition to above, if any.
- c) The bidders have to follow the steps listed in Bidding Manual – Attachment Mode available in the *Bidder Help Documents of e-tender portal login screen* for uploading the Price Bid.

11.2 The authorized signatory of the bidder must sign the bid duly stamped at appropriate places and initial all the remaining pages of the bid. Individuals signing the bid or other documents connected with a contract must specify whether he signs as:

- i. A 'Sole Proprietor' of the firm or constituted attorney of such Sole Proprietor.
- ii. In case of partnership firm he must have authority to quote & to refer to arbitration dispute concerning the business of the partnership either by virtue of the partnership agreement or a power of attorney;

iii. Constituted attorney of the firm if it is a company.

Note:

1. In case of (ii) above, a copy of the partnership agreement duly registered with "Registrar of Firm's" or general power of attorney, in either, case, attested by a Notary Public should be furnished, or affidavit on stamped paper of all the partners admitting execution of the partnership agreement or the general power of attorney should be furnished.
2. In case of the partnership firms, where no authority to refer disputes concerning the business of the partnership has been conferred on any partner, the bid and all other related documents must be signed by every partner of the firm.
3. A person signing the bid form or any documents forming part of the contract on behalf of another shall be deemed to warrant that he has authority to bind such other persons and if, on enquiry, it appears that the persons so signing had no authority to do so, the purchaser may, without prejudice to other civil and criminal remedies, liable for rejection of bid or cancel of contract and hold the signatory liable for all cost and damages.

11.3 A bid, which does not fulfil any of the above requirements and/or gives evasive information/reply against any such requirement, shall be liable to be ignored and rejected.

12. Bid Currencies

- 12.1 The bidder supplying indigenous goods or already imported goods shall quote only in Indian Rupees.
- 12.2 For imported goods if supplied directly from abroad, prices shall be quoted in any freely convertible currency say US Dollar, Euro, GBP or Yen. As regards price(s) for allied services, if any required with the goods, the same shall be quoted in Indian Rupees only, if such services are to be performed/undertaken in India. Commission for Indian Agent, if any and if payable shall be indicated in the space provided for in the Price Schedule and will be payable in Indian Rupees only after satisfactory supply, installation and acceptance of the goods. The rate of conversion shall be taken as on the date of placement of purchase order.
- 12.3 Bids, where prices are quoted in any other way shall be treated as non-responsive and rejected.

13 Bid Prices

- 13.1 The Bidder shall indicate on the Price Schedule provided under Section X all the specified components of prices shown therein including the unit prices, applicable taxes and total bid prices of the goods and services it proposes to supply against the requirement. All the columns shown in the Price Schedule should be filled up as required. If any column does not apply to a bidder, same should be clarified as "NA" by the bidder.
- 13.2 If there is more than one schedule in the "List of Requirements", the bidder has the option to submit its bid for any one or more schedules and, also, to offer special discount for combined schedules. However, while quoting for a schedule, the bidder shall quote for the complete requirement of goods and services as specified in that particular schedule.

- 13.3 The quoted prices for goods offered from within India and that for goods offered from abroad are to be indicated separately in the applicable Price Schedules attached Under Section X.
- 13.4 While filling up the columns of the Price Schedule, the following aspects should be noted for compliance:
- 13.4.1 For domestic goods or goods of foreign origin located within India, the prices in the corresponding Price Schedule shall be entered separately in the following manner:
- a) The price of the goods, quoted ex-factory/ ex-showroom/ ex-warehouse/ off-the-shelf, as applicable, including packing charges and GST and Custom Duty already paid or payable on the components and raw material used in the manufacture or assembly of the goods quoted ex-factory etc. or on the previously imported goods of foreign origin quoted ex-showroom etc;
 - b) Any taxes and duty, which will be payable on the goods in India if the contract is awarded;
 - c) Charges towards Inland Transportation, Insurance (local transportation and storage) would be borne by the Supplier from ware house to the consignee site for a period including 3 months beyond date of delivery, Loading/Unloading and other local costs incidental to delivery of the goods to their final destination as specified in the List of Requirements and Price Schedule;
 - d) The price of Incidental Services (including installation & commissioning, supervision, demonstration and training), at the consignee site as mentioned in List of Requirements, Technical Specification and Price Schedule;
 - e) The prices of Turnkey Work (if any), as mentioned in List of Requirements, Technical Specification and Price Schedule; and
 - f) The price of CAMC, as mentioned in List of Requirements, Technical Specification and Price Schedule.
- 13.4.2 For goods offered from abroad, the prices in the corresponding price schedule shall be entered separately in the following manner:
- a) The price of goods quoted on FOB at port/ FCA at airport of shipment, as mentioned in List of Requirements, Technical Specification and Price Schedule
 - b) The amount of Freight and Insurance (port of loading to port of entry) and other incidental costs.
 - c) The price of Incidental Services (including Installation & Commissioning, Supervision, Demonstration and Training) at the Consignee's site as mentioned in List of Requirements, Technical Specification and Price Schedule.
 - d) The price of Extended Insurance (local transportation and storage) from port of entry to the consignee site for a period including 3 months beyond date of delivery.
 - e) The Unit Price on CIP Name port of Destination + Extended Insurance (local transportation and storage)
 - f) The price of total Price on CIP Named port of Destination +Insurance (local transportation on and storage)
 - g) The prices of Turnkey Work (if any), as mentioned in List of Requirements, Technical Specification and Price Schedule; and
 - h) The price of CAMC, as mentioned in List of Requirements, Technical Specification and Price Schedule.

13.5 Additional information and instruction on Taxes and Duties:**13.5.1 GST (Goods & Services Tax)**

If the bidder desires to ask for GST (goods and services tax) to be paid extra, the same must be specifically stated. In the absence of any such stipulation, the price will be taken inclusive of GST and no claim for the same will be entertained later.

13.5.2 Customs Duty

The Purchaser will pay the Customs duty wherever applicable.

- 13.6 For transportation of imported goods offered from abroad, relevant instructions as incorporated under GCC Clause 10 shall be followed.
- 13.7 For insurance of goods to be supplied, relevant instructions as provided under GCC Clause 11 shall be followed.
- 13.8 Unless otherwise specifically indicated in this Bidding Document, the terms FCA, FOB, CIF, CIP etc. for imported goods offered from abroad, shall be governed by the rules & regulations prescribed in the current edition of INCOTERMS - 2010, published by the International Chamber of Commerce, Paris
- 13.9 The need for indication of all such price components by the bidders, as required in this clause (viz., GIB clause 13) is for the purpose of comparison of the bids by the purchaser and will no way restrict the purchaser's right to award the contract on the selected bidder on any of the terms offered.

14. Indian Agent

- 14.1 If a foreign bidder has engaged an agent in India in connection with its bid, the foreign bidder, in addition to indicating Indian agent's commission, if any, in a manner described under GIB sub clause 12.2 above, shall also furnish the following information:
- a) The complete name and address of the Indian Agent.
 - b) The details of the services to be rendered by the agent for the subject requirement.
 - c) Details of Service outlets in India, nearest to the consignee(s), to render services during Warranty and CAMC period.

15. Firm Price

- 15.1 Unless otherwise specified in the SIB, prices quoted by the bidder shall remain firm and fixed during the currency of the contract and not subject to variation on any account.
- 15.2 However, as regards taxes and duties, if any, chargeable on the goods and payable, the conditions stipulated in GIB clause 13 will apply.

16. Alternative Models

- 16.1 Alternative Models are permitted. The Bidder can quote alternate models meeting the specifications of the bidding document of same manufacturer with single Bid Security.

- 16.2 If an agent submits bid on behalf of the Principal/OEM, the same agent shall not submit a bid on behalf of another Principal/OEM in the same ATE for the same item/product. In a bid, either the Indian Agent on behalf of the Principal/OEM or Principal/OEM itself can bid but both cannot bid simultaneously for the same models in the same ATE.
- 16.3 One Principal/OEM cannot authorize two agents simultaneously for the same item against same ATE.

17 Documents Establishing Bidder's Eligibility and Qualifications

- 17.1 Pursuant to GIB clause 11, the bidder shall furnish, as part of its bid, relevant details and documents establishing its eligibility to quote and its qualifications to perform the contract if its bid is accepted.
- 17.2 The documentary evidence needed to establish the bidder's qualifications shall fulfill the following requirements:
- a) In case the bidder offers to supply goods, which are manufactured by some other firm, the bidder has been duly authorised by the goods manufacturer to quote for and supply the goods to the purchaser. The bidder shall submit the manufacturer's authorization letter to this effect as per the standard form provided under Section XIII in this document.
 - b) In case the bidder is not doing business in India, it is duly represented by an agent stationed in India fully equipped and able to carry out the required contractual functions and duties of the supplier including after sale service, maintenance & repair etc. of the goods in question, stocking of spare parts and fast moving components and other obligations, if any, specified in the conditions of contract and/or technical specifications.

18. Documents establishing good's Conformity to Bidding Document.

- 18.1 The bidder shall provide in its bid the required as well as the relevant documents like technical data, literature, drawings etc. to establish that the goods and services offered in the bid fully conform to the goods and services specified by the purchaser in the Bidding Documents. For this purpose the bidder shall also provide a clause-by-clause commentary on the technical specifications and other technical details incorporated by the purchaser in the Bidding Documents to establish technical responsiveness of the goods and services offered in its bid.
- 18.2 In case there is any variation and/or deviation between the goods & services prescribed by the purchaser and that offered by the bidder, the bidder shall list out the same in a chart form without ambiguity and provide the same along with its bid.
- 18.3 If a bidder furnishes wrong and/or misleading data, statement(s) etc. about technical acceptability of the goods and services offered by it, its bid will be liable to be ignored and rejected in addition to other remedies available to the purchaser in this regard.

19. Bid Security (BS)

- 19.1 Pursuant to GIB clauses 8.1 and 11.1 A (i) the bidder shall furnish along with its bid, Bid Security for amount as shown in the Notice Inviting Bids (NIB). The Bid Security is required to protect the purchaser against the risk of the bidder's unwarranted conduct as amplified under sub-clause 19.7 below.

- 19.2 The bidders who are currently registered with MSME for the specific goods as per bidding document specification shall be eligible for exemption from Bid Security as defined in MSE Procurement Policy issued by the department of MSME. In case the bidder falls in this category, the bidder shall enclose relevant certificate of registration issued by department of MSME.
- 19.3 The Bid Security shall be denominated in Indian Rupees or equivalent currencies as per GIB clause 12.2. The Bid Security shall be furnished in one of the following forms:
- i) Account Payee Demand Draft/ Banker's cheque
 - ii) Fixed Deposit Receipt
 - iii) Bank Guarantee
- 19.4 The demand draft or banker's cheque shall be drawn on any commercial bank in India or country of the bidder, in favour of the "....."(as indicated in the NIB) payable at New Delhi. In case of Bank Guarantee, the same is to be provided from any commercial bank in India or country of the bidder as per the format specified under Section XII in these documents.
- 19.5 The Bid Security shall be valid for a period of forty-five (45) days beyond the validity period of the bid. As validity period of Bid as per Clause 20 of GIB is 270 days, the Bid Security shall be valid for 315 days from Techno-Commercial Bid opening date.
- 19.6 The Bid Security of unsuccessful bidders will be returned without any interest, after expiry of the bid validity period, but not later than thirty days after conclusion of the resultant contract. The Bid Security of successful bidder will be returned without any interest, after receipt of performance security from that bidder.
- 19.7 Bid Security is required to protect the purchaser's right against the risk of the Bidder's conduct, which would warrant the forfeiture of the Bid Security. Bid Security of a bidder will be forfeited, if the bidder withdraws or amends its bids or impairs or derogates from the bid in any respect within the period of validity of its bid or if it comes to the notice that the information/documents furnished in its bid is incorrect, false, misleading or forged without prejudice to other rights of the purchaser. The Bid Security of the successful bidder will be forfeited without prejudice to other rights of Purchaser if it fails to furnish the required performance security within the specified period.
- 19.8 In the case of Bank Guarantee furnished from banks outside India (i.e. foreign Banks), it should be authenticated and countersigned by any nationalized bank in India by way of back-to-back counter guarantee and the same should be submitted along with the bid.

20. Bid Validity

- 20.1 If not mentioned otherwise in the SIB, the bid shall remain valid for acceptance for a period of 270 days (Two hundred and Seventy days) after the date of bid opening prescribed in the Bidding Document. Any bid valid for a shorter period shall be treated as unresponsive and rejected.
- 20.2 In exceptional cases, the bidder may be requested by the purchaser to extend the validity of their bids up to a specified period. Such request(s) and responses thereto shall be conveyed by mail/fax/email. The bidders, who agree to extend the bid validity, are to extend the same without any change or modification of their original bid and they are also to extend the validity period of the Bid Security accordingly. A bidder, who may not agree to extend its bid validity after the expiry of the original

validity period, their bid will not be considered further and the Bid Security furnished by them shall be returned.

- 20.3 In case the day up to which the bids are to remain valid falls on/subsequently declared a holiday or closed day for the purchaser, the bid validity shall automatically be extended up to the next working day.

21. Signing and Sealing of Bid

- 21.1 The bidders shall submit their bids as per the instructions contained in GIB Clause 11.
- 21.2 Unless otherwise mentioned in the SIB, a bidder shall submit only one copy of its bid marking it as "Original". Bidders are requested to submit their Bids after binding and page numbering.
- 21.3 The Bid shall either be typed or written in indelible ink and the same shall be signed by the bidder or by a person(s) who has been duly authorized. The letter of authorization shall be by a written power of attorney, which shall also be furnished along with the bid.
- 21.4 All the documents of the bid shall be duly signed at the appropriate places as indicated in the Bidding Documents and all other pages of the bid including printed literature (if any), shall be initialled and stamped by the same person(s) signing the bid. The bid shall not contain any eraser or overwriting, except as necessary to correct any error made by the bidder and, if there is any such correction; the same shall be initialled and stamped by the person(s) signing the bid.
- 21.5 The bidder is to seal the bid and writing the address of the purchaser and the bid reference number on the envelopes. The sentence "NOT TO BE OPENED" before _____ (The bidder is to put the date & time of bid opening) are to be written on this envelope. If the envelope is not sealed and marked properly as above, the purchaser will not assume any responsibility for its misplacement, premature opening, late opening etc.
- 21.6 Bidding Document seeks quotation following "Two Bid System", in two parts. First part will be known as 'Techno-Commercial Bid', and the second part 'Price Bid' as specified in clause 11 of GIB. Bidders shall seal 'Techno-Commercial Bid' and 'Price Bid' separately and covers will be suitably super scribed. Both these sealed covers shall be than put in a bigger cover and sealed and procedure prescribed in Paras 21.1 to 21.5 be followed.

D. SUBMISSION OF BIDS

22. Submission of Bids:

- 22.1 Unless otherwise specified, the bidders are to drop the Bids in the tender box located at **HLL Infra Tech Services Limited, Procurement and Consultancy Division, B-14 A, Sector-62, Noida-201307, Uttar Pradesh** or the same shall be submitted by the bidder by hand to concerned Project Officer dealing hand or his nominee. The necessary entry will be made in the Bid Receipt Register.
- 22.2 The bidders must ensure that they submit the on-line bids within the scheduled closing date & time. They shall also ensure to submit the original Tender

Processing Fee and Bid Security within its scheduled date & time. It is the responsibility of the bidder to ensure that their Bids whether sent by post or by courier or by person, are dropped in the Tender Box by the specified clearing date and time. In the event of the specified date for submission of bid falls on / is subsequently declared a holiday or closed day for the purchaser, the bids will be received up to the appointed time on the next working day.

23. Late Bid:

- 23.1 A bid, which is received after the specified date and time for receipt of bids will be treated as “late bid” and will be ignored.

24. Alteration and Withdrawal of Bid

- 24.1 The bidder, after submitting its bid, is permitted to alter/modify its bid, within the deadline for submission of bids. Alterations/modifications to bids received after the prescribed deadline will not be considered.
- 24.2 No bid should be withdrawn after the deadline for submission of bid and before expiry of the bid validity period. If a bidder withdraws the bid during this period, it will result in forfeiture of the Bid Security furnished by the bidder in its bid.

E. BID OPENING

25. Opening of Bids:

- 25.1 The purchaser will open the bids at the specified date and time and at the specified place as indicated in the NIB.

In case the specified date of bid opening falls on / is subsequently declared a holiday or closed day for the purchaser, the bids will be opened at the appointed time and place on the next working day.

- 25.2 Authorized representatives of the bidder, who have submitted bids on time may attend the bid opening provided they bring with them letter of authority from their bidder. The bid opening official(s) will prepare a list of the representatives attending the bid opening. The list will contain the representatives' names & signatures and corresponding bidder's names and addresses.
- 25.3 Two Bid System as mentioned in Para 21.6 above will be as follows. The “Techno - Commercial Bids” are to be opened in the first instance, at the prescribed time and date as indicated in NIB. These Bids shall be scrutinized and evaluated by the competent committee/authority with reference to parameters prescribed in the Bidding Document. During the Techno-Commercial Bid opening, the bid opening official(s) will read the salient features of the bids like brief description of the goods offered, Bid Security and any other special features of the bids, as deemed fit by the bid opening official(s). Thereafter, in the second stage, the Price Bids of only the Techno-Commercially acceptable offers (as decided in the first stage) shall be opened for further scrutiny and evaluation on a date notified after the evaluation of the Techno-Commercial Bid. The prices, special discount if any of the goods offered etc., as deemed fit by bid opening official(s) will be read out.

F. SCRUTINY AND EVALUATION OF BIDS**26. Basic Principle**

26.1 Bids will be evaluated on the basis of the terms & conditions already incorporated in the Bidding Document, based on which bids have been received and the terms, conditions etc. mentioned by the bidders in their bids. No new condition will be brought in while scrutinizing and evaluating the bids.

27. Scrutiny of Bids

27.1 The Purchaser will examine the Bids to determine whether they are complete, whether any computational errors have been made, whether required Bid Securities have been furnished, whether the documents have been properly signed stamped and whether the Bids are generally in order.

27.2 The Purchaser's determination of a Bid's responsiveness is to be based on the contents of the Bid itself without recourse to extrinsic evidence.

27.3 The Bids will be scrutinized to determine whether they are complete and meet the essential and important requirements, conditions etc. as prescribed in the Bidding Documents. The bids, which do not meet the basic requirements, are liable to be treated as non-responsive and will be rejected.

27.4 The following are some of the important aspects, for which a bid shall be declared non-responsive during the evaluation and will be ignored;

- (i) Bid form as per Section IX (signed & stamped) not enclosed.
- (ii) Bid is unsigned.
- (iii) Bid validity is shorter than the required period.
- (iv) Required Bid Security (Amount, validity etc.)/ Exemption documents have not been provided.
- (v) Bidder has quoted for goods manufactured by other manufacturer(s) without the required Manufacturer's Authorization Form as per Section XIII.
- (vi) Bidder has not agreed to give the required Performance Security of required amount in an acceptable form in terms of GCC clause 5, read with modification, if any, in Section - V – "Special Conditions of Contract", for due performance of the contract.
- (vii) Bidder has not agreed to other essential condition(s) specially incorporated in the bidding document like terms of payment, liquidated damages clause, warranty clause, dispute resolution mechanism, and applicable law.
- (viii) Poor/unsatisfactory past performance.
- (ix) Bidders who stand de-registered/banned/blacklisted by any Central Govt. Ministries/Departments/Hospitals/Institutes.
- (x) Bidder is not eligible as per Clauses 5, 6 & 17 of GIB.
- (xi) Bidder has not quoted for the entire quantity as specified in the List of Requirements in the quoted schedule.
- (xii) Bidder has not agreed for the delivery terms and delivery schedule.

28. Minor Informality/Irregularity/Non-Conformity

28.1 If during the evaluation, the purchaser find any minor informality and/or irregularity and/or non-conformity in a bid, the purchaser will convey its observation on such 'minor' issues, which has not price implication, to the bidders by registered/speed post/ e-mail/fax etc. asking the bidder to respond by a specified date. If the bidder does not reply by the specified date or gives evasive

reply without clarifying the point at issue in clear terms, that bid will be liable to be ignored.

29 Discrepancies in Prices

- 29.1 If, in the price structure quoted by a bidder, there is discrepancy between the unit price and the total price (which is obtained by multiplying the unit price by the quantity), the unit price shall prevail and the total price corrected accordingly, unless the purchaser feels that the bidder has made a mistake in placing the decimal point in the unit price, in which case the total price as quoted shall prevail over the unit price and the unit price corrected accordingly.
- 29.2 If there is an error in a total price, which has been worked out through addition and/or subtraction of subtotals, the subtotals shall prevail and the total corrected; and
- 29.3 If there is a discrepancy between the amount expressed in words and figures, the amount in words shall prevail, subject to sub clause 29.1 and 29.2 above.
- 29.4 If, as per the judgment of the purchaser, there is any such arithmetical discrepancy in a bid, the same will be suitably conveyed to the bidder by registered/speed post/email. If the bidder does not agree to the observation of the purchaser, the bid is liable to be ignored.

30. Qualification Criteria

- 30.1 Bids of the bidder, who do not meet the required Qualification Criteria prescribed in Section VIII, will be treated as non-responsive and will not be considered further.

31. Conversion of Bid currencies to Indian Rupees

- 31.1 In case the Bidding Documents permits the bidder to quote their prices in different currencies, all such quoted prices of the responsive bidder will be converted to a single currency viz., Indian Rupees for the purpose of equitable comparison and evaluation, as per the exchange rates established by the Reserve Bank of India for similar transactions, as on the date of 'Price Bid' opening.

33. Schedule-wise Evaluation

- 1.1 In case the List of Requirements contains more than one schedule, the responsive bids will be evaluated and compared separately for each schedule. The bid for a schedule will not be considered if the complete requirements prescribed in that schedule are not included in the bid. However, as already mentioned in GIB sub clause 13.2, the bidders have the option to quote for any one or more schedules and offer discounts for combined schedules. Such discounts wherever applicable will be taken into account to determine the lowest evaluated cost for the purchaser in deciding the successful bidder for each schedule, subject to bidder (s) being responsive.

33. Comparison of Bids

- 33.1. Unless mentioned otherwise in Section – III – Special Instructions to bidder and Section – VI – List of Requirements, the comparison of the responsive Bids shall be carried out on Free Delivery at consignee site basis. The quoted Turnkey Work prices and CAMC prices will also be added for comparison/ranking purpose for evaluation. "Net Present Value (NPV) of the Comprehensive Annual Maintenance

Contract Charges (CAMC) quoted for 5 years after the warranty period shall be added to the bid price for evaluation and will be calculated after discounting the quoted price by a discounting factor of 10% per annum.” However the payment of CAMC shall be made to the successful bidder at approved rates.

34. Additional Factors and Parameters for Evaluation and Ranking of Responsive Tenders

34.1 Further to GIB Clause 33 above, the purchaser’s evaluation of a bid will include and take into account the following:

- i) In the case of goods manufactured in India or goods of foreign origin already located in India, GST which will be contractually payable (to the bidder), on the goods if a contract is awarded on the bidder; and
- ii) in the case of goods of foreign origin offered from abroad, customs duty and GST which will be contractually payable (to the bidder) on the goods if the contract is awarded on the bidder.

34.2 The purchaser’s evaluation of bid will also take into account the additional factors, if any, incorporated in SIB in the manner and to the extent indicated therein.

34.3 The Purchaser reserves the right to give the price preference to small-scale sectors etc. and purchase preference to central public sector undertakings as per the instruction in vogue while evaluating, comparing and ranking the responsive Bids.

35. Bidder’s capability to perform the contract

35.1 The purchaser, through the above process of bid scrutiny and bid evaluation will determine to its satisfaction whether the bidder, whose bid has been determined as the lowest evaluated responsive bid is eligible, qualified and capable in all respects to perform the contract satisfactorily. If, there is more than one schedule in the List of Requirements, then, such determination will be made separately for each schedule.

35.2 The above-mentioned determination will, inter alia, take into account the bidder satisfying all the requirements of the purchaser as incorporated in the Bidding Document. Such determination will be based upon scrutiny and examination of all relevant data and details submitted by the bidder in its bid as well as such other allied information as deemed appropriate by the purchaser.

36. Contacting the Purchaser

36.1 From the time of submission of bid to the time of awarding the contract, if a bidder needs to contact the purchaser for any reason relating to NIB/Bidding Document and / or its bid, it should do so only in writing.

36.2 In case a bidder attempts to influence the purchaser in the purchaser’s decision on scrutiny, comparison & evaluation of bids and awarding the contract, the bid of the bidder shall be liable for rejection in addition to appropriate administrative actions being taken against that bidder, as deemed fit by the purchaser.

G. AWARD OF CONTRACT**37. Purchaser's Right to accept any bid and to reject any or all bids.**

37.1 The purchaser reserves the right to accept in part or in full any bid or reject any or more bid(s) without assigning any reason or to cancel the bidding process and reject all bids at any time prior to award of contract, without incurring any liability, whatsoever to the affected bidder(s).

38. Award Criteria

38.1 Subject to GIB clause 37 above, the contract will be awarded to the lowest evaluated responsive bidder decided by the purchaser in terms of GIB Clause 35.

39. Variation of Quantities at the Time of Award/ Currency of Contract

39.1 At the time of awarding the contract, the purchaser reserves the right to increase or decrease by up to twenty five (25) per cent, the quantity of goods and services mentioned in the schedule (s) in the "List of Requirements" (rounded off to next whole number) without any change in the unit price and other terms & conditions quoted by the bidder.

39.2 If the quantity has not been increased at the time of the awarding the contract, the purchaser reserves the right to increase by up to twenty five (25) per cent, the quantity of goods and services mentioned in the contract (rounded off to next whole number) without any change in the unit price and other terms & conditions mentioned in the contract, during the currency of the contract.

40. Notification of Award

40.1 Before expiry of the bid validity period, the purchaser will notify the successful bidder(s) in writing, by registered / speed post or by fax/email (to be confirmed by registered / speed post) that its bid for Goods & Services, which have been selected by the purchaser, has been accepted, also briefly indicating there in the essential details like description, specification and quantity of the goods & services and corresponding prices accepted. The successful bidder must furnish to the purchaser the required Performance Security within thirty days from the date of dispatch of this notification, failing which the Bid Security will be forfeited and the award will be cancelled. Relevant details about the Performance Security have been provided in clause 5 of GCC under Section IV.

40.2 The Notification of Award shall constitute the conclusion of the Contract.

41. Issue of Contract

41.1 Promptly after notification of award, the Purchaser will mail the contract form (as per Section XV) duly completed and signed, in duplicate, to the successful bidder by registered / speed post.

41.2 Within twenty one days from the date of the contract, the successful bidder shall return the original copy of the contract, duly signed and dated, to the Purchaser/ by registered / speed post/courier.

41.3 The Purchaser reserves the right to issue the Notification of Award consignee wise.

42. Non-receipt of Performance Security and Contract by the Purchaser

42.1 Failure of the successful bidder in providing Performance Security and/or returning contract copy duly signed in terms of GIB clauses 40 and 41 above shall make the bidder liable for forfeiture of its Bid Security and, also, for further actions by the Purchaser it as per the clause 24-Termination of default of GCC under Section IV.

43. Return of Bid Security

43.1 The Bid Security of the successful bidder and the unsuccessful bidder will be returned to them without any interest, whatsoever, in terms of Clause 19 of GIB.

44. Publication of Bid Result

44.1 The name and address of the successful bidder (s) receiving the contract(s) will be mentioned in the Website of AIIMS, CPPP and HITES.

H. CORRUPT OR FRADULENT PRACTICES

45. Corrupt or Fraudulent Practices

45.1 It is required by all concerned namely the Bidder /Suppliers/Purchaser/Consignee/End User etc. to observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, the Purchaser: -

- (a) defines, for the purposes of this provision, the terms set forth below as follows:
 - (i) “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; and
 - (ii) “fraudulent practice” means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Purchaser, 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 Purchaser of the benefits of free and open competition;
- (b) Will reject a proposal for award if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question;
- (c) Will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a contract by the purchaser if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing the contract.

SECTION – III**SPECIAL INSTRUCTIONS TO BIDDERS
(SIB)**

The following Special Instructions to Bidders will apply for this purchase. These special instructions will modify/substitute/supplement the corresponding General Instructions to Bidders (GIB) incorporated in Section II. The corresponding GIB clause numbers have also been indicated in the text below:

In case of any conflict between the provision in the GIB and that in the SIB, the provision contained in the SIB shall prevail.

Sl. No.	GIB Clause No.	Topic	SIB Provision	Ref. Page No.
A	1 to 7	Preamble	No Change	
B	8 to 10	Bidding Document	Change in GIB Clause no. 10.1	
	10.1	Clarification of Bid document	Changed as under	10
C	11 to 21	Preparation of Bids	Change in GIB Clause no. 21.1	
	21.1		Changed as under	17
D	22 to 24	Submission of Bids	Guiding notes given as under	18
E	25	Bid Opening	No Change	
F	26 to 36	Scrutiny and Evaluation of Bids	No Change	
	33	Comparison of Bids	Additional para 33.2 as under	20
G	37 to 44	Award of Contract	No Change	
H	45	Corrupt or Fraudulent Practices	No Change	

10. Clarification of Bid document

10.1 A bidder requiring any clarification or elucidation on any issue of the TE documents may take up the same with the purchaser in writing in their letter head duly signed and scanned through email to hll.ncij@hllhites.com. The purchaser will respond to such request provided the same is received 2 (two) days prior to the Pre-bid Meeting Conference. Any queries/representations received after the pre-bid meeting will not be taken into cognizance.

21. Digital Signing of e-Bid

21.1 The bidders shall submit their bids online as per the instructions contained in GIB Clause 11 and any other specific instruction mentioned in the e-Tender portal using the digital signature.

Instruction on submission of Bids

- i) All the necessary documents as prescribed in the NIB shall be prepared and scanned in different files (in PDF format as prescribed) and uploaded for on-line submission of Proposal.

- ii) The scanned copies of Bid Processing Fee, Bid Security, all document(s)/ information(s) including the Financial Proposal should be uploaded **online only** in the prescribed format given in the designated e-tendering portal website. No other mode of submission shall be acceptable.

However, **Bid Processing Fee, Bid Security, Catalogue(s)/Data-sheet(s)** related to all quoted items must be submitted in original at the desired venue before the last date and time of physical submission as mentioned in the NIB.

- iii) The prospective bidders may **scan the documents in low resolution (75 to 100 DPI)** instead of 200 DPI. The documents may be scanned for further lower resolution (if possible). This would reduce the size of the Cover and would be uploaded faster.
- iv) The Individual file size of uploading is restricted up to 5 MB. Bidders may upload multiple files (Not exceeding 5 MB individually) & give relevant file name indicating the contents.
- v) The file name of price bid should not be different from the price bid format uploaded by the Bid inviting Authority in the portal. This can be downloaded from the **Notes & Attachment** under **Details** of item when the RFx/event is in **Display Mode**.
- vi) **Bidders may simulate online bid submission (technical & financial) at least one week in advance of the bid submission deadline. No clarifications/troubleshooting regarding any problems being faced during bid submission online shall be entertained in the last week of bid submission.**

Qualification Criteria (Ref. GIB Clause 30.1)

The Purchaser reserves the right to ask for a free demonstration of the quoted equipment after giving reasonable time to the bidder at a pre-determined place acceptable to the purchaser or at site (in case of non-portable and heavy equipment) for technical acceptability as per the bidding document specifications, before the opening of the Price Bid.

33. Comparison of Bids

- 33.2 Unit Prices for all optional items/accessories/services (if any) asked in the tender specifications must be quoted separately by all the bidders in their price bid. Such unit prices after multiplying by the required quantity shall be added and taken into consideration for comparison and ranking of bids.

Added Para (Ref. GIB Clause 33 & 34):

The comparison of bids will be based on GIB Clause 33, 34 and if any, as specified in the Technical specification(s). However, at the time of award of contract, the value of award (bid value/contract value) shall be limited to the upfront charges payable by the exchequer for Supply, Installation, Testing & Commissioning value only on DDP basis which is inclusive of warranty (for number of years specified at section VI; List of Requirement, Part I) and any other item(s)/services detailed for upfront purchase in the technical specifications. The cost of any other parameters like CAMC price beyond the warranty period, cost of any Consumables, any other recurring expenditure, etc. which have been considered for ranking of bids or for freezing of rates shall not be part of tender/award/bid/contract value.

SECTION - IV**GENERAL CONDITIONS OF CONTRACT (GCC)
TABLE OF CLAUSES**

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1. Application

- 1.1 The General Conditions of Contract incorporated in this section shall be applicable for this purchase to the extent the same are not superseded by the Special Conditions of Contract prescribed under Section V, List of requirements under Section VI and Technical Specification under Section VII of this document.

2. Use of contract documents and information

- 2.1 The supplier shall not, without the purchaser's prior written consent, disclose the contract or any provision thereof including any specification, drawing, sample or any information furnished by or on behalf of the purchaser in connection therewith, to any person other than the person(s) employed by the supplier in the performance of the contract emanating from this Bidding Document. Further, any such disclosure to any such employed person shall be made in confidence and only so far as necessary for the purposes of such performance for this contract.
- 2.2 Further, the supplier shall not, without the purchaser's prior written consent, make use of any document or information mentioned in GCC sub-clause 2.1 above except for the sole purpose of performing this contract.
- 2.3 Except the contract issued to the supplier, each and every other document mentioned in GCC sub-clause 2.1 above shall remain the property of the purchaser and, if advised by the purchaser, all copies of all such documents shall be returned to the purchaser on completion of the supplier's performance and obligations under this contract.

3. Patent Rights

- 3.1 The supplier shall, at all times, indemnify and keep indemnified the purchaser, free of cost, against all claims which may arise in respect of goods & services to be provided by the supplier under the contract for infringement of any intellectual property rights or any other right protected by patent, registration of designs or trademarks. In the event of any such claim in respect of alleged breach of patent, registered designs, trademarks etc. being made against the purchaser, the purchaser shall notify the supplier of the same and the supplier shall, at his own expenses take care of the same for settlement without any liability to the purchaser.

4. Country of Origin

- 4.1 All goods and services to be supplied and provided for the contract shall have the origin in India or in the countries with which the Government of India has trade relations.
- 4.2 The word "origin" incorporated in this clause means the place from where the goods are mined, cultivated, grown, manufactured, produced or processed or from where the services are arranged.
- 4.3 The country of origin may be specified in the Price Schedule.

5. Performance Security

- 5.1 Within Thirty (30) days from date of the issue of notification of award by the Purchaser, the supplier, shall furnish Performance Security to the Purchaser for an amount equal to ten percent (10%) of the total value of the contract, valid up to

ninety (90) days after the date of completion of all contractual obligations by the supplier, including the warranty obligations.

- 5.2 The Performance security shall be denominated in Indian Rupees or in the currency of the contract as detailed below:

It shall be in any one of the forms namely Account Payee Demand Draft or Fixed Deposit Receipt drawn from any Scheduled bank in India or Bank Guarantee issued by a Scheduled bank in India, in the prescribed form as provided in Section XIV of this document in favour of the Purchaser. The validity of the Fixed Deposit Receipt or Bank Guarantee will be for a period up to ninety (90) days beyond Warranty Period.

- 5.3 In the event of any failure/default of the supplier with or without any quantifiable loss to the government including furnishing of consignee wise Bank Guarantee for CAMC security as per Performa in Section XIV, the amount of the performance security is liable to be forfeited. The needful will be done to cover any failure/default of the supplier with or without any quantifiable loss to the Government.
- 5.4 In the event of any amendment issued to the contract, the supplier shall, within fifteen (15) days of issue of the amendment, furnish the corresponding amendment to the Performance Security (as necessary), rendering the same valid in all respects in terms of the contract, as amended.
- 5.5 The supplier shall enter into Comprehensive Annual Maintenance Contract as per the 'Contract Form - B' in Section XV with respective consignees, 3 (three) months prior to the completion of Warranty Period. The CAMC will commence from the date of expiry of the Warranty Period.
- 5.6 Subject to GCC sub – clause 5.3 above, the Purchaser will release the Performance Security without any interest to the supplier on completion of the supplier's all contractual obligations including the warranty obligations & after receipt of Consignee wise bank guarantee for CAMC security in favour of concerned Director AIIMS/Chief of Centres/MS of Hospital/Head of the Department/Dean as per the format in Section XIV.

6. Technical Specifications and Standards

- 6.1 The Goods & Services to be provided by the supplier under this contract shall conform 'Technical Specification' under Sections VII of this document.

7. Packing and Marking

- 7.1 The packing for the goods to be provided by the supplier should be strong and durable enough to withstand, without limitation, the entire journey during transit including transshipment (if any), rough handling, open storage etc. without any damage, deterioration etc. As and if necessary, the size, weights and volumes of the packing cases shall also take into consideration, the remoteness of the final destination of the goods and availability or otherwise of transport and handling facilities at all points during transit up to final destination as per the contract.
- 7.2 The quality of packing, the manner of marking within & outside the packages and provision of accompanying documentation shall strictly comply with the requirements as provided in Technical Specifications under Section VII and in SCC under Section V. In case the packing requirements are amended due to issue of any

amendment to the contract, the same shall also be taken care of by the supplier accordingly.

7.3 Packing instructions:

Unless otherwise mentioned in the Technical Specification under Section VII and in SCC under Section V, the supplier shall make separate packages for each consignee (in case there is more than one consignee mentioned in the contract) and mark each package on three sides with the following with indelible paint of proper quality:

- a. Contract number and date
- b. Brief description of goods including quantity
- c. Packing list reference number
- d. Country of origin of goods
- e. Consignee's name and full address and
- f. Supplier's name and address

8. Inspection, Testing and Quality Control

- 8.1 The purchaser and/or its nominated representative(s) will, without any extra cost to the purchaser, inspect and/or test the ordered goods and the related services to confirm their conformity to the contract specifications and other quality control details incorporated in the contract. The purchaser shall inform the supplier in advance, in writing, the purchaser's programme for such inspection and, also the identity of the officials to be deputed for this purpose. "The cost towards the transportation, boarding and lodging will be borne by the purchaser and/or its nominated representative(s) for the first visit. In case the goods are rejected in the first instance and the supplier requests for re-inspection, and if same is accepted by Purchaser/Consignee, all subsequent inspections shall be at the cost of the supplier. The expense will be to and fro Economy Airfare, Local Conveyance, Boarding and Lodging of the inspection team for the inspection period."
- 8.2 The Technical Specification incorporated in the contract shall specify what inspections and tests are to be carried out and, also, where and how they are to be conducted. If such inspections and tests are conducted in the premises of the supplier or its subcontractor(s), all reasonable facilities and assistance, including access to relevant drawings, design details and production data, shall be furnished by the supplier to the purchaser's inspector at no charge to the purchaser.
- 8.3 If during such inspections and tests the contracted goods fail to conform to the required specifications and standards, the purchaser's inspector may reject them and the supplier shall either replace the rejected goods or make all alterations necessary to meet the specifications and standards, as required, free of cost to the purchaser and re-submit the same to the purchaser's inspector for conducting the inspections and tests again.
- 8.4 In case the contract stipulates pre-dispatch inspection of the ordered goods at supplier's premises, the supplier shall put up the goods for such inspection to the purchaser's inspector well ahead of the contractual delivery period, so that the purchaser's inspector is able to complete the inspection within the contractual delivery period.
- 8.5 If the supplier tenders the goods to the purchaser's inspector for inspection at the last moment without providing reasonable time to the inspector for completing the inspection within the contractual delivery period, the inspector may carry out the inspection and complete the formality beyond the contractual delivery period at the

risk and expense of the supplier. The fact that the goods have been inspected after the contractual delivery period will not have the effect of keeping the contract alive and this will be without any prejudice to the legal rights and remedies available to the purchaser under the terms & conditions of the contract.

- 8.6 The purchaser's contractual right to inspect, test and, if necessary, reject the goods after the goods' arrival at the final destination shall have no bearing of the fact that the goods have previously been inspected and cleared by purchaser's inspector during pre-dispatch inspection mentioned above.

"On rejection, the supplier shall remove such stores within 14 days of the date of intimation of such rejection from the consignee's premises. If such goods are not removed by the supplier within the period mentioned above, the purchaser/consignee may remove the rejected stores and either return the same to the supplier at his risk and cost by such mode of transport as purchaser/consignee may decide or dispose of such goods at the suppliers risk to recover any expense incurred in connection with such disposals and also the cost of the rejected stores if already paid for."

- 8.7 Goods accepted by the purchaser/consignee and/or its inspector at initial inspection and in final inspection in terms of the contract shall in no way dilute purchaser's/consignee's right to reject the same later, if found deficient in terms of the warranty clause of the contract, as incorporated under GCC Clause 15.
- 8.8 Principal/ Foreign supplier shall also have the equipment inspected by recognized/ reputed agency like SGS, Lloyd, Bureau Veritas, TUV etc. prior to dispatch at the supplier's cost and furnish necessary certificate from the said agency in support of their claim.

9. Terms of Delivery

- 9.1 Goods shall be delivered by the supplier in accordance with the terms of delivery and as per the delivery period specified in the schedule of requirement. Please note that the time shall be the essence of the contract.

10. Transportation of Goods

- 10.1 Instructions for transportation of imported goods offered from abroad:

The supplier shall not arrange part-shipments without the express/prior written consent of the purchaser. The supplier is required under the contract to deliver the goods under CIP (Named port of destination) terms.

11. Insurance

- 11.1 Unless otherwise instructed in the SCC, the supplier shall make arrangements for insuring the goods against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the following manner:
- i) In case of supply of domestic goods on Free Delivery at Consignee's Site basis, the supplier shall be responsible till the entire stores contracted for arrival in good condition at destination. The transit risk in this respect shall be covered by the Supplier by getting the stores duly insured for an amount equal to 110% of the value of the goods from warehouse to warehouse (consignee site) on all risk basis. The insurance cover shall be obtained by the Supplier and should be valid till 3 months after the receipt of goods by the Consignee.

- ii) In case of supply of the imported goods on CIP (named port of Destination Basis), the additional extended Insurance (local transportation and storage) would be borne by the Supplier from the port of entry to the consignee site for a period including 3 months beyond date of delivery for an amount equal to 110% of the overall expenditure to be incurred by the purchaser from warehouse to warehouse (consignee site) on all risk basis.

If the equipment is not commissioned and handed over to the consignee within 3 months, the insurance will have to be extended by the supplier at their cost till the successful installation, testing, commissioning and handing over of the goods to the consignee. In case the delay in the installation and commissioning is due to handing over of the site to the supplier by the consignee/End User, such extensions of the insurance will still be done by the supplier, but the insurance extension charges at actual will be reimbursed.

12. Spare parts

12.1 If specified in the List of Requirements and in the resultant contract, the supplier shall supply/provide any or all of the following materials, information etc. pertaining to spare parts manufactured and/or supplied by the supplier:

- a) The spare parts as selected by the Purchaser/End User to be purchased from the supplier, subject to the condition that such purchase of the spare parts shall not relieve the supplier of any contractual obligation including warranty obligations; and
- b) In case the production of the spare parts is discontinued:
 - i) Sufficient advance notice to the Purchaser/End User before such discontinuation to provide adequate time to the purchaser to purchase the required spare parts etc., and
 - ii) Immediately following such discontinuation, providing the Purchaser/End User, free of cost, the designs, drawings, layouts and specifications of the spare parts, as and if requested by the Purchaser/End User.

12.2 Supplier shall carry sufficient inventories to assure ex-stock supply of consumables and spares for the goods so that the same are used during warranty and CAMC period.

13. Incidental services

13.1 Subject to the stipulation, if any, in the SCC (Section – V), List of Requirements (Section - VI) and the Technical Specification (Section – VII), the supplier shall be required to perform the following services:

- i) Installation & Commissioning, Supervision, Demonstration, Trial run etc. of the goods.
- ii) Turnkey work (if any).
- iii) Training of Consignee's/End Users Doctors, Staff, operators etc. for operating and maintaining the goods.
- iv) Supplying required number of operation & maintenance manual for the goods.

14. Distribution of Dispatch Documents for Clearance/Receipt of Goods

The supplier shall send all the relevant dispatch documents well in time to enable the purchaser clear or receive (as the case may be) the goods in terms of the contract. Unless otherwise specified in the SCC, the usual documents involved and the drill to be followed in general for this purpose are as follows:

Within 24 hours of dispatch, the supplier shall notify the concerned Store Officer in AIIMS Clearing Agent and others concerned the complete details of dispatch and also supply following documents by air mail/ courier etc. with intimation by e-mail:

- a) Commercial Supplier's Invoice giving full details of the goods including quantity, value, etc.;
- b) Packing list;
- c) Certificate of country of origin;
- d) Bill of Lading/Airway Bill;
- e) Insurance Certificate; (if applicable)
- f) Manufacturer's guarantee and Inspection certificate; (if applicable)
- g) Inspection certificate issued by the Purchaser's Inspector; (if applicable)
- h) Any other document(s) as and if required in terms of the contract.

15. Warranty and CAMC

15.1 The supplier warrants comprehensively that the goods supplied under the contract is new, unused and incorporate all recent improvements in design and materials unless prescribed otherwise by the purchaser in the contract. The supplier further warrants that the goods supplied under the contract shall have no defect arising from design, materials (except when the design adopted and/or the material used are as per the Purchaser's/Consignee's specifications) or workmanship or from any act or omission of the supplier, that may develop under normal use of the supplied goods under the conditions prevailing in India.

15.2 The warranty shall include all spares, labour and preventive maintenance from the date of completion of the satisfactory installation and acceptance till warranty period.

15.3 The Comprehensive Annual Maintenance Contract shall include all spares, labour and preventive maintenance from the date of completion of the satisfactory installation and acceptance till warranty period.

15.4 Warranty as well as Comprehensive Annual Maintenance Contract will be inclusive of all accessories and turnkey work and it will also cover the following, wherever applicable:-

- All kinds of Motors.
- Plastic & Glass Parts against any manufacturing defects.
- All kinds of sensors.
- All kinds of coils, probes and transducers.
- Printers and imagers including laser and thermal printers with all parts.
- UPS including the replacement of batteries.
- Air-conditioners

15.5 In case of any claim arising out of this warranty and CAMC period the Purchaser/Consignee shall promptly notify the same in writing to the supplier. The period of the warranty will be as per G.C.C clause number 15.2 unless revised in SCC in Section V of Bidding Document.

- 15.6 Upon receipt of such notice, the supplier shall, within 8 hours on a 24(hrs) X 7 (days) X 365 (days) basis respond to take action to repair or replace the defective goods or parts thereof, free of cost, at the ultimate destination. The supplier shall take over the replaced parts/goods after providing their replacements and no claim, whatsoever shall lie on the purchaser for such replaced parts/goods thereafter. The penalty clause for non rectification will be applicable as per conditions laid down in the Bidding Document.
- 15.7 In the event of any rectification of a defect or replacement of any defective goods during the warranty period, the warranty for the rectified/replaced goods shall be up to the completion of the original warranty period of the main equipment.
- 15.8 If the supplier, having been notified, fails to respond to take action to repair or replace the defect(s) within 8 hours on a 24(hrs) X 7 (days) X 365 (days) basis, the purchaser may proceed to take such remedial action(s) as deemed fit by the purchaser, at the risk and expense of the supplier and without prejudice to other contractual rights and remedies, which the purchaser may have against the supplier.
- 15.9 During Warranty and CAMC period, the supplier is required to visit at each consignee's site at least once in 6 months commencing from the date of the installation for preventive maintenance of the goods.
- 15.10 The Purchaser/Consignee reserve the rights to enter into Comprehensive Annual Maintenance Contract between the Purchaser and the Supplier for the period as mentioned in Section VII, Technical Specifications after the completion of warranty period.
- 15.11 The supplier along with its Manufacturer, Indian Agent and the CAMC provider shall ensure continued supply of the spare parts for the machines and equipment supplied by them to the purchaser for 10 years from the date of installation and handing over.
- 15.12 The Supplier along with its Manufacturer Indian Agent and the CMC Provider shall always accord most favoured client status to the Purchaser vis-à-vis its other Clients/Purchasers of its equipment/machines/goods etc. and shall always give the most competitive price for its machines/equipment supplied to the Purchaser/Consignee.

16. Assignment

- 16.1 The Supplier shall not assign, either in whole or in part, its contractual duties, responsibilities and obligations to perform the contract, except with the Purchaser's prior written permission.

17. Sub Contracts

- 17.1 The Supplier shall notify the Purchaser in writing of all sub contracts awarded under the contract, if not already specified in its bid. Such notification, in its original bid or later, shall not relieve the Supplier from any of its liability or obligation under the terms and conditions of the contract.
- 17.2 Sub contract shall be only for bought out items and sub-assemblies.
- 17.3 Sub contracts shall also comply with the provisions of GCC Clause 4 ("Country of Origin").

18. Modification of Contract

18.1 If necessary, the purchaser may, by a written order given to the supplier at any time during the currency of the contract, amend the contract by making alterations and modifications within the general scope of contract in any one or more of the following:

- a) Specifications, drawings, designs etc. where goods to be supplied under the contract are to be specially manufactured for the purchaser,
- b) Mode of packing,
- c) Incidental services to be provided by the supplier
- d) Mode of dispatch,
- e) Place of delivery, and
- f) Any other area(s) of the contract, as felt necessary by the purchaser depending on the merits of the case.

18.2 In the event of any such modification/alteration causing increase or decrease in the cost of goods and services to be supplied and provided, or in the time required by the supplier to perform any obligation under the contract, an equitable adjustment shall be made in the contract price and/or contract delivery schedule, as the case may be, and the contract amended accordingly. If the supplier doesn't agree to the adjustment made by the Purchaser the supplier shall convey its views to the Purchaser within twenty-one days from the date of the supplier's receipt of the Purchaser's amendment/modification of the contract.

19. Prices

19.1 Prices to be charged by the supplier for supply of goods and provision of services in terms of the contract shall not vary from the corresponding prices quoted by the supplier in its bid and incorporated in the contract except for any price adjustment authorized in the SCC.

20. Taxes and Duties

20.1 Supplier shall be entirely responsible for GST incurred until delivery of the contracted goods to the purchaser.

20.2 Further instruction, if any, shall be as provided in the SCC.

21. Terms and Mode of Payment

21.1 Payment Terms

Payment shall be made through electronic transfer in NEFT/RTGS 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 (M&E) Or Foreign Origin Located Within India.

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

- a) **On delivery:** 75% payment of the contract price shall be paid on receipt of goods in good condition and upon the submission of the following documents:
 - (i) Original copies of supplier's invoice showing contract number, goods description, quantity, packing list, unit price and total amount;

- (ii) Consignee Receipt Certificate as per Section XVI of bidding document in original issued by the authorized representative of the consignee;
- b) **On Acceptance:** Balance 25% payment would be made against “Installation and Acceptance Certificate” of goods to be issued by the End User subject to recoveries, if any, either on account of non-rectification of defects/deficiencies not attended by the Supplier or otherwise. “Installation and Acceptance Certificate” need to be issued by the concerned End User after installation, commissioning, testing and successful trial run (if applicable).
- B) Payment for Imported Goods (M&E):** Payment for foreign currency portion shall be made in the currency as specified in the contract in the following manner:
- a) **On Shipment:** 75% of the net FCA/CIP price (i.e. FCA/CIP price less Indian Agency commission) of the goods despatch by Sea/Air shall be paid through irrevocable, non-transferable Letter of Credit (LC) opened in favour of the supplier in a bank in his country and upon submission of documents specified hereunder:
- i) Commercial Supplier’s Invoice giving full details of the goods including quantity, value, etc.;
 - ii) Packing list;
 - iii) Certificate of country of origin;
 - iv) Negotiable clean Bill of Lading/Airway Bill;
 - v) Insurance Certificate; (if applicable)
 - vi) Manufacturer’s guarantee and Inspection certificate; (if applicable)
 - vii) Inspection certificate issued by the Purchaser’s Inspector; (if applicable)
 - viii) Any other document(s) as and if required in terms of the contract.
- b) **On Acceptance:** Balance payment of 25% of net FCA/CIP price of goods would be made against “Installation and Acceptance Certificate” to be issued by the End User 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. “Installation and Acceptance Certificate” need to be issued by the concerned End User after installation, commissioning, testing and successful trail run (if applicable).
- c) Payment of Consumable Imported Goods/Reagents/Kits would be made 100% against “Installation and Acceptance Certificate” to be issued by the End User through Wire Transfer.
- d) **Payment of Incidental Costs:** Incidental costs till consignee site towards Incidental Services (including Installation & Commissioning, Supervision, Demonstration and Training),if applicable will be paid in Indian Rupees to the Indian Agent on submission of “Installation and Acceptance Certificate” by the End User.
- e) **Payment of Indian Agency Commission:** Indian Agency Commission (IAC) will be paid to the Authorised manufacturer’s agent in Indian rupees indicated in the contract (as per prevailing rate of exchange ruling on the date of Contract) and shall not be subject to further escalation/exchange variation. The agency commission payment shall be made on submission of “Installation and Acceptance Certificate” by the End User.
- C) Payment of Civil/Electrical Works at site:** The payment related to Civil/Electrical Works at site will be made as indicated in the contract (as per prevailing rate of exchange ruling on the date of Contract) and shall not be subject

to further escalation/exchange variation. The payment for Civil/Electrical works shall be made on submission of "Installation and Acceptance Certificate" by the End User.

D) Payment for Comprehensive Annual Maintenance Contract Charges: The consignee will enter into CAMC with the supplier at the rates as stipulated in the contract. The payment of CAMC will be made on six monthly basis after satisfactory completion of said period, duly certified by the End User on receipt of bank guarantee for an amount equivalent to 2.5% of the cost of the equipment as per contract in the prescribed format given in Section XV of the bidding document valid till 3 months after expiry of entire CAMC period. The Performance Bank Guarantee for CAMC will be applicable in case of contract value is more than Rs. 10 lakh.

21.2 Terms of payment for imported goods

- 21.2.1 The supplier shall not claim any interest on payments under the contract.
- 21.2.2 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 at rates as notified from time to time.
- 21.2.3 Irrevocable & non-transferable LC shall be opened by the Purchaser. However, if the supplier requests specifically to open confirmed LC, the extra charges would be borne by the supplier. If LC is required to be extended and/or amended for reasons not attributable to the purchaser, the charges thereof shall be borne by the supplier.
- 21.2.4 The payment shall be made in the currency/currencies authorised in the contract.
- 21.2.5 The supplier shall send its claim for payment in writing, when contractually due, along with relevant documents etc., duly signed with date.
- 21.2.6 While claiming payment, the supplier is also to certify in the bill that the payment being claimed is strictly in terms of the contract and all the obligations on the part of the supplier for claiming that, payment has been fulfilled as required under the contract.
- 21.2.7 While claiming reimbursement of duties, taxes etc. (like GST, sales tax, excise duty, custom duty) from the Purchaser, as and if permitted under the contract, the supplier shall also certify that, in case it gets any refund out of such taxes and duties from the concerned authorities at a later date, the supplier shall refund to the Purchaser forthwith.

22. Delivery

- 22.1 The supplier shall deliver the goods and perform the services under the contract within the time schedule specified by the Purchaser in the List of Requirements and as incorporated in the contract. The time for and the date of delivery of the goods stipulated in the schedule shall be deemed to be of the essence of the contract and the delivery must be completed no later than the date(s) as specified in the contract.
- 22.2 Subject to the provision under GCC clause 26, any unexcused delay by the supplier in maintaining its contractual obligations towards delivery of goods and

performance of services shall render the supplier liable to any or all of the following sanctions:

- (i) Imposition of liquidated damages,
- (ii) Forfeiture of its Performance Security and
- (iii) Termination of the Contract for default.

22.3 If at any time during the currency of the contract, the supplier encounters conditions hindering timely delivery of the goods and performance of services, the supplier shall promptly inform the Purchaser in writing about the same and its likely duration and make a request to the Purchaser for extension of the delivery schedule accordingly. On receiving the supplier's communication, the Purchaser shall examine the situation as soon as possible and, at its discretion, may agree to extend the delivery schedule, with or without liquidated damages for completion of supplier's contractual obligations by issuing an amendment to the contract.

22.4 When the period of delivery is extended due to unexcused delay by the supplier, the amendment letter extending the delivery period shall, interalia contain the following conditions:

- (a) The Purchaser shall recover from the supplier, under the provisions of the clause 23 of the General Conditions of Contract, Liquidated Damages on the goods and services, which the Supplier has failed to deliver within the delivery period stipulated in the contract.
- (b) That no increase in price on account of any ground, whatsoever, including any stipulation in the contract for increase in price on any other ground and, also including statutory increase in or fresh imposition of GST levied in respect of the goods and services specified in the contract, which takes place after the date of delivery stipulated in the contract shall be admissible on such of the said goods and services as are delivered and performed after the date of the delivery stipulated in the contract.
- (c) But nevertheless, the Purchaser shall be entitled to the benefit of any decrease in price on account of reduction in or remission of customs duty and GST which takes place after the expiry of the date of delivery stipulated in the contract.

22.5 The supplier shall not dispatch the goods after expiry of the delivery period. The supplier is required to apply to the Purchaser for extension of delivery period and obtain the same before dispatch. In case the supplier dispatches the goods without obtaining an extension, it would be doing so at its own risk and no claim for payment for such supply and/or any other expense related to such supply shall lie against the purchaser.

22.6 Passing of Property

22.6.1 The property in the goods shall not pass to the purchaser unless and until the goods have been delivered to the consignee in accordance with the contract.

22.6.2 Where there is a contract for sale of specific goods and the supplier is bound to do something to the goods for the purpose of putting them into a deliverable state the property does not pass until such thing is done.

22.6.3 Unless otherwise agreed, the goods remain at the supplier's risk until the property therein is transferred to the purchaser.

23. Liquidated Damages

- 23.1 Subject to GCC clause 26, if the supplier fails to deliver or install/commission any or all of the goods or fails to perform the services within the time frame(s) incorporated in the contract, the Purchaser shall, without prejudice to other rights and remedies available to the Purchaser under the contract, deduct from the contract price, as liquidated damages, a sum equivalent to 0.5% per week of delay or part thereof on delayed supply of goods, installation, commissioning and/or services until actual delivery or performance subject to a maximum of 10% of the contract price. Once the maximum is reached Purchaser may consider termination of the contract as per GCC 24.

During the above-mentioned delayed period of supply and/or performance, the conditions incorporated under GCC sub-clause 22.4 above shall also apply.

24. Termination for Default

- 24.1 The Purchaser without prejudice to any other contractual rights and remedies available to it the Purchaser, may, by written notice of default sent to the supplier, terminate the contract in whole or in part, if the supplier fails to deliver any or all of the goods or fails to perform any other contractual obligation(s) within the time period specified in the contract, or within any extension thereof granted by the Purchaser pursuant to GCC sub-clauses 22.3 and 22.4.
- 24.2 The Performance Security in such cases will be forfeited.
- 24.3 Unless otherwise instructed by the Purchaser, the supplier shall continue to perform the contract to the extent not terminated.

25. Termination for Insolvency

- 25.1 If the supplier becomes bankrupt or otherwise insolvent, the purchaser reserves the right to terminate the contract at any time, by serving written notice to the supplier without any compensation, whatsoever, to the supplier, subject to further condition that such termination will not prejudice or affect the rights and remedies which have accrued and / or will accrue thereafter to the Purchaser.

26. Force Majeure

- 26.1 Notwithstanding the provisions contained in GCC clauses 22, 23 and 24, the supplier shall not be liable for imposition of any such sanction so long the delay and/or failure of the supplier in fulfilling its obligations under the contract is the result of an event of Force Majeure.
- 26.2 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 which is not foreseeable and not brought about at the instance of the party claiming to be affected by such event and which has caused the non – performance or delay in performance. Such events may include, but are not restricted to, wars or revolutions, hostility, acts of public enemy, civil commotion, sabotage, fires, floods, explosions, epidemics, quarantine restrictions, strikes excluding by its employees, lockouts excluding by its management and freight embargoes.
- 26.3 If a Force Majeure situation arises, the supplier shall promptly notify the Purchaser in writing of such conditions and the cause thereof within twenty one days of

occurrence of such event. Unless otherwise directed by the Purchaser in writing, the supplier shall continue to perform its obligations under the contract as far as reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

- 26.4 If the performance in whole or in part or any obligation under this contract is prevented or delayed by any reason of Force Majeure for a period exceeding sixty days, either party may at its option terminate the contract without any financial repercussion on either side.
- 26.5 In case due to a Force Majeure event the Purchaser is unable to fulfil its contractual commitment and responsibility, the Purchaser will notify the supplier accordingly and subsequent actions taken on similar lines described in above sub-paragraphs.

27. Termination for Convenience

- 27.1 The Purchaser reserves the right to terminate the contract, in whole or in part for its Purchaser's convenience, by serving written notice on the supplier at any time during the currency of the contract. The notice shall specify that the termination is for the convenience of the Purchaser. The notice shall also indicate interalia, the extent to which the supplier's performance under the contract is terminated, and the date with effect from which such termination will become effective.
- 27.2 The goods and services which are complete and ready in terms of the contract for delivery and performance within thirty days after the supplier's receipt of the notice of termination shall be accepted by the Purchaser following the contract terms, conditions and prices. For the remaining goods and services, the Purchaser may decide:
- a) To get any portion of the balance completed and delivered at the contract terms, conditions and prices; and / or
 - b) To cancel the remaining portion of the goods and services and compensate the supplier by paying an agreed amount for the cost incurred by the supplier towards the remaining portion of the goods and services.

28. Governing Language

- 28.1 The contract shall be written in English language following the provision as contained in GIB clause 4. All correspondence and other documents pertaining to the contract, which the parties exchange, shall also be written accordingly in that language.

29. Notices

- 29.1 Notice, if any, relating to the contract given by one party to the other, shall be sent in writing or by Facsimile/email and confirmed in writing. The procedure will also provide the sender of the notice, the proof of receipt of the notice by the receiver. The addresses of the parties for exchanging such notices will be the addresses as incorporated in the contract.
- 29.2 The effective date of a notice shall be either the date when delivered to the recipient or the effective date specifically mentioned in the notice, whichever is later.

30. Resolution of Disputes

- 30.1 If dispute or difference of any kind shall arise between the Purchaser/Consignee and the supplier in connection with or relating to the contract, the parties shall make every effort to resolve the same amicably by mutual consultations.
- 30.2 If the parties fail to resolve their dispute or difference by such mutual consultation within twenty-one days of its occurrence, then, unless otherwise provided in the SCC, either the Purchaser/Consignee or the supplier may give notice to the other party of its intention to commence arbitration, as hereinafter provided the applicable arbitration procedure will be as per the Arbitration and Conciliation Act, 1996 of India.
- 30.3 In the case of a dispute or difference arising between the Purchaser and a domestic Supplier relating to any matter arising out of or connected with the contract, such dispute or difference shall be referred to the sole arbitration to be appointed by the Director, AIIMS. The award of the arbitrator shall be final and binding on the parties to the contract subject to the provision that the Arbitrator shall give reasoned award in case the value of claim in reference exceeds Rupees One lakh (Rs. 1,00,000/-).
- 30.4 **Venue of Arbitration:** The venue of arbitration shall be the place from where the contract has been issued, i.e., New Delhi, India.
- 30.5 **Jurisdiction of the court** will be from the place where the Bidding Document has been issued, i.e., New Delhi, India.

31. Applicable Law

The contract shall be governed by and interpreted in accordance with the laws of India for the time being in force.

32 Withholding and Lien in respect of sums claimed

- 32.1 Whenever any claim for payment arises under the contract against the supplier the purchaser shall be entitled to withhold and also have a lien to retain such sum from the security deposit or sum of money arising out of under any other contract made by the supplier with the purchaser, pending finalization or adjudication of any such claim.
- 32.2 It is an agreed term of the contract that the sum of money so withheld or retained under the lien referred to above, by the purchaser, will be kept withheld or retained till the claim arising about of or under the contract is determined by the Arbitrator or by the competent court as the case may be and the supplier will have no claim for interest or damages whatsoever on any account in respect of such withholding or retention.

33. Fall Clause

Fall clause is a price safety mechanism. The fall clause provides that if the contract holder reduces its price or sells or even offers to sell the contracted goods of identical specification and terms & conditions to that of the contract, at a price lower than the contract price, to any person or organization during the currency of the Contract, the Contract price will be automatically reduced with effect from that date for all the subsequent supplies under the Contract and the contract amended accordingly.

SECTION – V

SPECIAL CONDITIONS OF CONTRACT (SCC)

The following Special Conditions of Contract (SCC) will apply for this purchase. The corresponding clauses of General Conditions of Contract (GCC) relating to the SCC stipulations have also been incorporated below.

These Special Conditions will modify/substitute/supplement the corresponding (GCC) clauses.

Whenever there is any conflict between the provision in the GCC and that in the SCC, the provision contained in the SCC shall prevail.

Any specific clause, mentioned in the technical specification shall prevail and will supersede the similar clause mentioned anywhere in the tender.

The warranty conditions will be as mentioned in the list of requirement as per section VI of the Bidding Document.

SECTION- VI**LIST OF REQUIREMENTS****Part I:**

Sl. no.	Rfx/ Event number	Short Description of goods	Quantity	Warranty Period	CAMC period after warranty
1	3000002575	Paperless Critical Care and Anaesthesia Solution	1	05 years	05 years
2	3000002576	CSSD System	1	05 years	05 years
3	3000002577	Laundry System	1	05 years	05 years

Part II: Required Delivery Schedule:**For Indigenous and/or Imported goods:**

Supply, Installation and Commissioning to be completed within 120 days from the date of NOA or date of opening of LC or date of approval of layout drawing, whichever is later.

(In case of LC opening, necessary documents like valid Performance Security and Proforma Invoice are to be submitted within 30 days from the date of release of NOA. In case layout drawing approval is applicable, it should be submitted by the supplier within 21 days from the date of release of NOA.)

For delayed delivery and/or installation and commissioning liquidated damages will get applied as per GCC clause 23.

Part III: Scope of Incidental Services:

Installation & Commissioning, Supervision, Demonstration, Trial run and Training etc. as specified in GCC Clause 13.

Part IV: Turnkey Work (if any) as per details in Technical Specification.**Part V: Warranty period as per details mentioned in technical specification and as specified in Part I above. Warranty period will start from the date of installation, commissioning and acceptance.**

Comprehensive Annual Maintenance Contract (CAMC) as per details in Technical Specification as specified in part I above. Comprehensive Annual Maintenance Contract (CAMC) will start from the date of successful completion of warranty period.

Part VI: Required Terms of Delivery and Destination.**a) For Indigenous goods or for imported goods if supplied from India:**

Free Delivery at Consignee's Site(s)

b) For Imported goods directly from abroad:

The foreign bidders are required to quote their rates on CIP (Named Port of Destination Basis) giving breakup of the price as per the Proforma prescribed in the Price Schedule. Purchaser will place the order on CIP (Named Port of Destination basis).

Insurance (Local Transportation and Storage) would be extended and borne by the Supplier from ware house to the consignee site for a period including 3 months beyond date of delivery.

c) The Consignee details are as under but the supplier is required to deliver the goods at the designated site in the floor and building of concerned Centers/Hospital/Departments:

Consignee	Site	Contact Address.	Air Port	Sea Port
NCI-AIIMS (National Cancer Institute – All India Institute of Medical Sciences)	Jhajjar Campus	Badsha Village Jhajjar Haryana	New Delhi	ICD Tuglakabad (for containerised shipments) Or ICD Patparganj

Note: The consignee will ensure timely issue of NMIC, CDEC etc., wherever applicable to the supplier.

SECTION - VII**TECHNICAL SPECIFICATION AND GENERAL POINTS****A. TECHNICAL SPECIFICATION:**

**Item No. 1 (Rfx/ Event number 300002575)
Paperless Critical Care and Anaesthesia Solution**

A	Scope of Work:
1	Bidder has to Supply, Install, Testing, Commissioning & maintenance of a Paperless Critical Care and Anaesthesia Solution for OTs, ICU, Pre & Post-Operative and Emergency ward.
2	The System will comprise of Anaesthesia Workstation, Patient Monitoring System with CNS (Central Nursing Station), Ventilator and Electronic Charting system for OT and critical care areas.
3	Bidder has to supply all necessary hardware, software, cables, servers etc required for successful installation and commissioning of the entire system.
4	NCI-AIIMS will provide power connection, Intranet LAN Points and MGPS terminal, static IP. However rest of the work shall be done by the bidder.
5	The system shall be supplied as per the Annexure-1.
6	The bidders are strongly advised to visit the site before submission of the bid for assessment of work.
7	Bidder has to provide onsite demonstration of the whole system along with all components, if desired by the Technical Specification committee.
A.	Anaesthesia Machine with Integrated Monitor & Ventilator
I.	The Anaesthesia Machine should have the following features:
1	Should have pipelines attachment for oxygen, nitrous oxide and compressed air.
2	Should have yoke assembly for oxygen and nitrous oxide with pin index system.
3	Durable main switch to put the machine in the on or off position.
4	There should be digital control and display for oxygen & electronic gas mixing.
5	Should have following safety features:
	a. Should provide 25% or more of oxygen when an anaesthetic gaseous mixture is in used.
	b. Should be provided with “electronic” hypoxic guard.
	c. Should have extra flow meters for oxygen only.
6	Should have oxygen flush with a flow rate of more than 35L/min.
7	It should have alternate O2 supply mode in case electronic gas mixture failure.
8	Should be able to hold two seletatec vaporizers (Isoflurane, Sevoflurane & Desflurane) simultaneously. Vaporizers should be maintenance free. Cost of vaporizers shall be quoted separately.
9	Co2 absorber system should have following features:-
	a. Single/Double canister
	b. Autoclavable
	c. Canister capacity of 0.8 kg or more.
	d. It should be possible to bypass the canister if removed during clinical cases to change soda lime.

10	APL valve assembly and Bag mount should be conveniently placed.
11	Independent port for open circuit.
12	Should be provided with two or more number of drawers.
13	Machine should have a good quality handle and castors to move the machine with locking system.
14	The ventilator of the anaesthesia workstation should have the following features:-
	a. Should be electronically controlled.
	b. Should be suitable for infants, paediatric and adult patients.
	c. It should have coloured screen.
	d. Volume and pressure control mode of ventilations.
	e. Electronic peep
	f. Both SIMV and pressure support mode.
	g. Tidal volume range from 20ml to 1200 ml or more
	h. Respiratory rate from 4 to 80 or more
	i. I:E ratio
	j. Display : Respiratory rate, peak airway pressure and PEEP
	k. There should be no collection of water in the breathing system.
15	Should have independent paramagnetic/Galvanic oxygen sensor for FiO ₂ monitor and flow sensor for spirometry. (Both the sensor should be covered under warranty & CMC)
16	The work station should be capable of delivery of low and minimal flow anaesthesia.
17	Should be able to display
	a. Pressure Vs time
	b. Volume /Flow Vs time
18	Should have battery backup of atleast 30 minutes.
19	Bidder must ensure regular supply of medical grade Soda lime with rate quoted separately.
20	Anaesthesia machine should have Colour LCD/TFT display of atleast 12" or more.
21	Multi –Gas analysis with auto detection of all anaesthetic agents either on anaesthesia machine or on monitor with ETCO ₂ values.
22	Should be able to calculate and display FiO ₂
23	Should be able to automatically detect and calculate MAC of all anaesthetic gases.
24	Anaesthesia work station should be able to connect with the Charting System. Necessary protocol/ codes required for this connection should be provided.
25	The machine should be supplied with the following accessories in addition to the Reusable autoclavable Breathing circuit: 2 nos each for Adult & Paediatric
26	Anaesthesia Workstation including patient monitor should be US FDA or European CE (with 4 digit notified body number) approved.
II.	The Monitor should have the following:
	The monitor will be of same make, model & specification including accessories as asked in monitoring specification (at point no. B) with the following minimum parameters/modules: ECG, SpO ₂ , NIBP, 2 IBP, RR, 2 Temp, BIS, Integrated NMT. The monitor should be supplied with the Transport Module/Monitor as detailed at point no. B.

III.	TCI (Target Controlled Infusion) Pump: (One no with each Anaesthesia Workstation)
	Pump should have the following features:
1	Base/ console/Pump having a provision of a LCD/TFT display to show the Status of Infusions being given to Patient.
2	Base can support TCI with normal syringe pumps or volumetric pumps Upto three simultaneously running pump.
3	Upto 5-7 pre-programmed protocols can be stored
4	Should be compatible with all anaesthetic drugs and brand of syringes.
5	Deleted
6	Should be able to predict the drug concentration that will be delivered over time, in the Plasma or at the Effect-site (biophase).
7	Should have facility to show the concentration level change over the next 5 minutes.
8	Displays the 'end of effect' time for each anesthetic drug.
9	Ability to select Pharmacokinetic (Marsh &Schinider) models as per user's choice or patient related issues.
10	Should have facility for 2 channel relay programming.
11	Displays the total dose and volume infused from the start of induction.
12	It should also be integrated with the charting system.
	Pump Specification:
1	Flow rate programmable from 0.1 to 1200 ml/h, 0.1 ml/h increment.
2	Should work on syringe of 5, 10, 20, 30, 50/60 ml & with automatic syringe volume recognition.
3	Should have Pressure limit selection from 100 to 1000 mmHg
4	Automatic anti-bolus system to reduce pressure on sudden release of bolus will be essential.
5	Volume limit must be 1 to 999.9 ml, 0.1 ml increment.
6	Keep Vein open (KVO) must be 1ml/h, or programmed rate if lower than 1ml/h.
7	Alarms for IV Line disconnection, Occlusion pressure, Pre- warning of occlusion alarm, End of Infusion, power failure etc.
8	Syringe position control: syringe barrel clasp check; plunger detection; anti-siphon system check.
9	Infusion control: syringe barrel clasp check; end of infusion pre-alarm; volume limit pre-alarm & alarm; KVO rate.
10	Device control: disengaged driving mechanism alarm; low battery pre-alarm; discharged battery alarm; unconfirmed programming; technical malfunction alarm; (auto test; rotation); drive system advance check; watch dog check; RS 232 interface failure; unlocked module.
11	Stackable design and any no of pumps can be stacked.
12	Rechargeable NiMH type of battery having long life of about 5 hours @ 100 ml/ hr. or more.
13	Displays a measurement of approximate charge level as an indicator of remaining battery capacity.
B.	Cardiac Monitor for ICU with CNS and Transport Monitor/Module

1	Monitor should be advanced high end modular type having integrated non-invasive, invasive measurement & features suitable for neonates, paediatrics & adult patients.
2	Monitor should have bright, highly visible minimum 19" or more colour TFT display with full touch screen
3	Monitor should display minimum 8 waveform or more, along with related numerical parameters on single screen.
4	Monitors should monitor ECG, SpO2, NIBP, Respiration, dual temp, dual IBP, and modular ETCO2.
5	BIS/Entropy, Inbuilt NMT & 2 channel EEG module or Standalone EEG Monitor. (Price of these modules should be quoted separately). All these modules/standalone monitor should be integrated with the charting system.
6	Monitor should have advanced arrhythmia detection and ST Analysis as standard feature.
7	Monitor should provide 24 hours review data including graphical and tabular trends, arrhythmia event recalls, alarms. Should have full disclosure of user selectable waveform (either on monitor or through central station), haematological and lung trends.
8	Monitor should have the time linked review function. Monitor must show the waveforms for the time when the arrhythmia has occurred in case of arrhythmia recall.
9	Monitor should be able to display 12 lead ECG.
10	Monitor should have the feature of ST segment calculations
11	Monitor should be capable to connect with network printer to take print of any review data. (Trends, Graphs, waveform full disclosure either at monitor or at CNS, arrhythmia recall etc.)
12	All Monitors should be able to communicate with each other and can display other patient monitor data.
13	Equipment should have US FDA or European CE certificate with four digit notified body number.
14	Necessary mounting system for all the monitors along with module rack and accessories should be provided.
15	Each monitor to be supplied with following:
	a. 3 and 5 Lead ECG electrode cable 2 No. each
	b. 6/10/12 lead ECG cable – 1 no.
	c. Adult, Paediatric and neonate SpO2 probe – 2 No. each(Ear lobe/wrap around probes for neonates)
	d. NIBP cuffs for Adult, Paediatrics and neonates – 2 no each (of different sizes)
	e. Temp Probe – 2 Nos. (skin & Oesophageal one each)
	f. IBP connection cable – 02 Nos.
	g. IBP Disposable Pressure Transducers – 10 Nos
	h. ETCO2 sample line: 10 nos (if applicable)
	i. BIS/ Entropy Electrode: 10 nos (wherever module has been asked)

16	All monitors in an area must be connected to the identified nursing station through IP technology via a Central Nursing System (CNS). A minimum 21" anti-reflective LED Monitor to be provided at the nursing station to view the CNS. Bidder will use the Hospital LAN network to connect CNS with the other monitor. All other necessary hardware and software to be provided by the bidder. The bidder should provide adequate number of CNS licenses as per the nursing station matrix enclosed along with Annexure-1. It should be connected to HIS. (Price to be quoted separately).
17	There will be two stage integration. All the monitors and the CNS should be connected through Web browsing facility to access each monitor data through hospital LAN and through web browsing from remote location.
18	Each Main Monitor should be supplied with transport monitor and/or module (as the case maybe) such that it should not be required to change any patient leads while shifting the patient from main monitor to transport monitor nor should there be any break in acquisition of ECG, SpO2, NIBP, Respiration, temp, dual IBP parameters. The display on the Transport Monitor/Module should be at least 5" and should display at least ECG, SpO2, NIBP, Respiration, temp, dual IBP. It should have an independent battery backup of min 3 hrs and min 48 hours of trend.
C. ICU Ventilator	
1	Advanced technology ventilator for use in ICU, suitable for ventilating all categories of patients from paediatric to adults.
2	Microprocessor controlled system with individual selection of various ventilation parameters & PEEP.
3	The system should have the facility for Pressure triggering and/or Flow triggering
4	Should have the following modes of ventilation
	Volume control
	Pressure control
	Pressure Regulated Volume Control with on-demand flow (PRVC)
	Pressure support with back-up ventilation
	CPAP
	SIMV(Volume Control) + Pressure support
	SIMV (Pressure Control) + Pressure Support
	SIMV (PRVC) + Pressure support
	Non Invasive Ventilation
	BIVENT / BIPAP
5	The system should have the following parameters:
	Tidal Volume: 20 ml – 2000 ml
	CMV Frequency: 4-100 breaths/min
	SIMV frequency: 1 – 40 breaths / min
	Inspiratory time: 10% - 80% of breath cycle time
	Pause time: 0 - 30% of breath cycle time
	Pressure level: 0 – 80 cm H2O.
	PEEP: 0 – 45 cm H2O
	Trigger flow: All Category: 0.3 to 1.5 lpm and/or Trigger Pressure: 20 - 0 cm H2O below PEEP
	Inspiratory rise time: 0 - 20% of breath cycle time

	I : E ratio:1 : 10 – 4 : 1
	Should have following audio – visual alarms:
	Airway pressure
	High continuous pressure
	FiO2
	Expired minute volume
	Apnea
	End expiratory pressure
	Respiratory rate
	Gas failure
6	Battery: Should have built-in battery back-up for 45 minutes for the ventilator.
7	Atleast 12” Colour Touch Screen TFT user interface screen. It should be possible to display at least three types of waveforms & two loops for each breath Access through touch screen & Direct access to vital settings: PEEP, O2 concentration, Respiratory rate & Volume (or Pressure).
8	24 hour trend display of up to 24 parameters.
9	Scroll / Zoom functions
10	Screen should display following waveforms:
	Flow time
	Pressure time
	Volume time
	Following loops:
	Volume – pressure
	Pressure – volume
11	Oxygen sensor should be paramagnetic/ultrasonic/Galvanic and covered under warranty & CMC and will be supplied free of cost during warranty and CMC period.
12	One set each auto cleavable silicon patient tubes for adult & paediatric should be supplied with the system and it should be compatible with humidifier.
13	Should also be supplied with 10 disposable Adult , 5 disposable Paediatric circuits and 15 HME Filters.
14	It should be supplied with 2 mask each of 3 Sizes (Large, Medium, Small).
15	It should have Twonos Auto-clavable& Reusable Expiration Cassette /valves for complete dis-infection capability.
16	A minimum of 5 nos. flow sensors should be supplied with the ventilator or one no permanent sensor which should be covered under warranty.
17	It should have facility for ventilation data transfer & network connection.
18	It should be user-friendly & have sturdy design.
19	In-line Ultrasonic Nebuliser with capability of producing < 3 micron drug particle. (Price to be quoted separately).
20	Should be supplied with imported humidifier. (Price to be quoted separately).
21	Should be US FDA / European CE marked with 4 digit notified body number.
22	Ventilator, hinged arm and trolley should be from same manufacturer.
23	Should have stand alone medical grade air compressor of same make (Price to be quoted as separately).
24	System should be able to connect to Charting system as specified in Para D in the specification.

25	It has to be driven by centralized compressed air. Primary driving source will be centralized compressed air and should have standby standalone compressor.
D.	Electronic Data Management & Automatic Electronic Patient charting solution for Operation Theatre, Pre & Post operative Beds, Intensive Care unit and Emergency Ward
	Web based Charting system should have following features-
1	Electronic charting solution should automatically collect all the data from Anaesthesia workstation and patient monitors detailed in Annex 1
2	Retrieval of patient demographic information from Hospital HIS (with HL 7 Compliant HIS System) via HL7 protocols / web services as the case maybe (It shall be the responsibility of bidder to interface the Charting system with NCI-AIIMS HIS).
3	Observation and comments from Doctor & nurse including case history and prescription should be recorded. Documentation of doctor, nurse observations and notes, care given and results for the purposes of case documentation.
4	Patient Registration, presentation and documentation of therapy results.
5	Printing of reports and daily charts. Report generation should be in PDF form as a standard.
6	System should adapt current documentation formats available with user department.
7	System should be completely web based and should allow access from any PC on the Intranet & Internet (with proper authentication : user name/password)
8	It should be possible for atleast 100 users to simultaneously login to the system.
9	System should be provided with one central common server with a common database which can be accessed, updated from the various clients installed in the OT, Recovery, ICU, etc.
10	System should capture data from each OT, Pre & Post operative beds, Emergency and ICU patient monitors for charting purpose.
11	The bidders must provide a minimum 24" All-in-One PC (with anti-reflective display) for viewing and entering patient information at each Nursing Station as per Annexure 1.
12	There should be a medical grade display of 19" min integrated with all Anaesthesia workstations for running, viewing and entering the data for the charting system or patient monitoring data
13	The charting system interface should be touch screen so that it is possible to view and enter details in the System on Medical Grade Carts to be provided by the bidder as per the specifications detailed herein. It must be possible to enter data into the system via an on-screen keyboard on the touchscreens of the medical carts and elsewhere when appropriate hardware is available.
14	Should be One common True "Web based" solution for Multiple departments (OR / Recovery /ICU/Pre & post op/ER).
15	It should do scoring as per international standards and also help to configure new own scoring for study purpose in system.
16	Should have records of observation Diagnoses (ICD-9, ICD-10, etc), Procedures (ICPM, OPS), The hospital's own catalogues (hit lists) for diagnoses and procedures

17	Programmable events like (Start of Surgery, Start of Anesthesia, ...) can be documented with Quick event button tool” events will be shown as a symbol in an event bar in the flow sheet.
18	Case configuration, staff documentation, Admit/discharge/transfer facility, intervention documentation, outcome documentation is must.
19	Continuation and sharing of data between OR, ICU, Recovery, Emergency is must for automatic electronic centralized server based charging with web browsing.
20	Automatic identification of connected device preferably with name of device
21	Reports generation as per user formats is must.
22	Charting system should also be able to integrate monitors, Syringe pumps, Infusion Pump, Anaesthesia workstation, Ventilators, TCI pump, Cardiac output monitor, ABG of other make.
23	It should have the following clinical modules:
	Pre-OP Module
	OT Module
	Post-OP Module
	ICU Module
	Medication Module
	Patient List Manager Module
	Reference data Editor Module
	Application Editor Module
	Protocol Module with bundles and scores.(Glasgow Comma scores, SOFA, CPIS, SAPS II, SAPS III, MODS, LODS, TISS-28, Apache II, Apache III, PRISM etc)
	All the modules should be customizable as per user choice.
24	The medical grade cart should be connected to the system through Wifi at the critical care and OT area. Necessary hardware and software required shall be supplied by the bidder.
25	Bidder shall be responsible for activating single sign-on for the Charting system as and when active directory services are provided by the client.
26	Electronic Charting system should be from same make as of Cardiac Monitors.
	Scope of supply for charting
1	Main server (Two nos. One is for primary in OT server room and another for redundancy in Computer facility at NCI-AIIMS for charting with screen, keyboard mouse (specs as below) along with racks.
2	Licences (Viewing and editing) required for all-in-one PC at each CNS station, Anaesthesia Workstation , Medical Grade Cart and 5 nos extra for computer system required in doctors room, HOD room etc.
3	Suitable UPS with minimum 10min backup for all servers.
4	Good quality Cisco layer 2 (qty depending on site condition) and layer 3 (1no) switches to be provided for interface by the bidder if required. Bidder will use the Hospital LAN network for networking. Integration and setup will be responsibility of patient monitor and charting solution Supplier Company.
5	Wifi router and necessary hardware and software for connecting medical grade cart to the system.
	System Server Requirement
	Minimum Hardware & software requirement
	Processor Quad core 3GHz processor Supports virtual machines
	Memory 32 GB RAM

	Storage RAID 5 configuration (hardware)
	Minimum 1 TB hard drives x 8 nos.
	Redundant Power supply
	Inbuilt Network 2 Ethernet connections
	Media DVD-ROM drive
	3 or more USB ports Video VGA output
	Backup - External harddisk – 1 TB
	Hyper V /Vmware
	Keyboard, Mouse & Display
	Original Microsoft 2008 R2 licenses for OS
	Original Microsoft SQL 2014 licenses
	Anti virus
	Specification for Medical Grade Cart
	Mobile medical cart with integrated PC with display for viewing and entering data for the charting systems. The cart should be connected with the system through wifi.
	Base Cart:
1	Castors – 4 nos. Front 2 nos will have locking facility.
2	Work surface – Min 18” X 19”
3	Motorized height adjustment facility.
4	It should have battery power indication.
5	It should be IEC 60601-1 certified.
6	It should have a battery backup of min 2 hrs.
7	It should have 4 USB & 1 RJ 45 port.
	Integrated PC:
1	Processor intel core i5 or better.
2	RAM: 4 GB min.
3	HDD: 500 GB min.
4	Licensed Windows 7 or higher OS compatible with the charting software.
5	Display – Min 21” Medical grade Touch screen HD LCD/LED Display. It should be mounted on the cart through VESA mount.
	Accessories:
	The following accessories should be supplied along with each cart.
1	Power Cord
2	Medication Box of min 3 racks.
3	Sharp Bin
4	AHR Holder
	Maintenance / Backup
	Warranty for 5 years with all software updates and upgrades. CMC for 5 years with all software updates and upgrades.
	Remote access for server will be provide to vendor for remote server maintenance
	Internet connection will be also provided by hospital.
	User Training
	Onsite Training to be provided to all users (admin, doctors and nurses). At least 1 training of 7 days per quarter for first two year and then once in a year for next three years.

E.	Standalone Cardiac Output Monitor:
1	It should be a standalone Continuous Cardiac Output Monitor with minimum 8" colourTFT display.
2	It should measure the following parameters: CCO, SV, SVV.
3	Bidder should supply necessary mount for fixing this machine to the Anaesthesia Workstation and wall in critical care areas.
4	System should be fully integrated with the Charting system & CNS. Necessary protocol/ codes required for this to be provided.
5	It should be US FDA or European CE (with four digit notified body number) approved.
F.	Syringe Infusion Pump
1	The syringe pump should be programmable, front loading, user friendly (not bulky type), safe to use and should have battery backup and comprehensive alarm system.
2	Must Work on commonly available standard 5ml/ 10ml/20ml/50ml/60 ml Syringes with accuracy of minimum of +/-2% or better, with automatic syringe size recognition.
3	Equipment should have US FDA or European CE certificate with four digit notified body number.
4	Flow rate programmable from 0.1 to 1000 ml/hr or more in steps of 0.1 ml/hr with user selectable flow set rate option. SAVE last infusion rate even when the AC power is switched OFF.
5	Bolus rate should be programmable to 40 to 1000 ml/hr or more with infused volume display and one key press bolus. Reminder audio after every 1 ml delivered.
6	Display of Drug directory of more than 50 drugs, customized and adjustable.
7	Key board locking system for patient safety.
8	Keep Vein Open (KVO) must be available at 0.1 ml or set rate
9	Selectable Occlusion pressure trigger levels selectable from 300/500/900 mmHg. or atleast 3 selectable levels
10	Automatic detection of syringe size & proper fixing. Must provide alarm for wrong loading of syringe such as disengaged plunger, unsecured barrel etc.
11	Manual/Automatic Pusher.
12	Anti bolus system to reduce pressure on sudden release of occlusion.
13	Should have comprehensive ALARM package including: Occlusion limit exceed alarm. Near end of infusion pre-alarm & alarm, Volume limit pre-alarm & alarm, KVO rate flow, Low battery pre-alarm and alarm, AC power failure and Drive disengaged alarm.
14	Rechargeable Battery having at least 4 hours backup for about 5ml/hr flow rate with 50ml syringes.
15	Docking Station with communication facility to connect it to the charting system for at least four pumps as per requirement so as to enable to power up to 4 pumps with one power cord and fixing the pump in the station when mounted on IV pole.
16	The unit shall be capable of stored and operating continuously in ambient temperature of 10 - 50deg C and relative humidity of 15-90%
17	Power input to be 220-240VAC, 50Hz.

G.	Volumetric Infusion Pump
1	Description of Function
1.1	Volumetric Infusion Pump is a medical device that delivers intravenous fluids and medicine to patients in hospitals, outpatient surgical centres, hospices, nursing homes, and in ambulances
2	Operational Requirements
2.1	Programmable volumetric infusion pump is required
2.2	It should be able to connect the machine with the charting system. Necessary codes/protocol needed for this to
3	Technical Specifications
3.1	Battery back-up operating time 4 hours.
3.2	LCD programming display
3.3	Should have alpha numeric programming keyboard or any keypad for data entry.
3.4	Pole clamp Multi-function mounting clamp
3.5	Nurse call output alarm, time and date settings
3.6	Quick titration of rate or dose with volume-time programming
3.7	Flow rate range (primary) 0.1 to 99.9 ml/hr. (0.1 ml increments) and 1 to 800 ml/hr. (1ml increments.)
3.8	Volume to be infused 0.1 to 99.9 ml (o.1ml increments) and 1 to 9999 ml(1 ml increments).
3.9	Both flow rates and volume to be infused should be configured to limit the maximum allowable range
3.1	Accuracy $\pm 5\%$.
3.11	Pump Database: events of 24 hours with real time.
4	System Configuration Accessories, spares and consumables
4.1	Compatible with any standard (PVC) infusion sets available in local Indian market."
4.2	50 numbers of required infusion sets should be supplied with the single unit
5	Environmental factors
5.1	The unit shall be capable of being stored continuously in ambient temperature of 0-50deg C and relative humidity of 15-90%
5.2	The unit shall be capable of operating continuously in ambient temperature of 10 - 40deg C and relative humidity of 15-90%
6	Power Supply
6.1	Power input to be 220-240VAC, 50Hz fitted with Indian plug
7	Standards, Safety and Training
7.1	Equipment should have US FDA or European CE certificate with four digit notified body number.
7.2	Manufacturer/Supplier should have ISO certification for quality standards.
8	Documentation
8.1	User/Technical/Maintenance manuals to be supplied in English.
8.2	Certificate of calibration and inspection from factory.

Annexure-1 Matrix for Paperless Critical care & Anaesthesia Solution

Sl No	ZONE	Major OT	Emergency OT	ICU	Pre Op - Major OT	Post Op- Major OT	Emergency Preop	Emergency Post-op	Emergency Ward	Total
1	Numbers under consideration for Paperless Critical Care & Anaesthesia Solution	8 OT	1 OT	25 Beds	8 Beds	10 Beds	2 Beds	4 Beds	6 Beds in RED area 6 Beds in YELLOW area	
2	Location	3rd floor	ground floor	3rd floor	3rd floor	3rd floor	ground floor	ground floor	ground floor	
3	Anaesthesia Workstation including TCI	8	1	1						10
4	ICU Monitoring system inclusive of Seamless Transport monitoring with ECG, SpO2, NIBP, RR, Temp, 2IBP, ETCO2 and accessories as per specification			25	8	10	2	4	12	61
	BIS/Entropy Module			2		1		1		4
	NMT Module			2		1		1		4
	2 Ch EEG Module/Stand Alone Monitor			1					1	2
5	Nursing Station details for planning of CNS & Charting System licences	NA	NA	Nursing Station -I (10 Beds) Nursing Station -II (15 Beds)	1	1	Common Nursing station (6 Beds)		Nursing Station -I (6 Beds) Nursing Station -II (6 Beds)	7 - Nursing Stations (61 Beds)
6	Ventilator			25		5	1	2	6	39
7	Standalone Continuous Cardiac Output Monitor	4	1	15						20
7.A	Compatible transducer with Disposable Catheter									400
8	Syringe Pump									125
8.A	Docking Station									61
9	Infusion Pump (Volumetric)									50
10	Medical Grade Cart with Integrated PC as per spec			5	2	3	1	1	3	15

**Item No. 2 (Rfx/ Event number 300002576)
CSSD System**

Sl. No.	Technical Specification
	Scope of Works
1	Bidder is responsible for planning, designing, supplying, installation, commissioning, maintenance and operation of CSSD services of NCI-AIIMS for 10 years.
2	The CSSD should be divided into the following areas: decontamination, assembling & packaging, sterilization and storage. Physical barriers should separate the decontamination area from the other sections to contain contamination on used items. In the decontamination area reusable contaminated supplies (and possibly disposable items that are reused) are received, sorted, and decontaminated. The recommended airflow pattern should contain contaminants within the decontamination area and minimize the flow of contaminants to the clean areas. Bidder shall follow CDC Guidelines 2008 for Disinfection and Sterilization in Healthcare Facilities(Revised upto 2017)
3	The CSSD should be designed such that negative pressure is recommended in decontamination area (American Institute of Architects) and no fewer than six air exchanges per hour in the decontamination area with positive pressure in the sterilizer equipment room and in Sterile storage room. The packaging area is for inspecting, assembling, and packaging clean, but not sterile, material.
4	The sterile storage area should be a limited access area with a controlled temperature (20-25°C) and relative humidity (30-60%)
5	All items to be sterilized will be first sent to CSSD after purchase for laser etching & for entry into Inventory Module (Vendor shall integrate CSSD workflow management inventory module with HIS Inventory Module (HL7 compliant) of NCI-AIIMS.
6	Bidder must ensure pasting of indicator stickers on all packs detailing :Sterilization status (in case of steam sterilization only), Batch no, Sterilization date, Expiry date (via stickering gun or label printing)
7	<p>The bidder shall calculate the number and type of equipment required in the CSSD system of NCI-AIIMS based on the following; and CSSD must run 24x7 all 365 days in 3 shifts of duty with sufficient manpower depending on the load.</p> <p>a. Specification of the key equipment of CSSD system as detailed in the tender document.</p> <p>b. Load of CSSD shall be approximately 450 STU per day when NCI-AIIMS is fully operational (710 beds).</p> <p>c. The ETO load shall be approximately 400 liters per day when NCI-AIIMS is fully operational (710 beds).</p> <p>d. The institute is likely to be operationalized in three phases viz.</p> <p align="center">i. Phase-I - Dec-2018 - 250 Beds</p> <p align="center">ii. Phase-II - Dec - 2019 - 500 Beds</p> <p align="center">iii. Phase-III - Dec - 2020 - 710 Beds</p> <p>e. The CSSD system shall be designed and commissioned upfront for full capacity with scope of expansion for upto 25 percent of the estimated capacity without deployment of any additional equipment.</p> <p>f. Indicative timings for receiving & issuing of sterilized instruments/items should be as per SOP/instruction given by institute.</p>
8	NCI-AIIMS shall pay upfront CAPEX cost for infrastructure work, installed equipment & any CSSD system accessories being supplied upfront by the bidder as per the rates quoted by them. CAPEX shall be inclusive of cost of turnkey works, equipment cost in CSSD, warranty and maintenance for first 5 years, cost of any accessories, carts, trays, trolleys, etc used in collection / distribution / storage of CSSD, any furniture installed within the CSSD, any RO system, quality control equipment etc installed by the bidder and must be clearly quoted under the column of CAPEX in the technical and price bid.
9	Bidder has to quote OPEX (Operational Cost) rate per hospital bed per day on

	annual basis as mentioned in Annexure 3. This OPEX rate must be inclusive of the cost of manpower, consumables any other recurring cost incurred for the receiving, sorting, washing, disinfecting, drying, packing, storage, issuing, quality control, routine cleaning etc of the complete CSSD area as per SOP prescribed in tender. This OPEX (operational cost)rate shall be the basis for calculating OPEX (operational cost) of the CSSD for bid ranking purpose by multiplying the quoted annual OPEX rate with 710 beds per year. However, the OPEX shall be paid on monthly basis by multiplying the quoted annual OPEX rate per hospital bed per day with the actual number of operational hospital beds during that month as certified by the competent authority at NCI-AIIMS.
10	The CAMC price from 6 th to 10 th year must be quoted separately and should not be quoted under CAPEX and OPEX.
11	L1 calculation will be based on the total cost of CAPEX as in Annexure -2 + Cost of CAMC from 6 th to 10 th year + OPEX cost as per Annexure 3, however the payment of OPEX will be made on the actual basis and CAMC on annual basis from 6 th year onwards.
12	Bidder is responsible for cleaning and maintaining hygienic condition in CSSD premises on all times. Repairing & maintenance of CSSD should be on regular basis.
13	All instruments/ items received for sterilization in CSSD should be ready for issue within 24 hours
14	NCI- AIIMS may do surprise inspection for quality checks and compliance of SOP in CSSD
15	All record keeping and maintenance of record to be done via workflow management system. Record keeping should be done in realtime.
16	Standard universal precautions must be followed as per CDC Guidelines 2008 for Disinfection and Sterilization in Healthcare Facilities(Revised in 2017)
17	Bio-Medical Waste management rules, wherever applicable will be followed by the vendor.
18	Bidder has to provide adequate & sufficient manpower to run the CSSD Operations as per work defined in SOP.
19	Bidder has to do all required turnkey as defined in the Annexure -1, institute will provide shell structure of approx. 6000 sq feet with one point electrical, water, drain supply & chill water supply (HVAC within CSSD). Bidder has to do complete planning, designing, supply, installation, testing & commissioning of all equipment on turnkey basis including all civil, electrical, plumbing, SS panelling, firefighting, sanitary, drainage, furnishing, CCTV and HVAC etc as described in Turnkey works. While designing the CSSD the Bidder has to provision for future expansion of CSSD for installation of One Washer disinfectant, One Steam Sterilizer & one ETO of the highest capacity quoted by the bidder in the said tender. This provision should be made without disrupting the zoning of the CSSD. All ancillary services like (electricity, water points, plumbing, R.O etc.)required for future expansion has to be built in while designing and furnishing the CSSD.
20	Authorized personnel of bidder may collect NCI brochure including list of user areas and CAD drawings from room number 160, 1st floor, DR. BRAIRCH, AIIMS, New Delhi for better understanding of CSSD areas, wards/ICUs/OTs/OPD/etc areas.
21	The planning and design of CSSD should be inclusive of zoning (contaminated, clean & sterile).Various areas in CSSD should be designed as per zoning concept .Zoning should be both Physical and Functional.Various areas as mentioned at point 1 should be designed accordingly like Soiled Reception,Wash, dry & Disinfection area, clean storage, control & packing area, Linen Inspection, Folding & Packing, Gauze Cutting Room, ETO, Sterile store, offices, change room, RO Plant room, weighing area, Issue Counter, Air Compressor Room (If required), Boiler Room (If required),AHU room, store for inventory etc. The design should be approved by NCI-AIIMS before starting the turnkey works.
22	During the Warranty period, desired Uptime of 95% of 365/366 (Leap Year) days (24 hrs), if downtime more than 5%, the warranty period/CAMC period will be extended by

	double the downtime period.
23	Vendor has to meet and follow SOP for CSSD laid by the NCI-AIIMS (including infrastructure, equipment, manpower & Quality control and assurance for the maintenance and operations of CSSD services etc.) Any deviation from the SOP will amount to penalty of Rs. 500 per instance. In case of loss of instrument/item a penalty of double the cost of lost instrument/item would be deducted from the OPEX bills.
25	The details of SOP, Turnkey Works & Manpower are given as an Annexure -1
26	The vendor shall be responsible for procurement of all the CSSD Chemicals /Biological indicators/ Chemical Indicators etc of the specification as per approved by consignee/SOP. NCI-AIIMS authorities can make surprise check to verify that the items used are as per approved items/SOP and right quantity of these are being used.
27	NCI-AIIMS shall have the right to terminate the contract of the services rendered by the vendor, which are not of the requisite standard. Management shall demand and be supplied with a sample of any consumable/chemical for inspection and analysis & if required to be sent for testing by the approved laboratory. NCI-AIIMS will have unfettered right to inspect the premise, process of CSSD, finished product at any time and the vendor shall cooperate with the authorities.
28	The bidder must be a manufacturer . In case the manufacturer does not quote directly , they may authorise their authorized agent as per performa of " Manufacturer Authorization Form" as given in the bidding document to quote and enter into a contractual obligation. Bidders can engage into a contract with third party for running the CSSD. In such case, the third party engaged should have an experience of operating in a Hospital with atleast 300 beds.
29	<p>Sterilization Cycle Verification: Bidder shall verify sterilization process before sterilizer is put into use in the CSSD,NCI -AIIMS . All steam & non steam sterilizers shall be tested with biological and chemical indicators upon installation, when the sterilizer is relocated, redesigned, after major repair and after a sterilization failure has occurred. It must be ensured that they are functioning in accordance prior to placing them into routine use. Three consecutive empty steam cycles are to be run with a biological and chemical indicator in an appropriate test package or tray. In a prevacuum steam sterilizer three consecutive empty cycles are also run with a Bowie-Dick test. The sterilizer is not put back into use until all biological indicators are negative and chemical indicators show a correct end-point response.</p> <ul style="list-style-type: none"> • Biological and chemical indicator testing shall be done for ongoing quality assurance testing of representative samples of actual products being sterilized and product testing when major changes are made in packaging, wraps, or load configuration. Biological and chemical indicators are placed in products, which are processed in a full load. When three consecutive cycles show negative biological indicators and chemical indicators with a correct end point response, the change can be introduced into routine use • Items processed during the three evaluation cycles should be quarantined until the test results are negative.
30	Deleted
31	All general furnitures should be modular and made of SS/wood/Aluminium, etc and should be of reputed make like Godrej/Durian/.
Technical Specification	
A	SOILED RECEPTION
1	Receiving Counter
2	Staff Chair(s)
3	Lab Stool(s)
4	Waste Bin (s)
5	Storage Cupboard
6	Computer with UPS & Printer
B	WASH & DISINFECTION AREA
7	Washer disinfectant minimum 12 DIN or more with accessories
	The washer disinfectant shall be suitable for cleaning and disinfection of surgical

	instruments/goods. The process shall include pre wash, detergent wash and hot water disinfection, rinse and drying cycles.
	The unit shall be suitable for electrical operation and would be complete with water circulation pump, necessary valves & fittings.
	It should be microprocessor based so as to ensure correct program sequence and irregularities or deviations which are displayed immediately.
	Chamber Capacity: Chamber capacity: Operational Volume should be able to process minimum 12 DIN trays (Approx 480X250X50) with 6 levels in single process. Should supply 12 Nos of standard Stainless Steel DIN trays. The chamber should be made of S.S. 304 or S.S. 316L quality with electro polished washed surfaces. The chamber edges should not have the pockets & folds so as to avoid bacterial growth. The wash chamber should also be fitted with bright light for clear visibility of the washing process.
	Consumables are responsibility of bidder only and adequate supply minimum for 30days should be always kept in CSSD, NCI-AIIMS
	Connection with MGPS system for compressed air(if required) shall be the responsibility of the bidder.
	Washer should have following features:
	For shortest possible filling and draining phases, higher capacity quick opening valves should be used so that short total process time is achieved. The design should focus on saving the environment through reduced consumptions of all utilities.
	Cleansable spray arms should be located at the top and bottom of the chamber.
	Wash carts should be equipped with cleansable spray arms between each shelf so as to facilitate water to reach all the surfaces which needs to be cleaned.
	Injection wash carts should be automatically connected to water and drying air in order to clean and dry the inside of the tubular instrument.
	The drying air should be pre-heated.
	The washer should be equipped with independent temperature monitoring and validation test port.
	Data interface RS232 should be available.
	All electrical components should be easily accessible for easy service - ergonomic design.
	Washer should be equipped with audible alarm that alerts if error code occurs.
	Double door should be automatic made of toughened glass for see through & should facilitate the loading process. (Vertical sliding operating door)
	The washer should have 3 dosing pump (detergent, alkaline & lubrication) for process chemicals, instrument lubricants/ enzymatic cleaners.
	The washer should perform: .
	Pre-rinses with cold water.
	Main washes with hot water (60C) and detergent
	Final rinse with water (55C)
	Disinfection with hot water (85C)
	Unit to have LCD display and operating console to have membrane key pad for durability or LCD touch screen display
	Unit should feature safety measures such as:
	Automatic door lock.
	Automatic temperature regulation.
	Electronic adjustment of water level.
	The unit should also have an interface as standard for an optional batch printer.
	The washer disinfector shall be supplied with universal rack, minimum 4 level racks for instrument tray, full size instrument tray as well as stop valves, anti-suction device and plastic water trap.
	Should ensure essential washing accessories.
	Standards & Norms:
	Should be US FDA/European CE with 4 digit notified body number.

	Manufacturer should be ISO 13485:2003 , EN ISO15883 and ISO9001 certified and copy of the certificates should be attached with the bid.
8	Wire Storage shelf module for dirty/disinfection area
	Minimum Size (LxWxH) : 1500x450x1900 mm
	Construction should be based on single free-standing shelf modules for storage of clean linen, instruments, and packing material or sterilized goods, including disposables.
	Moreover, two single modules can be placed back to back and combined as a double module unit.
	If two units are to be connected, 10 S-hooks should be supplied.
	The wire construction should allow good air circulation while permitting easy inspection of the goods.
	The wire shelves should be made of special heavy-duty steel (304), chromium-plated and surface treated with clear epoxy varnish to facilitate cleaning.
	The shelf unit should be easy to assemble on site and all parts should fit precisely.
	Shelves should be mounted by means of plastic clamps onto circular rigid posts, with the adjustable height within a range of about 50 mm. Each post should include a height adjustable foot.
	Each unit should include 5 shelves.
	The shelf unit should have optional Ø 125 mm castors for using as a mobile storage unit by replacing the foot with castors.
	Manufacturer should be ISO 9001
9	Inspection Lamp with Magnifier
	Should have two spring balanced arms with parallel movement of at least 150 degree in horizontal plane.
	Magnifying lens should be of fixed 7 diopter bi-convex.
	Lens diameter should be approximately 12.5 cm
	Manufacturer should be ISO 9001
10	Ultrasonic Cleaner (40 L) or more
	The units should be a compact free-standing bench model, with a built-in tank manufactured from high-quality (304/316L) stainless steel and a solid-state generator that sends ultrasonic (approx 40 KHz) impulses through wash water containing detergent and electrical heating; microprocessor controlled display with memory time and temperature functions.
	The electrical energy should be transformed into sound waves by transducers, fixed to the bottom of the tank.
	The tank should be made of solid stainless steel (304/316L).
	The ultrasonic cleaner should have a display and control which could be easily seen and placed above any liquid for safety and reliability. Degassing facility should be there.
	It should have digital read out timer and temperature setting (temperature adjustable from 30 to 69 °C or more) monitoring.
	Capacity should be 40 L
	Should work on 230V, 50 Hz AC Supply.
	Ultrasonic cleaner should be either ISO 13485 with Declaration of conformity as per European CE norms or US FDA certified.
	Ultrasonic cleaner should supplied with Wire mesh basket of suitable size & Stainless steel lid
11	Wash Stations with 2 sinks for dirty area
	Minimum Size (LxWxH) : 2000x750x850 mm
	The worktop should be made of solid, bright-polished minimum sheet thickness of 1.5 mm stainless steel (304) to withstand heavy-duty work with wet instrument.
	Designed with an integrated 10 mm high edge at the front and sides, and a 60 mm high edge (splash back) at the rear
	The front and side edges are reinforced and widened to 49 mm. Edges are welded

	together and polished at the corners.
	The worktop should slope to the sink, and reinforced by a full-length support frame.
	The support frame should be a complete assembly with the front, back and ends welded together at the corners.
	The worktop and support frame should be bonded together with double-adhesive tape of a special, age-resistant quality to give rigidity and noise abatement.
	The floor stand should be made of polished stainless steel.
	The table should be available with double sink units preferably at both ends of the table, all with a smooth, polished inside finish made of stainless steel (304) top
	Corners should be curved to a 65 mm radius for easy cleaning.
	The bottom should slope to the drain.
	Sink units should be of sizes that allow processing of the large modular instrument trays
	Sink units should have 650 mm wide and 900 mm high (adjustable ± 25 mm).
	The legs should be able to provide strong support and hold to the entire unit securely.
	The sink should include a drain valve, removable strainer, manually operated drain-valve, overflow drainpipe and water trap. The table also includes a mixing faucet with swivel spout, for cold and hot water connection.
	Should be delivered ready for assembly.
	Manufacturer should be ISO 9001.
12	Spray Gun Rinser
	Spray gun rinse unit should be designed for connection to water or compressed air, to use for assisted cleaning of pipettes, catheters, cannulas, syringes etc.
	The spray-gun should include tubing and different tips and nozzles for the various cleaning purposes, like
	syringes and cannulas with Record cone
	Measuring and blood pipettes
	Catheters and small pipes
	Drainage tubing
	Syringes and cannulas with Lure cone
	Spray jet for rapid instrument cleaning
	Bottles and Erlenmeyer flasks
	Water jet pumps for suction cleaning
	All appliances are stored within easy reach on a special wall-mounted rack (included).
	A special wall-mounted rack should be a part of standard supply to store all appliances within easy reach.
	All tips should be able to get easily locked to the spray gun by a safety cone.
	The gun grip is heat-insulated. The water/air pressure is released, regulated and fully controlled by the spray-gun trigger (adapted to a 1/2" connection).
	Bidder should provide complete details of sets of standard and optional adapters, nozzles and accessories.
13	Vacuum Cleaner
	Should be upright vacuum cleaner
	Should have vacuum and blowing functions
	Should have 30 liter tank, rust-resistant
	Should have 60 liters per second air flow, 17 kilopascals suction power
	Should work on 230V, 50 Hz AC Supply.
14	Hand Dryer
	Should be wall mount type
	Should have infrared sensor for automatic detection of hands
	Should have brushed 304 SS finish.
	Motor should be at least 1/10 HP at 7500 RPM
	Dryer should deliver the flow of 7300 LFM
	Should work on 230V, 50 Hz power supply
	Should supply with all accessories such as clamps for mounting

15	Work Table for Wet Goods for dirty area
	Minimum Size (LxWxH) : 1800x650x900 mm
	Stainless steel tables specially designed for inspection and sorting of wet goods in heavyduty areas and for general purpose pre-storage.
	The work tables should have a rigid stainless steel construction which is easy to clean and should not have sharp edges or corners.
	The table should be ergonomically worked up, should have easy to clean robust mattfinished (to reduce reflection of light from the surface) with minimum sheet thickness of 1.5 mm stainless steel (304) worktop/surface to withstand and carry out heavy work comfortably, either sitting or standing.
	The edges along the front, back and sides should be reinforced and widened to 37 mm, giving a rigid construction.
	They are welded together and polished at all corners for good hygiene, as well as for the comfort and safety of the staff.
	The worktop should be supported by a complete assembly with full-length reinforcements along the front, back and ends, welded together at the corners.
	The worktop and support frame are bonded together with double-adhesive tape of a special, age-resistant quality to give rigidity and noise abatement.
	The support frame has to be mounted on a solid, stable floor stand, made of polished stainless steel square tubing, with horizontal braces 300 mm above floor level. An adjustable 10cm (\pm 25 mm) plastic foot, easy to clean, is mounted on each leg.
	The provision is to be made for a sturdy 445 mm-wide stainless steel shelf (optional) can be mounted on the horizontal braces.
	It should be delivered ready for assembly.
	All edges should be smooth and the rigid frame should be made up of minimum 1.5 mm sheet thickness stainless steel (304).
	There should be unobstructed access to the working space, since the only supports needed along the front of the table are the corner legs. This also facilitates cleaning of floors.
	Manufacturer should be ISO 9001.
16	Lab Stool
17	Waste Bin
18	Pass Box
	Area : Dirty to Clean supply.
	Size : 600x600x600mm, internal
	Should be made up of SS 304 sheets with double wall construction
	Should have UV lights for safe storage of components
	UV light should automatically switch off when any one door is opened
	Pass-through chamber should be based on pneumatic/ electrical operated and should fit all types of standard racks
	The control should feature two modes of operation to open or close the hatch with a press button mechanism.
	Should have door interlocking to prevent simultaneous opening of both the doors
	Should have toughened glass paneling for easy visibility.
	Manufacturer should be ISO 9001
19	Table Trolley for Dirty/Clean/Sterile Area
	Size : 1080x550x800 mm
	The table trolley is made of all-welded medical grade stainless steel tubing.
	The trolley should have handlebars.
	The solid top and bottom shelves are made of heavy gauge stainless steel (304) with a ground and polished finish, and with a 12 mm raised edge all around.
	The lower shelf is 300 mm above floor level. There are protective buffer rollers on all four corners.
	The table trolley has 4 swivel wheels, mounted in ball bearings, for easy handling even in narrow passages.

	Manufacturer should be ISO 9001
C	PACKING & STERILIZATION AREA
20	Wire Storage shelf module for Clean supply area
	Minimum Size (LxWxH) : 1525x455x1895 mm
	Construction should be based on single free-standing shelf modules for storage of clean linen, instruments, and packing material or sterilized goods, including disposables.
	Moreover, two single modules can be placed back to back and combined as a double module unit.
	If two units are to be connected, 10 S-hooks should be supplied.
	The wire construction should allow good air circulation while permitting easy inspection of the goods.
	The wire shelves should be made of special heavy-duty steel (304), chromium-plated and surface treated with clear epoxy varnish to facilitate cleaning.
	The shelf unit should be easy to assemble on site and all parts should fit precisely.
	Shelves should be mounted by means of plastic clamps onto circular rigid posts, with the adjustable height within a range of about 50 mm. Each post should include a height adjustable foot.
	Each unit should include 5 shelves.
	The shelf unit should have optional Ø 125 mm castors for using as a mobile storage unit by replacing the foot with castors.
21	Horizontal Sterilizer with minimum 12 STU with Accessories
	Fully automatic PLC or Microprocessor controlled Horizontal Rectangular Autoclave (Steam Sterilizer), with pre and post-vacuum treatment and with loading equipment.
	Door:
	The sterilizer supplied should be pneumatically (Compressed Air) /electrical operated double door with fully automatic vertical sliding movement along with door safety features.
	Door Safety Systems:
	Pressure sensor system should be available in the chamber to monitor the chamber pressure. Chamber should be completely depressurized before the door seal is retracted by vacuum.
	Door chamber should not open when chamber is pressurized.
	A mechanical safety edge stops the door if it is obstructed while closing, thus protecting operator & loading equipment.
	A cycle should not start if the door is open or not properly locked and a specific indicator or display should be there if door is not locked/open .
	The door seal should be made of silicon rubber/ Teflon gasket & on commencement of the process the door gasket is pressed against the rear face of the door by steam/air to ensure the door remains closed during the process.
	Double door safety is implemented through interlocks which prevent both doors from being opened simultaneously.
	The Sterilizer should be supplied with Automatic (Manual opening in case of automatic mechanism failure) vertical sliding door.
	Construction:
	Chamber & Doors:
	The chamber and doors should be made of solid, high quality 316L Stainless steel.
	The chamber should be jacketed to ensure the temperature uniformity in chamber with multiple heaters. Specify the number of heaters.
	The chamber floor is slightly sloped towards an internal drain to facilitate drainage.
	A stainless steel mesh strainer should be provided to protect the drain port from blockage by debris. The chamber is mounted on a stainless steel framework with height adjustable feet.
	Surface Treatment:
	The internal surface should be electro-chemically treated or mechanically treated for

	high quality smooth finish to facilitate cleaning. The resultant surface should be polished to less than 0.8 μm fineness to protect against corrosion. The internal corners should be rounded off to facilitate efficient cleaning.
	Insulation:
	The sterilizer jacket and door should be completely insulated to keep the autoclave cool on the outside. The insulation should be completely encased in rigid removable sheet housing.
	Jacket:
	The jacket should be made of 316L quality stainless steel with pressure gauge.
	Steam Generator:
	The sterilizer should have inbuilt steam generator of adequate capacity. In inbuilt steam generator should be made of 316L quality stainless steel.
	The steam generator should have chloride free mineral wool/mineral glass wool of thickness 25 mm to 50 mm insulation with SS 316 or Aluminum.
	It should have a built in thermostat, pressure safety valve & water level glass gauge inspection device or water level indication on screen visible from service area.
	The heating element should be of sufficient capacity to make the sterilization process faster with maximum cycle time of 45-50mins in pre vacuum.
	It should also have the automatic blow down valve & degassing system for feeding water to steam generator.
	Pipes, Valves and Components:
	All the hot piping system should be made of Stainless Steel other pipes should be made of Stainless Steel / Brass / Copper
	All the process valves should be stainless steel 316L / Copper Valves / Red Brass Valves & should be pneumatically/electrically operated piston valves for longer trouble free operations.
	All the non-standard components should be non-proprietary & should be easily sourced.
	All the hot pipes should be properly insulated. Safety valves should be made of brass/copper/stainless steel.
	Primary piping & fittings should be stainless steel threaded or SS 316 L triclamp fittings.
	Primary components: SS316L quality triclamps or threaded fitting components like – Manual valve, non-return valve, pressure regulator, pneumatic valves, and steam trap etc.
	Electrical Components: the terminals & contacts should be housed in a water tight cabinet while the other electrical component should be directly mounted on sterilizer.
	Air Filter: A disposable air filter should be provided for filtering the atmospheric air before entering inside the chamber. The filter separation efficiency should be higher than 99.998% for particle size less than 0.3 μm .
	Control System:
	The control system should be microprocessor based PLC system specially designed for sterilization application.
	Control system should have touch sensitive, 5 inches or more colour display interface at operator loading side while it should have normal interface at unloading side
	Apart from main PLC based control system the sterilizer should also have additional independent monitoring & documentation system which constantly cross checks the safety systems & time.
	Multiple password access levels (specify number) should be provided to control access/operation of the machine preventing unauthorized access.
	These access levels should be user selectable. The control system should have CPU processor with battery back-up & nonvolatile memories, Digital input/output controls, analog measuring inputs & COM ports for printer & PC connectivity.
	With the standard factory configuration, calibration of the temperature circuits and calibration of the pressure circuits should require an access code.

	Temperature and Pressure Sensors:
	The sterilizer should have at least 2 temperature & pressure sensors one at chamber drain & one in Jacket. It should also have temperature & pressure sensor in chamber.
	The sensors should be PT100 sensors to confirm Class A of the IEC 571 standard, with accuracy of $\pm 0.1^{\circ}\text{C}$ while the pressure sensor should have the accuracy 1% over the range of 0-5 bar.
	Each sensor circuit should be calibrated with individual constants to correct the deviation in manufacturing and aging.
	Alarms:
	Automatic process checking & failure correction should be possible by the control system.
	The range of alarm should include over temperature , pressure sensor failure, phase time-out, doors not properly closed, power failure (less than 10 sec should be ignored), Continuous self-checking of all the safety devices, low water level ,water in chamber etc should be possible.
	All the alarms should be audio- visual.
	Loading/Unloading system:
	Sterilizer should have the two rails for easy loading, shelf rack with shelves (carriage) with 1 set of loading and unloading carts & racks from the same manufacturer/principal company.
	Cycle Documentation – Printer:
	The autoclave should be equipped with an alpha-numeric printer which prints the each cycle parameter performed by the sterilizer. The measured values of temperature and pressure are printed at fixed time intervals, according to various phases of the sterilization process such as 4 minute time interval for vacuum, 1 minute time interval for sterilization, and the start and end time of the drying phase.
	All these time intervals should be user defined. Vendor should supply customized time intervals as desired by the user prior to order delivery.
	Water Consumption:
	Specify water consumption levels.
	Vacuum Pump:
	High vacuum pump (water ring type) should be provided & mounted on vibration isolator for quite operations
	It should also have low water level alarm to protect it from dry run.
	Available Cycles:
	The sterilizer should be designed to operate various programs.
	Apart from standard cycles, special cycle should be programmed by an authorized supervisor code only.
	Programs include:
	Wrapped Instruments, Porous load 134°C
	Heat Sensitive material, rubber, plastic, porous load 121°C
	Rapid cycle for single open instrument
	Heavy load cycle
	Bowie & Dick test (7 Kg), PCD test
	Leak test
	Directives & Standards:
	It should meet EN ISO / IEC directives and product should be European CE from notified body with 4 digit number/ US FDA Certified. Copy of certificate to be attached.
	The manufacturer should have ISO 13485:2003 and EN 285 for Large Autoclaves (Europe) or USA: ST8 – Hospital Sterilizers
	Should pass a hollow load (A) test (Batch monitoring system).
	Steam Sterilizer should have provision for connecting a $\frac{3}{4}$ " line terminating in the shutoff valve, nonreturn valve, pressure relief valve, steam riser, condensate drain and other essential accessories (for future steam connection from the central boiler).
	In case of suppliers offering standalone steam generator they should provide

	alternatives for ensuring clean steam (as per International Standards) .
	With standalone generator
	For preheating the sterilizer with steam from a central boiler having adequate stand by supply
	High vacuum compressor
22	Table for Packing in clean area
	Minimum Size (LxWxH) : 2000x1500x900 mm
	This table should be specially designed for sorting, inspection, functional control and packing of various sets for wards, clinics etc. and for surgical instrument sets in trays. The work could be done comfortably, either sitting or standing.
	The worktop should be made of a robust wood-based core material, surfaced with plastic laminate in a soft beige colour that reduces reflection of light from the surface / stainless steel top. All edges should be smooth. The extended width of the worktop should be designed to facilitate thorough inspection of instrument trays and allow the use of large wrapping material.
	The rigid frame is made of stainless steel (304).
	There should be unobstructed access to the working space, since the only supports needed along the front of the table are the corner legs. This also facilitates cleaning of floors.
	Should have double workspace. One workplace table should have 700 mm wide worktop and other workplace should have 1400 mm worktop.
	The table should include a two-shelf console, mounted on the worktop, for storage of packaging materials. The rigid supporting columns of the console include 3 electrical outlets.
	There should be a free space of 450 mm between the lower shelf and the worktop, and 150 mm between the two shelves.
	The table should have a drawer unit (both sides as double model) mounted under the worktop.
	Each drawer unit should be 400 mm wide and should include a drawer and a sliding plate.
	Fluorescent tube fittings (Inspection lamp) should be available. (Optional)
23	Lab Stool
24	Heat Sealing Machine
	Rotary heat sealers should provide validated sealing of sterilization bags and clear-view pouches (paper/plastic laminate).
	It should be microprocessor-controlled.
	The rotary heat sealer should give documentation of process parameters via an integrated printer and could be integrated with documentation system.
	The ergonomically design should be tilted forward for increased user convenience and space saving installation.
	The sealer housing should be powder-coated and the control panel is of the flat-membrane type, for easy cleaning.
	It should be operationally simple. When a bag is fed into one side of the machine, the machine should start automatically or by pushing a button, moving the bag through the machine, and applying pressure and heat to form a perfect seal.
	The warm-up time should not exceed 30 seconds, and the feed speed should be approx. 10 m/min.
	The temperature should be adjustable from 50–200°C with a tolerance of 1% of the set value.
	It should be regulated by a heating element that is highly sensitive to temperature fluctuations, assuring even temperature and perfect seals.
	It should offer a number of additional features, including:
	Automatic start-up
	Reverse feed function in case an instrument accidentally enters the sealing area
	Energy-saving stand-by mode

	Pre-set temperatures
	Re-settable counter function
	Rotary heat sealers come with a port and cable for connection of the sealer to a PC and printer, enabling monitoring and documentation of the entire process.
	Should have a protection mechanism against overheating and start prevention at temperature deviations outside +/- 5° C tolerance.
	Rotary heat sealer should be European CE (DOC) /US FDA certified.
25	Wire Storage shelf module for clean supply area
	Minimum Size (LxWxH) : 1525x455x1895 mm
	Construction should be based on single free-standing shelf modules for storage of clean linen, instruments, and packing material or sterilized goods, including disposables.
	Moreover, two single modules can be placed back to back and combined as a double module unit.
	If two units are to be connected, 10 S-hooks should be supplied.
	The wire construction should allow good air circulation while permitting easy inspection of the goods.
	The wire shelves should be made of special heavy-duty steel (304), chromium-plated and surface treated with clear epoxy varnish to facilitate cleaning.
	The shelf unit should be easy to assemble on site and all parts should fit precisely.
	Shelves should be mounted by means of plastic clamps onto circular rigid posts, with the adjustable height within a range of about 50 mm. Each post should include a height adjustable foot.
	Each unit should include 5 shelves.
	The shelf unit should have optional Ø 125 mm castors for using as a mobile storage unit by replacing the foot with castors.
26	Waste Bin
27	Inspection Lamp with Magnifier
	Should have two spring balanced arms with parallel movement of at least 150 degree in horizontal plane.
	Magnifying lens should be of fixed 7 diopter bi-convex.
	Lens diameter should be approximately 12.5 cm
28	Documentation Labeller
	It should be intergrated with Work flow management system
	The labeller should be 3-line for printing the following information
	Person responsible for sterilization
	Load number
	Packaging content
	Sterilizer number
	Production date
	Expiry date
29	Multi-Roll Tape Dispenser
	ApproxSize (LxWxH) 260x60x120mm
	This dispenser for sterilizer tape should hold two reels of tape.
	The heavy-duty bottom plate should be fitted with anti-slip rubber to prevent the dispenser from slipping when tape is torn off.
	Should be made of high quality coated steel for long use.
30	Instrument Tray Small
	Area : Various movement
	Size : 340x250x70 mm
	It should be modular design with high precision and should be designed for use with modular wire baskets through all phases of instrument processing: washing and disinfection (both manual and in an automatic washer-disinfector), ultrasonic cleaning, inspection and packing, sterilization, storage, distribution and usage.
	It should be self-drying after disinfection in hot water (min.+85°C)

	Instrument trays should be sturdy, jig-welded trays maintain their size and shape even if handled carelessly.
	It should be stackable.
	The tray should be made of stainless steel (304) wire net, with a maximum mesh size of 6.5 mm and a wire diameter of 1.5 mm. This design gives optimal cleaning results and at the same time prevents instruments from penetrating the sides of the tray.
	All cross-points in the network and vertical wires to top and bottom frames should be point welded.
	All free wire ends should be soft-polished to prevent injury when handled.
	The bottom wire construction should include a rigid, 3 mm diameter, stainless steel (304) wire frame to provide space for airing between goods and work surface and to allow use on roller, belt and chain conveyors.
	It should be electro-polished for smooth, clean surfaces and also suitable for ISO modular wire baskets.
31	Instrument Tray Big
	Area : Various movement
	Size : 450x250x70 mm
	It should be modular design with high precision and should be designed for use with modular wire baskets through all phases of instrument processing: washing and disinfection (both manual and in an automatic washer-disinfector), ultrasonic cleaning, inspection and packing, sterilization, storage, distribution and usage.
	It should be self-drying after disinfection in hot water (min.+85°C)
	Instrument trays should be sturdy, jig-welded trays maintain their size and shape even if handled carelessly.
	It should be stackable.
	The tray should be made of stainless steel (304) wire net, with a maximum mesh size of 6.5 mm and a wire diameter of 1.5 mm. This design gives optimal cleaning results and at the same time prevents instruments from penetrating the sides of the tray.
	All cross-points in the network and vertical wires to top and bottom frames should be point welded.
	All free wire ends should be soft-polished to prevent injury when handled.
	The bottom wire construction should include a rigid, 3 mm diameter, stainless steel (304) wireframe to provide space for airing between goods and work surface and to allow use on roller, belt and chain conveyors.
	It should be electro-polished for smooth, clean surfaces and also suitable for ISO modular wire baskets.
32	Table Trolley for Dirty/Clean/Sterile Area
	Minimum Size : 1080x550x800 mm
	The table trolley is made of all-welded medical grade stainless steel tubing.
	The trolley should have handlebars.
	The solid top and bottom shelves are made of heavy gauge stainless steel (304) with a ground and polished finish, and with a 12 mm raised edge all around.
	The lower shelf is 300 mm above floor level. There are protective buffer rollers on all four corners.
	The table trolley has 4 swivel wheels, mounted in ball bearings, for easy handling even in narrow passages.
33	Work Table for dry Goods for Clean Area (Pass Box Receiving)
	Minimum Size (LxWxH):1800x650x900 mm
	Stainless steel tables specially designed for working with dry goods and for general purpose pre-storage.
	The work tables should have a rigid stainless steel construction which is easy to clean and without sharp edges or corners.
	The table should be ergonomically worked up, should have easy to clean robust mat finished (to reduce reflection of light from the surface) with minimum sheet thickness of 1.5 mm stainless steel (304) worktop/surface to withstand and carry out

	heavy work comfortably, either sitting or standing.
	The edges along the front, back and sides should be reinforced and widened to 37 mm, giving a rigid construction.
	They are welded together and polished at all corners for good hygiene, as well as for the comfort and safety of the staff.
	The worktop should be supported by a complete assembly with full-length reinforcements along the front, back and ends, welded together at the corners.
	The worktop and support frame are bonded together with double-adhesive tape of a special, age-resistant quality to give rigidity and noise abatement.
	The support frame has to be mounted on a solid, stable floor stand, made of polished stainless steel square tubing, with horizontal braces 300 mm above floor level. An adjustable 10 cm (\pm 25 mm) plastic foot, easy to clean, is mounted on each leg
	The provision is to be made for a sturdy 445 mm-wide stainless steel shelf (optional) can be mounted on the horizontal braces.
	Must be delivered ready for assembly
	All edges should be smooth and the rigid frame should be made up of minimum 1.5 mm sheet thickness stainless steel (304).
	There should be unobstructed access to the working space, since the only supports needed along the front of the table are the corner legs. This also facilitates cleaning of floors.
34	Drying Cabinet
	Should be automatic in operation
	Inner chamber should be made up of stainless steel and outer chamber should be of epoxy painted CRCA sheets
	Should have heaters of minimum 2 KW
	There should be provision for setting the drying temperature and drying time.
	Approximate Dimension: 475X370X 1500 mm(wxdxh)
	It should be European CE (DOC) /US FDA certified.
35	Linen Fold Table for clean area
	Size (LxWxH) : 2000x1400x900 mm
	The table should be specially designed for sorting, inspection (each piece of linen can be moved over an illuminated inspection panel) and folding of surgical dressing sets and individually packaged towels/gowns. The extended width also facilitates work with large dressing sheets. Work can be carried out comfortably, either sitting or standing.
	Worktop should be made of stainless steel SS 304 Grade with thickness 1.2mm, mat finished.
	All edges of the worktop should be smooth.
	The top should have a built-in opalescent (milky) plastic surface plate, 1000 x 600 mm, illuminated from underneath by two 25 W fluorescent tubes located beneath the top in a laminated recess.
	The table should have two electrical outlets (one on each side).
	The rigid frame should be made of stainless steel (304).
	There should be unobstructed access to the working space, since the only supports needed along the front of the table are the corner legs. This also facilitates cleaning of floors.
36	Lab Stool
37	Open Storage Rack
38	Waste Bin
D	GAUZE CUTTING ROOM
39	Gauze Cutting Machine
	Should be useful in cutting thickest of cotton gauze material
	Should consist of a cutting unit and a knife sharpening unit
	Blade size should be 200 mm.
	Cutting Capacity should be 165 mm.
	Should work on 230V, 50 Hz power supply.

40	Work Table for dry Goods for clean area (Pass Box Receiving)
	Minimum Size. (LxWxH):1800x650x900 mm
	Stainless steel tables specially designed for working with dry goods and for general purpose pre-storage.
	The work tables should have a rigid stainless steel construction which is easy to clean and without sharp edges or corners.
	The table should be ergonomically worked up, should have easy to clean robust mat`tfinished (to reduce reflection of light from the surface) with minimum sheet thickness of 1.5 mm stainless steel (304) worktop/surface to withstand and carry out heavy work comfortably, either sitting or standing.
	The edges along the front, back and sides should be reinforced and widened to 37 mm, giving a rigid construction.
	They are welded together and polished at all corners for good hygiene, as well as for the comfort and safety of the staff.
	The worktop should be supported by a complete assembly with full-length reinforcements along the front, back and ends, welded together at the corners.
	The worktop and support frame are bonded together with double-adhesive tape of a special, age-resistant quality to give rigidity and noise abatement.
	The support frame has to be mounted on a solid, stable floor stand, made of polished stainless steel square tubing, with horizontal braces 300 mm above floor level. An adjustable 10 cm (± 25 mm) plastic foot, easy to clean, is mounted on each leg
	The provision is to be made for a sturdy 445 mm-wide stainless steel shelf (optional) can be mounted on the horizontal braces.
	Must be delivered ready for assembly
	All edges should be smooth and the rigid frame should be made up of minimum 1.5 mm sheet thickness stainless steel (304).
	There should be unobstructed access to the working space, since the only supports needed along the front of the table are the corner legs. This also facilitates cleaning of floors.
41	Lab Stool
E	ETO ROOM
42	ETO Steriliser
	The ETO gas sterilizer should be fully automatic type for sterilization of heat sensitive goods such as anaesthetic tubing and other plastic disposable materials etc.
	The sterilization chamber should be double walled, corrosion and gas resistant of suitable alloy. The chamber shall be insulated against heat emission and specify the mechanism of heat insulation.
	The inner surface should be smoothly finished to minimize gas deposits.
	The sterilizer door shall have a quick release locking arrangement, with door opening to the sides.
	Suitable safety interlocking arrangement shall be provided for the door so that the sterilization process does not start unless the door is properly locked in position and during the programme run it should not open if there is any residual gas.
	The sterilizer shall be provided with suitable mechanism to separate and evacuate the gas and specify the mechanism.
	The ETO sterilizer should be able to operate for the minimum essential following cycles programmes :
	Sterilization cycle for heat sensitive objects that ensure temperature from 37-55degreeC with subsequent aeration for protection of the operating personnel.
	Aeration cycle/programme to extract residual gas out of the sterilized objects after each sterilization cycle.
	Automatic chamber evacuation cycle with subsequent venting before releasing the door lock for opening, thereby prohibiting exposure of the operating personnel by gas dissolving from the chamber walls during shutdown period.
	Appropriate pollution control device for safe disposal of E.O like catalytic converter or

	equivalent technology / gas disposal management -to be as per local pollution control norms, if any.
	Capacity: Should have capacity of 200 litre or more. Conversion from cu.ft to litres is as per standard conversion. For information, 1 cu.ft is 28.317 litres approximately.
	Each ETO sterilizer shall be equipped with the following accessories:
	Sterilization basket of suitable size : 1 No
	Packaging material (1 roll each of different standard sizes) may be quoted and 50 units of chemical & biological indicator should be supplied.
	Gas cartridges should be EPA certified.
	Technical Data
	Sterilization Gas : Ethylene Oxide 100%
	Sterilization method : Cold sterilization of heat sensitive material.The ETO sterilizer should have compliance to BS EN ISO 9001. Certificate to be provided by equipment manufacturer.
	Operating temp. Range : 37 to 55 C
	d. No. of doors : One
	The ETO sterilizer should have compliance to BS EN ISO 9001. Certificate to be provided by equipment manufacturer.
	The ETO sterilizer should have compliance to ISO 13485. Certificate to be provided by equipment manufacturer.
	The ETO sterilizer should have compliance to OSHA/NIOSH/OHSAS 18001 exposure monitoring.
	Should be US FDA/European CE certified
	The required safety & clearance certificate from the concerned department if any should be the responsibility of the supplier.
	The consumables including cartridges, biological & chemical indicator and packing material required for 200 cycles to be provided.
	If any machine required compressed air plant for running the machine it should be supplied as standard.
	All listed accessories and parts (eg. Vent hoods and exhaust hoods) as per manufacturer's guidelines required for running ETO should be supplied as standard.
	A observation glass window should be present in ETO room to monitor the process
F	STERILE STORE
43	Wire Storage shelf module for Sterile store
	Minimum Size (LxWxH) : 1525x455x1895 mm
	Construction should be based on single free-standing shelf modules for storage of clean linen, instruments, and packing material or sterilized goods, including disposables.
	Moreover, two single modules can be placed back to back and combined as a double module unit.
	If two units are to be connected, 10 S-hooks should be supplied.
	The wire construction should allow good air circulation while permitting easy inspection of the goods.
	The wire shelves should be made of special heavy-duty steel (304), chromium-plated and surface treated with clear epoxy varnish to facilitate cleaning.
	The shelf unit should be easy to assemble on site and all parts should fit precisely.
	Shelves should be mounted by means of plastic clamps onto circular rigid posts, with the adjustable height within a range of about 50 mm. Each post should include a height adjustable foot.
	Each unit should include 5 shelves.
	The shelf unit should have optional Ø 125 mm castors for using as a mobile storage unit by replacing the foot with castors.
44	Modular Sterilizing baskets Big
	Size : 585x395x195 mm
	Area : Various movement

	It should be modular design with standard SPRI sizes and high precision and should be designed for sterilizing / processing as well as easy handling and management of the supply, storage and distribution of re-circulated sterilized goods.
	It should be self-drying after disinfection in hot water (min.+85°C)
	It should be sturdy, jig-welded trays maintain their size and shape even if handled carelessly.
	It should be both nest able and stackable There should be special wire support to help making baskets both stackable (when the supports are folded into the basket) and nest able (when the supports are folded out)
	The top frame should be designed such that it should serve as a handle grip for easy carrying even when heavily loaded.
	There should be no sharp edges or wires.
	The surfaces should be smooth to assure easy cleaning in a washer-disinfector.
	The baskets should be made of electro-polishes heavy-duty stainless steel (304) and should have a rigid bottom frame that gives space for airing between goods and work surfaces and allow use on roller belt and chain conveyors.
	It should be designed and manufactured in accordance with high quality specifications to assure long lifetime.
45	Modular Sterilizing baskets Medium
	Size : 585x395x100 mm
	Area : Various movement
	It should be modular design with standard SPRI sizes and high precision and should be designed for sterilizing / processing as well as easy handling and management of the supply, storage and distribution of re-circulated sterilized goods.
	It should be self-drying after disinfection in hot water (min.+85°C)
	It should be sturdy, jig-welded trays maintain their size and shape even if handled carelessly.
	It should be both nest able and stackable There should be special wire support to help making baskets both stackable (when the supports are folded into the basket) and nest able (when the supports are folded out)
	The top frame should be designed such that it should serve as a handle grip for easy carrying even when heavily loaded.
	There should be no sharp edges or wires.
	The surfaces should be smooth to assure easy cleaning in a washer-disinfector.
	The baskets should be made of electro-polishes heavy-duty stainless steel (304) and should have a rigid bottom frame that gives space for airing between goods and work surfaces and allow use on roller belt and chain conveyors.
	It should be designed and manufactured in accordance with high quality specifications to assure long lifetime.
46	Closed Sterilization Containers 300mm x 290mm x 110mm
	Should have thermo lock drainage, steam penetration valve and stainless steel top.
47	Closed Sterilization Containers 300mm x 290mm x 140mm
	Should have thermo lock drainage, steam penetration valve and stainless steel top.
48	Closed Sterilization Containers 590mm x 280mm x 260mm
	Sizes should be - 590x280x260 units.
49	Free Standing basket rack (15 Baskets) for Sterile store
	Size (LxWxH) : 1850x480x2150 mm(Single), 1850x800x2150 mm(Double)
	Quotations should be offered for both single and double basket storage racks to store wire baskets in sterile storage and/or as pre-storage of clean packed goods.
	The rack should be designed as an open unit to promote aeration of sterilized goods and to make inspection of stored goods as easy as possible.
	Should provide rigid, horizontal guide-rails, consisting of 50 x 20 mm steel profiles for loading and unloading the baskets by sliding the baskets on rail.
	The guide-rails should be welded to a robust support column mounted on a rigid floor stand.

	The columns should be joined by support frames on top and below the base of the rack.
	To facilitate cleaning of the floor, the base should have a rigid construction that minimizes the number of legs needed for support.
	Each leg should have an adjustable foot (± 25 mm).
	The rack should be made of SS.
	The single rack should be a free-standing section that holds 5 baskets in each vertical.
50	Basket Trolley
	Should be suitable for transport of empty, stacked /nested ,modular wire sterilization basket.
	Should be mounted on a 4 swivel castors of 75mm dia.
	Should be made up of stainless steel.
	Should be provided with handle for easy transport.
	Load capacity approx. 150 Kg.
	Dimension should be (approx.): 750mm(L)X500 mm(W)x150 mm(H)
D	ISSUE COUNTER
51	Issue Counter
52	Staff Chair
53	Waste Bin
54	Pass Box
55	Computer with UPS and Printer
H	CSSD OFFICE
56	Office Table with chair
57	Staff Chair
58	Visitor's Chair
59	Storage Cupboard
60	Waste Bin
61	Computer with UPS and Printer
I	STAFF CHANGE FEMALE
62	Change Locker - 4 Compartments
63	Waste Bin
64	Shoe Rack
J	STAFF CHANGE MALE
65	Change Locker - 4 Compartments
66	Waste Bin
67	Shoe Rack
K	OTHER EQUIPMENTS
68	Reverse Osmosis Plant 2000 LPH with 6000Ltrs storage tank and shed
	RO should of Eureka Forbes/Ion Exchange / Millipore / Kent / Aquacare / Rions / Water expert make.
69	Air Compressor (if required)
70	Call Bell at the Receiving counter
L	Inventory Management Store
71	Office Table with chairs
72	Lockable Almirahs
73	Waste Bin
74	Storage Racks
75	Work Flow Management
	It should be able to provide solutions for CSSD management, tracking , traceability & monitoring of the CSSD.
	It should use ID technologies (bar code Etc.) to trace & track Operators, Equipment & Assets.
	It should be able to integrated with OT and other areas from where instruments/ items will be reaching CSSD for sterilization tracing the surgical instruments/ items.
	It should have supervision software to manage the sterilization process thus increasing

	the efficiency & accessibility.
	It should allow operators to access data for increased efficiency & tracing.
	It should allow integration of washers & disinfectors, sterilizers of different make
	The System should be integrated with the Hospital information system(HIS).
	The operating system should be with PC able to run the management and storage capacity of data upto ten years
	The tracking system of sterilized material through laser printed Bar coding.
	Work flow management system should be able to trace all instrument/ items laser printed, should able to monitor and record all the parameters (Identification of instruments/ items, Operator profiling, movement of instruments/ items through various steps in CSSD, Machine identification, monitoring parameters) required in sterilizing instruments/items
	The user should be able to manage traceability processes and introduce tools and able to guarantee the traceability of the activities on mobile device
	The following features should be installed on professional mobile devices and provides the following features:
	1. Instruments issued to the in-charges from CSSD inventory store
	2. Instruments received by the CSSD Personal
	3. Instruments/ items/ kits/ drums etc association with equipment
	4. Instruments/ items stored
	5. Sterilized Instruments/ items issued
	It should monitor storage of sterilized instruments/ items and supervision of expiring material.
	The work flow management system should be able to identify the operator, identify the instruments/ items and confirm the quantity at the various steps of work flow in CSSD
	The monitoring system of Sterilization cycles should view related temperature & pressure
	The data communication should be in REAL time.
	The workflow management software must capture the machine status in real time, batch details including traceability to and from user end, etc.
	Laser printing on instruments should be readable by the bar code reader
	The bidder shall be responsible for etching of laser marking on all instruments/ items which will be sterilized in CSSD, NCI-AIIMS
	Suitable hardware and software for Laser printing , reading, tracking, traceability & monitoring of all instruments/ items should be provided at CSSD by the bidder . At all other user areas, software and appropriate decoding device for reading, tracking, traceability & monitoring of all instruments/ items should be provided by the bidder. Standard windows PC shall be provided by NCI-AIIMS in all user areas like wards, OT, OPD, Diagnostics etc wherever required. However the bidder shall be responsible for provision of any type of hardware & software within the CSSD.
	Complies to Annexure 1 (SOP, Turnkey Works & Manpower), Annexure 2 and Annexure 3 as per tender specification.
	Added Para:
i)	NCI-AIIMS will provide dual metered electricity supply (1 from DG & 1 from grid supply) for CSSD. Electricity charges at prevailing institutional electrical supply rates in the State of Haryana shall be deducted from the OPEX bill as per actuals for that period. It shall be the responsibility of the bidder to record the electricity meter readings for the billing period. NCI-AIIMS reserves the rights to verify the same if required.
ii)	All machinery/equipment paid for by NCI-AIIMS under CAPEX shall be the property of NCI-AIIMS from the date of issue of LC/CRC.
iii)	The ANNEXURE 2 (page 78-80) is an indicative BOQ given for various areas of the CSSD. The bidder may add or delete any of the items in ANNEXURE 2 as per requirement unless minimum number of the item has been specified therein.

Annexure – 1**(SOP, Turnkey Works & Manpower)****A) Standard Operating Procedure(SOP)****Objective:**

1. The orderly and timely processing of medical and surgical instruments to protect patients from infections while minimizing risks to staff and preserving the value of the items being reprocessed.
2. To ensures operator competence and proper methods of cleaning and wrapping instruments, loading the sterilizer, operating the sterilizer, and monitoring of the entire process. Furthermore, care must be consistent from an infection prevention standpoint in all patient-care settings, such as hospital and outpatient facilities

Work Flow**I. Inventory management in CSSD**

- 1) Inventory management of the Instrument/items which are to be sterilized in CSSD will be done in CSSD itself.
- 2) Instrument/items will be issued to the in-charges of various areas from the CSSD. At the time of issuing instruments/ items to the in-charges laser marking will be done in CSSD on each equipment and the record will be maintained in CSSD via workflow management software.
- 3) Proper records inclusive of number of equipment, type of equipment, name of the department or area to which instrument/item is issued, name & ID of the person issuing the item and name & ID of the person receiving the item will be maintained via workflow management software.
- 4) Indenting of inventory will be done by authorized personal of NCI-AIIMS and all indents will be entered in work flow management software.
- 5) Instrument/ items sent to CSSD for sterilization will be checked by the bidder for any defects and if defect is found instrument. Item will be replaced by the bidder from the inventory and the same will be updated in the module of CSSD.
- 6) If any defect is found in the instrument/item by the in-charge of user area the defective instrument/ item will be sent back to the CSSD after making entry of the same in the CSSD module at the user's site.

II. Sending Instruments/ items for sterilization to CSSD

- 1) At the time of sending In-charge of the respective area will make entries of the number of equipment, type of equipment at the time of sending the instruments/ items to the CSSD in the module of CSSD in HIS
- 2) Pre-cleaning in patient-care areas may be needed on items that are heavily soiled with feces, sputum, blood, or other material.

III. Receiving of Instruments/items for sterilization in CSSD

- 1) Items will be received at **the receiving counter** of the CSSD.
- 2) At the CSSD receiving window, the bidder shall open the tray/drum/linen etc. in front of the AIIMS Staff and acknowledge receipt of the items in the work flow management software.

- 3) Counting of Instruments/items received at the counter shall be in front of the AIIMS Staff by a CSSD personal.
- 4) Items transported should be preferably covered.
- 5) Personnel handling contaminated items at the receiving counter should use Personal Protective Equipment. The items must be sent from the OTs via dump waiter especially designed for this purpose. Counting of Instruments/items received will be done by a CSSD personal in front of the AIIMS Staff and acknowledge receipt of the items in the work flow management software.
- 6) Records to be maintained at the time of receiving items from various areas. Records should be inclusive of (Types of items received, Number of items received, Condition of the item received, Name of the person delivering the items, Name of the person receiving the items,) via work flow management software.
- 7) Records will be maintained for 3 Years
- 8) Timings of receiving items in CSSD: 24*7

IV. Cleaning of Instruments/ Item.

- 1) Items must be cleaned using water with detergents and /or enzymatic cleaners that are capable of removing visible organic and inorganic residues before processing
- 2) Surgical instruments are general pre-soaked or pre-rinsed to prevent drying of blood and tissue.
- 3) Cleaning and decontamination should be done as soon as possible after items have been used.
- 4) Perform either manual cleaning (i.e., using friction) or mechanical cleaning (e.g., with ultrasonic cleaners, washer-disinfector).
- 5) If using an automatic washer/disinfector, ensure that the unit is used in accordance with the manufacturer's recommendations.
- 6) Ensure that the detergents and/or enzymatic cleaners selected are compatible with the metals and other materials used in medical instruments and also they should be in accordance with the CDC guidelines for sterilization.
- 7) Ensure that the rinse step is adequate for removing cleaning residues to levels that will not interfere with subsequent disinfection/sterilization processes.
- 8) Inspect equipment surfaces for breaks in integrity that would impair either cleaning or disinfection/sterilization.
- 9) After washing, each device should be inspected for cleanliness, functionality, breakage or defects and then appropriately assembled.
- 10) To record and report to CSSD supervisor regarding any damaged/ defective item and the same should be entered via work flow management system.
- 11) All items should be properly dried after and moisture-free as moisture impairs many sterilization processes.
- 12) Personnel working in the decontamination area should wear Personal Protective Equipment when handling or cleaning contaminated instruments and devices.
- 13) Thoroughly clean hands (wash and dry hands or use an alcohol – based gel for hand cleaning) upon leaving the decontamination area and before caring out any other activity in other areas.
- 14) All the records shall be maintained in computer through work flow management for a period of 3 years

IVa) Manual Cleaning:

- 1) Use two stainless steel sinks for the manual cleaning process.

- 2) Sinks must be large and deep enough to immerse completely any article processed

IVb) Ultrasonic Cleaner:

Standards to be followed as per OEM guidelines and in accordance to the CDC guidelines / European Guidelines / Indian Guidelines if any issued by the Government of India for sterilization.

IVc) Washer Disinfector

Standards to be followed as per OEM guidelines and in accordance to the CDC guidelines / European Guidelines / Indian Guidelines if any issued by the Government of India for sterilization.

1. To maintain standard water Temperature
2. To check that the appropriate temperature is attained after each repair
3. Blood test soil pre-applied to thin metal coupon/Metal coupon with strip of coagulated blood for the Monitoring of the Cleaning Efficiency of Washer-Disinfector.
4. All records to be maintained with regard to equipment and items processed in it via workflow management software. Records to be provided as and when required.
5. Record has to be maintained for atleast 3 years via work flow management

V. Assembling and packaging

- 1) Once items are cleaned, dried, and inspected, those requiring sterilization must be wrapped and should be arranged in instrument trays/baskets.
- 2) Hinged instruments should be opened; items with removable parts should be disassembled unless the device manufacturer or researchers provide specific instructions or test data to the contrary; complex instruments should be prepared and sterilized according to device manufacturer's instructions and test data.
- 3) The items shall then be packed in front of designated AIIMS Staff posted in CSSD. The packing shall be such, that once packed there shall be a Tamper resistant seal / sticker based on integrity of which, the user department shall receive the sterilized packs without opening them physically.
- 4) In CSSD, double wrapping can be done sequentially or non-sequentially (i.e., simultaneous wrapping). Wrapping should be done in such a manner to avoid tenting and gapping. The sequential wrap uses two sheets of the standard sterilization wrap, one wrapped after the other. This procedure creates a package within a package. The non-sequential process uses two sheets wrapped at the same time so that the wrapping needs to be performed only once.
- 5) Ensure that packaging is sufficiently strong to resist punctures and tears to provide a barrier to microorganisms and moisture. The wrapping material used to wrap the instruments for the sterilization process should be Medical Grade Crepe / Kraft Paper. (ISO11607-1 and EN868-2 compliant)
- 6) Instruments must not be held together with rubber bands.
- 7) If lubrication is necessary, use a nontoxic, water-soluble lubricant.
- 8) **Place instrument sets in trays with S/S Tray/Perforated tray/wire mesh bottoms/instrument container systems.**
- 9) **Package Identification: Label every sterilized item with the following:**

- a. Lot control: Batch no., Sterilizer Number, Load Number, the cycle number, year and date of sterilization / expiry date
- b. Item identification – Laser coding already there
- c. Indicators shall be fixed during packing of items for sterilization. Place sterilizer indicator tape on the outside of every package.

10) Arrangement on the Sterilizer Cart

- a. Place items close to each other with a finger breath gap
- b. Do not stack sterile containers on top of each other
- c. Do not place rigid instrument containers on their side

VI. Steam sterilization

Operational manuals by OEM shall be followed during steam sterilizer operation.

1. Steam Sterilizer Process Records

Records must be managed via the workflow management system and must contain the following:

- a. Sterilizer number
- b. Sterilization date
- c. List or lot number
- d. List of contents of each load run
- e. Initials of operator who ran the sterilizer
- f. Record of Mechanical, Chemical Indicators, Biological Indicators etc to be kept
- g. Record of all items recalled when evidence of sterilizer failure is noted.
- h. Store records for at least 10 years via work flow management

2. Handling of Sterilized Items

- a. Leave items removed from sterilizers on the sterilizer cart until they are completely cooled.
- b. Consider items that are wet as unsterile.
- c. Minimize handling of all sterile items.
- d. Consider items that are dropped or touched by any wet object contaminated and reprocess.
- e. Do not place hot items on cool shelves.
- f. Do not place rigid containers on top of wrapped trays.

3. Cleaning of Sterilizers

- a. Follow manufacturers' recommendations for cleaning.
- b. Clean whenever soiled

4. Monitoring System

- a) Monitor each load with **mechanical indicators** (e.g., time, temperature, pressure): Keep the printed record and soft copy of the same
- b) Chemical indicator** (Class –I) are to be affixed on the outside of each pack to show that the package has been processed through a sterilization cycle.
- c) Chemical indicator (Class V)** should be placed inside each pack.
- d) Before any load is released, the operator will verify that the sterilizer parameters have been met.
- e) Bowie-Dick Test must be performed daily in an empty dynamic-air-removal sterilizer.
- f) Test each sterilizer using a biological spore test containing *Bacillus stearothermophilus* weekly and incubate the same.

- g) Read the results according to manufacturers instruction and record the results in the sterilizer process records.
- h) **Prior to use, validate proper functioning of sterilizers after major repairs/preventive maintenance have been performed** :Following repairs of any sterilizer, a **biological indicator test**, Leak rate test, Thermocouple test , Air detector test, Bowie-Dick Test **& Air Leak test** must be performed and read to assure proper functioning prior to use of the sterilizer and records to be maintained in the workflow management software.
- i) The result of the monitoring system should be interpreted in accordance to the CDC guidelines on Sterilization. If the results are positive the recall policy shall be in accordance with the CDC guidelines on Sterilization.
- j) Records of the results following monitoring processes shall be maintained for atleast 1 year

VII. Non Steam Sterilizer:ETO

Operational manuals by OEM shall be followed during steam sterilizer operation.

a) Ethylene Oxide Gas Sterilizer Process Records must contain the following:

- a. Sterilizer number
- b. Sterilization date
- c. Load or lot number
- d. List of contents in each of load run
- e. Initials of operator who ran the sterilizer
- f. Record of biological indicator rest results
- g. Record of time-temperature readings
- h. Aeration completion time
- i. Record of repairs and preventive maintenance-Biomedical Engineering.
- j. Record of items recalled when evidence of sterilizer failure is noted
- k. Store records for at least 10 years via work flow management

b) Handling of Sterilized Items

- a. Adequate aeration following ethylene oxide gas sterilization is absolutely essential.
- b. Properly aerate materials prior to dispensing. Follow manufacturers' operational instructions and recommended aeration times for mechanical chamber aeration.
- c. Maintain aeration load records with the aeration chamber. DO NOT retrieve items from the aerator until the aeration time has been complete

c) Monitoring

- a. Maintain a mechanical recording indicating time and temperature for each sterilizer .Pre-set Automatic Control Monitors. Follow manufacturers' operational guidelines.
- b. Chemical indicators** (Class -I) are to be affixed on the outside of each pack to show that the package has been processed through a sterilization cycle.
- c. Chemical indicator (Class V)** should be placed inside each pack.
- d. Run a chemical integrator with each load. Place this integrator on the bottom rack closest to the drain. -PCD.
- e. Run a biological spore test containing Bacillus subtilis in each load. Incubate the test according to manufacturer's instructions. Read the test results as instructed by OEM.

- f. The result of the monitoring system should be interpreted in accordance to the CDC guidelines on Sterilization. If the results are positive the recall policy shall be in accordance with the CDC guidelines on Sterilization.
- g. Records of the results following monitoring processes shall be maintained for atleast 1 year

VIII. Implantable Devices

Each load should be monitored if it contains implantable objects. **Run a chemical integrator (Chemical Indicator Class V) with each load. Place this integrator on the bottom rack closest to the drain -PCD.** If feasible, implantable items should not be used until the results of spore tests are known to be negative.

IX. Storage of sterilized articles

- a) Following the sterilization process, medical and surgical devices must be handled using aseptic technique in order to prevent contamination.
- b) Sterile supplies should be stored far enough from the floor (8 to 10 inches), the ceiling (5 inches unless near a sprinkler head [18 inches from sprinkler head]), and the outside walls (2 inches) to allow for adequate air circulation, ease of cleaning, and compliance with local fire codes (e.g., supplies must be at least 18 inches from sprinkler heads).
- c) Medical and surgical supplies should not be stored under sinks or in other locations where they can become wet.
- d) Sterile items that become wet are considered contaminated because moisture brings with it microorganisms from the air and surfaces.
- e) Open shelving may be used for storage.
- f) Any package that has fallen or been dropped on the floor must be inspected for damage to the packaging and contents (if the items are breakable).
- g) If the package is heat-sealed in impervious plastic and the seal is still intact, the package should be considered not contaminated.
- h) If undamaged, items packaged in plastic need not be reprocessed.
- i) Store items in a manner that prevents crushing or bounding together
- j) Place lighter items on heavier ones.
- k) Store items on wire shelves in a restricted storage area with the bottom shelf being solid.
- l) Maintain storage areas in a manner that prevents splashing from personnel or housekeeping.
- m) Arrange sterile storage to facilitate stock rotation.
- n) If traffic is not restricted to personnel who are involved only in the dispensing functions, require other personnel to adhere to the attire guidelines.
- o) Shelf life of the sterilized instrument / item should be minimum one month and accordingly the packing material may be planned.

X. Issuing of Sterilized Instrument/Items:

- a) For OTs: 24x7
- b) For ICU/HDUs: Morning 9AM -11AM and Evening 3PM-4PM
- c) Wards and Other areas: Morning 10AM -12 Noon

XI. Personal hygiene and health for personnel performing sterilization processes

- a) Wear clean surgical attire when working in the preparation, sterilization, and sterile storage areas.
- b) Provide hand washing facilities and alcohol-based hand gel in areas accessible to all personnel.
- c) Clean hands frequently and thoroughly by either washing with a lotion soap or use of an alcohol-based gel.
- d) Clean hands by washing or using alcohol-based gel before moving between work areas.
- e) Hair, body, nails and uniforms of personnel must be clean at all times.
- f) Personnel report illness or infections to their supervisors prior to beginning the workday.
- g) Instruction to staff in personal hygiene, particularly the need for hand washing after handling items.
- h) Medical evaluation of staff is mandatory before placement to ensure that personnel are not placed in jobs that would pose undue risk of infection to them, other personnel, patients, or visitors. All personnel must have a medical record kept upon employment.
- i) The record should contain the following, among other pertinent data: Presence or absence of symptoms attributable to, and past history of tuberculosis, viral hepatitis, mumps, measles, rubella, varicella, sexually-transmitted infections or absence of an immuno-compromised state, e.g. Chronic steroid use
Immunization history, Complete physical examination.
- j) Periodic evaluations may be done as indicated for job reassignment, for ongoing programs or for evaluation of work-related problems
- k) The staff need to report all infections such as gastroenteritis, dermatitis, pustules, skin lesions and boils and seek immediate medical attention
- l) Occupational exposures including needlestick injuries should be immediately reported to the supervisor and/or to the Infection Control officer of the facility.
- m) Immunization requirements for staff should be undertaken.

XII. In-service education for personnel performing sterilization processes

- a) Provide in-service training programs for personnel involved in decontamination, processing, sterilization, storage, and the delivery of sterile supplies annually and more frequently as deemed necessary by the area supervisor.
- b) Provide written policy and procedure manuals covering work tasks in all areas performing sterilization processes.
- c) The manager shall have appropriate knowledge about the CDC guideline 2008 regarding cleaning disinfection & sterilization
- d) Education should be given to staff about potential infectious hazards and techniques to prevent the spread of micro-organisms in the environment as well as safe and appropriate handling procedures
- e) An orientation/training module designed for the staff is to be implemented in the facility as part of infection control training
- f) The key staff members are fully trained in appropriate skills and technology; those skills should be maintained by ongoing training and supervision; only appropriately trained personnel handle and store chemicals.

XIII. General Cleanliness of the CSSD Premises: CSSD premises shall be hygienic and clean all times

It will be the responsibility of the bidder to abide by the SOP laid down for CSSD by the institute and to adapt changes in SOPs from time to time. The successful bidder will ensure this policy is implemented efficiently. To monitor compliance to the policy spot checks will be undertaken by the institute

B) Turnkey works

1. The cost of Turnkey for the area of 6000 sq.ft will be considered for Ranking / Evaluation purpose **however payment shall be made at actual on pro-rata basis.**
2. The turnkey work includes all modifications to the built up space provided at the hospital site including Installation of Equipment, ETO, RO plant, civil works, electrical works, plumbing works, false ceiling,CCTV, SS paneling for sterilizer and washer disinfectant, firefighting, sanitary, drainage, furnishing, etc.While designing the CSSD the Bidder has to provision for future expansion of CSSD for installation of One Washer disinfectant, One Steam Sterilizer & one ETO of the highest capacity quoted by the bidder in the said tender. This provision should be made without disrupting the zoning of the CSSD. All ancillary services like (electricity, water points, plumbing, R.O etc.)required for future expansion has to be built in while designing and furnishing the CSSD.
3. Bidder shall make provision for inventory management with store room for all instrument/ items which will be sterilized in CSSD.
4. Bidders are required to visit the site for self-assessment of the extent of work.
5. Bidder will be responsible for doing SS 304 with 0.8 mm or more thickness paneling for sterilizer and washer disinfectant.
6. All cable trenches and railings wherever required.
7. Any other necessary work not mentioned in BOQ/technical specifications/turnkey but required for successful completion of Installation, testing & commissioning of CSSD should be carried out by the bidder.
8. Bidder has to specify the Electrical Load Requirement, Water Requirement and other associated works required on the basis of BOQ given in the tender, air conditioning requirement, electrical light fittings etc.
9. Necessary Co-ordination with other associated works vendors/agencies like other medical services vendors/Civil contractor agencies/Institute/HITES will be responsibility of bidder for successful completion of CSSD.
- 10.All necessary work & accessories required to install and complete functioning of equipment should be included in the equipment and supplied as standard
- 11.Bidder has to construct toilets, rest room, change room(Male & Female), eye-shower and shower facilities for their workers.

Interior and Accessories for CSSD (Power/Drain/Lighting/AC/Exhaust etc)

It is an indicative requirement for CSSD area. Bidder has to provide all the required works in CSSD (Power/Drain/Lighting/AC/Exhaust etc) as per the approved drawing by NCI-AIIMS and as per the tender specifications.

S. No	Description	Flooring	Walls	Drains	Exhaust	Ventilation	Power / Isolator	Lighting & Fans

S. No	Description	Flooring	Walls	Drains	Exhaust	Ventilation	Power / Isolator	Lighting & Fans
1	Soiled Reception	Vitrified tiles 2' x 2'	Glazed tiles 2' x 2' up to roof	-	-	-	5 A x 4	Fluorescent lighting Fans
2	Trolley Wash & Hold	Matt Tiles	Glazed tiles 2' x 2' up to roof	3" drains	-	-	-	Fluorescent Lights
3	Wash & Disinfection Area	Vitrified tiles 2' x 2'	Glazed tiles 2' x 2' up to roof	3" drains	-	-	40 A x 3	Fluorescent lighting+ fans
							15 A x 6	
							5 A x 5	
4	Clean Store	Vitrified tiles 2' x 2'	Glazed tiles 2' x 2' up to false ceiling	-	-	Air conditioned	5 A x 2	Fluorescent Lights
5	Office	Vitrified tiles 2' x 2'	Glazed tiles 2' x 2' up to false ceiling	-	-	Air conditioned	5 A x 3	Fluorescent lighting
6	Change Room Female	Vitrified tiles 2' x 2'	Glazed tiles 2' x 2' up to roof	-	-	-	5 Ax 2	Fluorescent lighting+Fans
7	Toilet	Matt tiles	Glazed tiles 2' x 2' up to roof	2" drain	-	-	-	Fluorescent Lighting
8	Change Room Male	Vitrified tiles 2' x 2'	Glazed tiles 2' x 2' up to roof	-	-	-	5 Ax 2	Fluorescent lighting+Fans
9	Toilet	Matt tiles	Glazed tiles 2' x 2' up to roof	2" drain	-	-	-	Fluorescent Lighting
10	Staff Rest Room	Vitrified tiles 2' x 2'	Glazed tiles 2' x 2' up to	-	-	-	5 A x 2	Fluorescent lighting+Fans

S. No	Description	Flooring	Walls	Drains	Exhaust	Ventilation	Power / Isolator	Lighting & Fans
			roof					
11	Control & Packing Area	Vitrified tiles 2' x 2'	Glazed tiles 2' x 2' up to false ceiling	-	-	Air-conditioning +ve	100A x 5	Fluorescent lighting
							15 A x 6	
							5 A x 5	
12	Linen inspection, folding & Packing	Vitrified tiles 2' x 2'	Glazed tiles 2' x 2' up to roof	-		+ve Pressure ventilation	5 A x 2	Fluorescent lighting+Fans
13	Gauze cutting Room	Vitrified tiles 2' x 2'	Glazed tiles 2' x 2' up to roof	-		+ve Pressure ventilation	15 A x 2	Fluorescent lighting+Fans
14	ETO sterilizer room	Vitrified tiles 2' x 2'	Glazed tiles 2' x 2' up to false ceiling	2" drains	Gas Exhaust	-	30 A x 2	Fluorescent Lights 15 Amp sockets x 3
15	Sterile Store	Vitrified tiles 2' x 2'	Glazed tiles 2' x 2' up to false ceiling	-	-	+ve Pressure & Air conditioned	5 A x 2	Fluorescent Lights
16	Issue Counter	Vitrified tiles 2' x 2'	Glazed tiles 2' x 2' up to roof	-	-	-	5 A x 4	Fluorescent lighting+Fans
17	Inventory Management Store	Vitrified tiles 2' x 2'	Glazed tiles 2' x 2' up to false ceiling	-	-	Air conditioned	5 A x 2	Fluorescent Lights

1. Civil work

- a) All material should be of high quality and sample should get approved by consignee.
- b) Installation of false ceiling with at least 0.8mm thick stainless steel sheets (AISI 304) with minimum of 2x2 feet size with proper insulation.

- c) All civil works inclusive of construction of brick wall, plastering , painting etc required as per the approved lay out plan, laying of tiles on walls & floors, provision of doors & windows as per approved lay out plan
- d) Levelling of floor if any required before laying of floor tiles

2. Electrical work:

- a) Consignee will provide three phase supply at one point in CSSD Area. All remaining work has to be done by the bidder.
- b) Installation of the new electrical panels comprising of appropriate size ACB/ MCCB/ MCB/ Contactors/ Relays/ Changeover/ Switchover/ Measuring Instruments/ Indicating lights etc as per requirement of the Lighting, machines, Air conditioners, AHUs, RO Plant etc. There should be separate cubicle panels for emergency and normal electrical supply
- c) The approved make of electrical panel will be ABB/ L&T/ Legrand/ Snider/ Seimens. Panel fabricator should be CPRI approved.

3. Air-conditioning:

- a) Bidder has to do Air conditioning requirement as per zoning concept and standards. NCI-AIIMS will provide chilled water supply at one point outside the CSSD.
- b) The central processing area(s) ideally should be divided into at least three areas: decontamination, packaging, and sterilization and storage. The recommended airflow pattern should contain contaminates within the decontamination area and minimize the flow of contaminates to the clean areas.
- c) The CSSD should be designed as such that negative pressure is recommended in decontamination area (American Institute of Architects) and no fewer than six air exchanges per hour in the decontamination area with positive pressure in the sterilizer equipment room and in Sterile storage room. The packaging area is for inspecting, assembling, and packaging clean, but not sterile, material.**
- d) All the work will be done keeping in mind the prescribed norms of the pressure and the air changes for the different areas of the CSSD.

4. Fire safety:

Fire safety equipment will be installed as per the norms and requirements of the fire department and keeping in mind the norms and specifications of the different zoning areas of the CSSD.

- a. Fire detection and alarm system with conventional optical type smoke detectors, RIs/ MCP, fire control panel and its wiring with copper conductor FRLS wire shall be provided as per CPWD specifications.
 - i. Make of smoke detectors as approved will be Apollo/ Edward/ Seimens/ Honeywell.
 - ii. Make of RI, Hooters, MCP, Fire control panel will be of Agni/ Safex/ Minimax.
- b. Fire fighting system will be installed comprising of Hose reels, fire hydrants, landing valve, hose pipes, branch pipe, nozzles, valves as per CPWD specifications. The hosing and internal pipeline needs to be laid down by the vendor. However, the water connection will be provided by the institute.
- c. Automatic sprinkler system with adequate size of pressurization pump with pressure gauge, flow switch, annunciation panel etc shall be installed by the vendor, as per CPWD specifications.

- d. Vendor will provide adequate fire extinguishers of required type. (According to Fire safety rules).

5. Plumbing work & draining system

- a) Stainless piping to drain the hot water from autoclaves to nearest drains
- b) All necessary plumbing works required in the CSSD area including laying of plumbing pipeline with all required fittings.
- c) All necessary drainage works required in the CSSD area including laying of drain pipeline with all required fittings.
- d) Provision of sanitation fittings in the toilets and any other associated areas

6. Ventilation and lighting

- a) Provision of 2ftx2ft LED lights to provide illumination of 500 lux in all areas. LED lights to be flush mounted to the false ceiling
- b) Toughened glass sealed windows with curtains to be provided to allow natural sun light wherever possible.
- c) Exhaust air fans to be provided wherever required

7. Security and safety

- a) NCI-AIIMS, shall not be held responsible for any loss or damage due to any reasons whatsoever to any type of inventory that may be kept in the said CSSD store by the vendor. The premises provided to the vendor should only be used for the purpose as mentioned in the contract (i.e. CSSD services for NCI-AIIMS, only). Under no circumstances, the premises are to be used for any other purpose, than what has been mentioned in the contract. The general safety & ensuring fire safety of the premises is the responsibility of the contractor.
- b) Bidder has to install CCTV cameras covering all major areas with recording of 30 days for the proper monitoring of workflow with the connection in the manager room. It should be integrated with Hospital security system.

B) Manpower (Terms & condition)

1. Any person who is in Govt. Service anywhere or an employee of the institute should not be made a partner to the contract by the bidder directly or indirectly in any manner whatsoever.
2. If any information furnished by bidder is found to be incorrect at any time, the contract is liable to be terminated without any notice and the security deposit is liable to be forfeited by the institute.
3. The bidder shall comply with the labour laws applicable and Institute shall not be responsible for any litigation/default from agency side.
4. The firm will verify the antecedents of all employees working, by police verification and will keep attendance and other relevant records at its cost and will produce these on demand of any authority. The list containing the names/addresses of the personnel appointed by the agency shall be made available to the Institute Authorities with their bio-data within 10 days from the date of deputing.
5. In case any person engaged by the contractor is found to be inefficient, quarrelsome, infirm, and invalid or found indulging in unlawful or union activities, the Contractor

- will have to replace such person with a suitable substitute at the direction of the competent authority.
6. The institute shall not provide any sort of accommodation to the staff or person deployed by the contractor and no cooking/lodging will be allowed in the premises of the institute at any time.
 7. CSSD will function 24* 7 365 days, Timings of receiving and issuing of items to various areas are detailed in SO.
 8. If any situation arise out in violation of any terms and conditions of the contract executed between the parties to terminate or cancel or at the time of expiry of the contract, the vendor will be held responsible to preserve the CSSD equipment intact and handover the same in functional status. Otherwise vendor shall be liable to pay the damages occurred due to any lapse on his part and the amount of the damages of equipment will be deducted from the amount of security deposited.
 9. The contractor shall not, at any stage, cause or permit any sort of nuisance in the premises of institute or do anything which may cause unnecessary disturbance or inconvenience to others working there as well as to the general public in the institute premises and near to it.
 10. The vendor will depute adequate manpower to meet the SOP & load requirement as defined in the tender.
 11. Workers with adequate knowledge and experience of working in CSSD to be employed. Due certification/verification of employees with health check-up is mandatory.
 12. Medical examination of staff:-The bidder shall employ only those persons in the CSSD who are found to be medically fit. Hospital reserves its rights to examine any of the employees for medical fitness without prior notice. Expenses, if any incurred by the NCI-AIIMS on medical examination of such employees, shall be borne and paid by the bidder.
 13. Wages and insurance:-The vendor shall comply with the laws applicable to employees working in the CSSD regarding working hours, minimum wages, safety, cleanliness, leave, over time allowances, provident fund, retrenchment benefit, and medical benefit like ESI etc.
 14. It shall be the responsibility of the vendor to employ adequate number of cleaners and sweepers and provide them with adequate and necessary equipment/ materials for keeping the CSSD scrupulously clean and in a sanitary condition to the satisfaction of the institute. Anti-rodent and pest control measures will also be strictly followed and it will be the responsibility of the vendor to ensure that premises are free of these.
 15. NCI-AIIMS management has no liability for the manpower deployed by the party, their health and safety. Firm will provide uniforms, aprons and other protective gear to ensure proper protection to all workers. All workers will be immunized by the firm before employment & during the course of employment as & when needed. All personnel should be consistently & appropriately trained at frequent intervals especially for the use of, appropriate personal protective equipment (PPE). NCI-AIIMS possess no other liability other than the cost of cleaning.

The CSSD services for AIIMS-NCI shall be provided on all days (including Sundays & Holidays) during the contract period. Failure to provide service shall attract penalty.

Annexure -2
BOQ CSSD- NCI AIIMS (CAPEX Cost Calculation)

Sr. no	Area	Description	Minimum Load/Capcity/ Quantities required	
1	A. Soiled Reception	Receiving Counter	As per requirement	
2		Staff Chair		
3		Lab Stool		
4		Waste Bin		
5		Storage Cupboard		
6		Computer with UPS & Printer		
7	B. Wash & Disinfection area	Washer disinfecter minimum 12 DIN or more with accessories	03 Nos. (Load requirement - 350DIN per day + 25% Extra for expansion without adding addl. Equipment)	
8		Wire Storage shelf module for dirty/disinfection area	As per requirement	
9		Inspection Lamp with Magnifier	1 No.	
10		Ultrasonic Cleaner 40 Liters or more		
11		Wash Stations with 2 sinks for dirty area	As per requirement	
12		Spray Gun Rinser		
13		Vacuum Cleaner		
14		Hand Dryer		
15		Work Table for Wet Goods for dirty area		
16		Lab Stool		
17		Waste Bin		
18		Pass Box		
19		Table Trolley for Dirty/Clean/Sterile Area		
20	C. Packing & Sterilization area	Wire Storage shelf module for Clean supply area	03 Nos. (Load requirement - 450 STU per day + 25% Extra for expansion without adding addl. Equipment)	
21		Horizontal Sterilizer with minimum 12 STU with Accessories		
22		Table for Packing in clean area		As per requirement
23		Lab Stool		
24		Heat Sealing Machine		
25	Wire Storage shelf module for clean supply area			

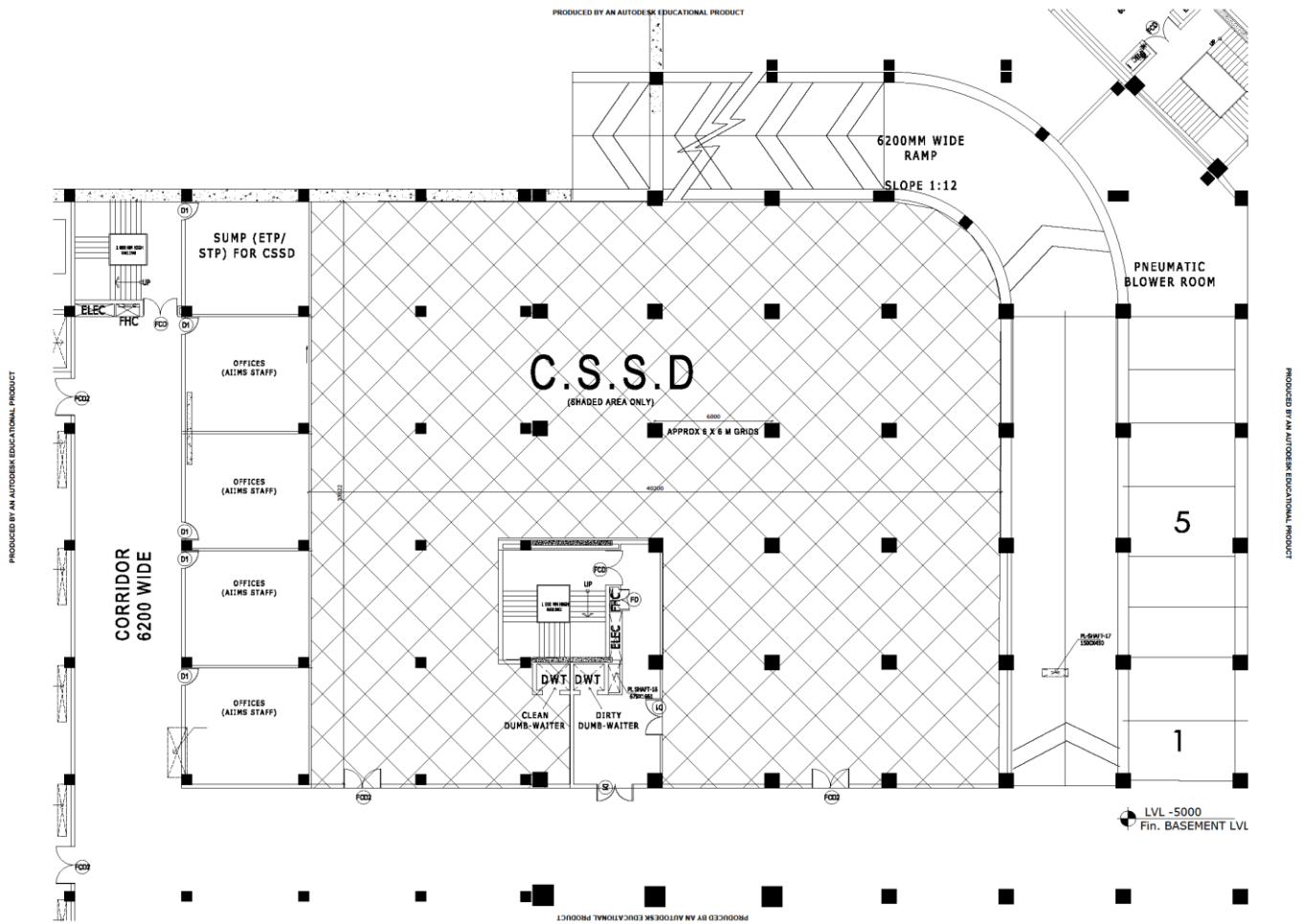
Sr. no	Area	Description	Minimum Load/Capcity/Quantities required	
26		Waste Bin		
27		Inspection Lamp with Magnifier		
28		Documentation Labeller		
29		Multi-Roll Tape Dispenser		
30		Instrument Tray Small		
31		Instrument Tray Big		
32		Table Trolley for Dirty/Clean/Sterile Area		
33		Work Table for dry Goods for Clean Area (Pass Box Receiving)		
34		Drying Cabinet		
35		Linen Fold Table for clean area		1
36		Lab Stool		As per requirement
37		Open Storage Rack		
38		Waste Bin		
39		D. Gauze Cutting Room		Gauze Cutting Machine
40	Work Table for dry Goods for clean area (Pass Box Receiving)			
41	Lab Stool			
42	E. ETO Room	ETO Steriliser 200 Liters or more	2 Nos.	
43	F. Sterile Store Area	Wire Storage shelf module for Sterile store	As per requirement	
44		Modular Sterilizing baskets Big		
45		Modular Sterilizing baskets Medium		
46		Closed Sterilization Containers 300mm x 290mm x 110mm		
47		Closed Sterilization Containers 300mm x 290mm x 140mm		
48		Closed Sterilization Containers 590mm x 280mm x 260mm		
49		Free Standing basket rack (15 Baskets) for Sterile store		
50		Basket Trolley		
51	G. Issue Counter	Issue Counter	As per requirement	
52		Staff Chair		
53		Waste Bin		
54		Pass Box		
55		Computer with UPS and Printer		
56	H. CSSD Office	Office Table with chair	As per requirement	
57		Staff Chair		
58		Visitor's Chair		
59		Storage Cupboard		
60		Waste Bin		
61		Computer with UPS and Printer		

Sr. no	Area	Description	Minimum Load/Capcity/ Quantities required
62	I. Staff Changing Room (Female)	Change Locker - 4 Compartments	As per requirement
63		Waste Bin	
64		Shoe Rack	
65	J. Staff Changing Room (Male)	Change Locker - 4 Compartments	As per requirement
66		Waste Bin	
67		Shoe Rack	
68	K. Other Requirement	Reverse Osmosis Plant 2000 LPH with 6000Ltrs storage tank and shed	As per requirement
69		Air Compressor (if required)	
70		Call Bell at the Receiving counter	
71	L. Inventory Management Store	Office Table with chairs	As per requirement
72		Lockable Almirahs	
73		Waste Bin	
74		Storage Racks	
75		Work Flow Management System	
76	Turnkey	Turnkey as per specification	Lump sum

Annexure-3

(OPEX Cost Calculation)			
Year of Operation	OPEX Rate per hospital bed per day	Annual OPEX Cost (for the purpose of Bid Ranking only) = OPEX Rate per Bed per day x 710 x 365	Offered in Price-Bid (Yes/No)
1st			
2nd			
3rd			
4th			
5th			
6th			
7th			
8th			
9th			
10th			
Total OPEX Cost for the pupose of Bid Ranking		Sum Total of Annual OPEX Cost from 1st to 10th year of operation	

Note- Bidder should submit this in the technical bid by mentioning yes/no in the last column without entering any price in the technical bid



**Item No. 3 (Rfx/ Event number 3000002577)
Laundry System**

A. TECHNICAL SPECIFICATION:	
Sl. no	Scope of Work
1	Bidder is responsible for planning, designing, supplying, installation, commissioning, maintenance and operation of laundry services for 10 years for NCI-AIIMS.
2	The bidder shall calculate the number and type of equipment required in the laundry system of NCI-AIIMS based on the following:
a.	Specifications of the key equipment of laundry services are detailed in the tender document.
b.	Load of dirty linen shall be approximately 3000 Kg per day (3-4 Kg per bed per day) when NCI-AIIMS is fully operational (710 beds).
c.	The institute is likely to be operationalized in three phases viz.
	i. Phase-I September 2018 250 beds
	ii. Phase-II December 2019 500 beds
	iii. Phase-III December 2020 710 beds
d.	The laundry services shall be designed and commissioned upfront for full capacity with scope of expansion for upto 25 percent of the estimated capacity without deployment of any additional equipment.
e.	Timings of Collection of Linen(Indicative)
	i. From OTs : Collection of linen will take place from 9-10AM, 2-3PM and 6-7 PM all days
	ii. Collection of linen from ICUs : will take place from 11 AM to 12noon all days
	iii. Collection of Linen from wards, OPD& other area: will take place from 10AM to 12AM all days
f.	Timings of Distribution of Linen(Indicative)
	i. Distribution of Linen to OTs: Distribution of Linen will take place from 8AM to 9AM all days in morning
	ii. Distribution of Linen to ICU: Distribution of Linen will take place from 9AM to 10AM all days in morning
	iii. Distribution of linen to wards, OPD& other area: Distribution of Linen will take place from 10AM to 2PM all days
3	NCI-AIIMS shall pay upfront CAPEX cost for infrastructure work, installed equipment & any laundry system accessories being supplied upfront by the bidder as per the rates quoted by them. CAPEX shall be inclusive of cost of turnkey works, equipment cost in laundry, warranty and maintenance for first 5 years, cost of any accessories, carts, non-disposable bags, etc used in collection / distribution / storage of linen, any furniture installed within the laundry, any boilers, RO system, quality control equipment etc if installed by the bidder and must be clearly quoted under the column of CAPEX in the technical and price bid.
4	Bidder has to quote unit rate for all linen mentioned in Annexure 1. This unit rate for each linen item must be inclusive of the cost of manpower, consumables, fuel, any other recurring cost incurred for the collection, sorting, washing, drying, ironing, packing, storage, distribution, quality control, routine cleaning of laundry premises including equipment etc of the complete laundry system as per SOP prescribed in tender. This unit rate shall be the basis for calculating operational cost (OPEX) of the laundry system and the OPEX shall be paid on monthly basis by multiplying the unit rate with the actual quantity of linen handled. Bidder is responsible for cleaning, repair & maintenance of infrastructure of laundry area installed and commissioned by the bidder on regular basis.
5	The CAMC price from 6th to 10th year must be quoted separately and should not be quoted under CAPEX and OPEX.

6	L1 calculation will be based on the total cost of CAPEX (Annexure 2- Page no 101-102) + Cost of CAMC from 6th to 10th year + indicative OPEX cost for 10 years as per Amended ANNEXURE 1 for Laundry . However the payment of OPEX will be made on the actual basis and CAMC on annual basis from 6th year onwards.
7	The approved vendor will carry out all the work related to linen washing including collection of dirty linen from all areas of the hospital to the laundry and distribution of clean laundry to the various areas of the hospital.
8	All linen items must be returned to respective areas on the next day of collection as per delivery schedule prescribed in SOP and the linen should be clean, undamaged, and well ironed. After collection and distribution of linen a “satisfactory” certification must be obtained in the log book from the sister in-charge of concerned areas. In case lesser number of linen is returned to the concerned area, a penalty of double the cost of lost linen would be deducted from the OPEX bills, if the lost item is untraceable after 24 hours.
9	Repair of any linen should be done (in –house) and in case of irreparable damage it should be informed to Laundry in-charge (NCI-AIIMS) along-with reasons within 24hrs and the report of the same should be submitted to the appropriate authority on monthly basis.
10	Daily record during collection of dirty linen items/distribution of cleaned / washed and ironed linen items should be maintained in the department-wise registers duly signed by the representative of contractor and department official, who is looking after the day to day transaction of such linen items.
11	Colour coded carts will be used for transport & storage of dirty & washed linen. The carts used for transport of soiled linen should be disinfected after every use & should be kept separate from those used for transport of clean linen.
12	Standard precautions must be followed while collecting & handling of infected/soiled linen.
13	Bio-Medical Waste management rules, wherever applicable will be followed by the vendor.
14	Bidder has to provide the adequate & sufficient manpower to run the Laundry Operations as per work defined in SOP.
15	Bidder has to furnish and equip all required turnkey item as defined in the specs, institute will provide shell structure of approx.6000sq feet with one point electrical, water, chilled water pipe & drain supply, rest all bidder has to do from planning, designing, supply, installation and commissioning of all equipment on turnkey basis. While designing the laundry the Bidder has to provision for future expansion of the Laundry for installation of One Washer Extractor & One Front Loading Drying Tumble of the highest capacity quoted by the bidder in the said tender. This provision should be made without disrupting the zoning of the laundry. All ancillary services like (electricity, water points, plumbing, steam/ Gas etc.) required for future expansion has to be built in while designing and furnishing the laundry.
16	Authorized personnel of bidder may collect NCI brochure including list of user areas and CAD drawings from room number 160, 1st floor, DR. BRAIRCH, AIIMS, New Delhi for better understanding of laundry areas, wards/ICUs/OTs/OPD/etc areas.
17	The design of laundry should include areas like collection, washing, drying, ironing, storage, transportation trolley storage, offices, change room, RO Plant room, Linen weighing area, Air Compressor Room (If required), Boiler Room (If required), etc as per zoning concept for dirty & clean linen. The design should be approved by the consignee.
18	The tagging is the responsibility of the bidder for all Linen as prescribed in SOP
1	Dirty Linen Collection Trolley- 3 containers minimum 40 kg capacity.
1	The dirty Linen trolley shall be having 3 containers with different colour coding bags for the collection of the linen from the wards and other areas supported on swivelling wheels.
2	Dirty Linen Transportation Trolley - spring bottom type- Capacity minimum 100 kg
1	The dirty linen trolley shall be fabricated out HDPE fibre plastic / SS/ Aluminium and should have spring bottom feature for the better movement and performance along with swivelling wheels. The trolley should be accessible to all hospitals lifts.
2	Trolley has to be colour coded to be used in clean and dirty area.
3	Dirty Linen Transportation Trolley - spring bottom type- Capacity minimum 50 kg

1	The dirty linen trolley shall be fabricated out HDPE fibre plastic/ SS/ Aluminium and should have spring bottom feature for the better movement and performance along with swivelling wheels.
2	Trolley has to be colour coded to be used in clean and dirty area. The trolley should be accessible to all hospitals lifts.
4	Receiving Counter
1	Construction: Counter Top should be made of granite top (W 1m x L 2m)
2	Should be aesthetically good
3	Should provision for placing CPU, UPS, Mouse, Keyboard etc
4	Should have at least 3 drawers.
5	Computer with printer& UPS
1	Bidder should be providing latest generation intel processor computer with printer at receiving counter and at other areas wherever required.
6	Industrial Weighing machine
a.	Capacity - 0 to 200 Kg minimum with accuracy +/- 0.1 % The weighing machine shall be heavy duty platform type with Digital display weight indication. The platform for placement of buckets/goods for weighing shall be with steel casting with adjusting lever mechanism and knob for adjustment of error in machine.
7	Office Table
	It should be modular, ergonomically design, the make of the furniture should be SS/Aluminium/ wood, and no plastic should be used.
8	Chair with hand rest
	It should be modular, ergonomically design, the make of the furniture should be SS/Aluminium/ wood, and no plastic should be used.
9	Storage Cupboard (2x2)
	It should be modular, ergonomically design, the make of the furniture should be SS/Aluminium/ wood, and no plastic should be used. Should be provided with lockable doors.
10	Almirah
	It should be modular, ergonomically design, the make of the furniture should be SS/Aluminium/ wood, and no plastic should be used. The Almirah shall have locking system.
11	Dust Bin
1	Constructed from Stainless steel.
2	Removable inner container of S.S. material.
3	Capacity minimum 10 litre.
4	Foot operated lid opening.
12	Laundry Scrub Station with 2 Sinks
	Stainless Steel Construction with taps for wash and rinse using hot and cold water. SS Scrubbing Board in between Sinks.Underneath Shelf. Size- 1600mmx500mmx900mm
13	Sluicing machine with automatic dosing- capacity minimum 30 kg (Electrically heated):-To wash the infected and soiled clothes received from the wards, ICU's and OT's.
1	Machine should be fully automatic.
2	Basket volume minimum 300 litres.
3	Washer extractor with soft mount type with loading capacity of 30 kg dry weight having G force of over 350G, Robust spring suspension with shock absorbers.
4	The machine should be electricheated with all wetted parts are SS304 stainless steel construction with capability of automatic washing, rinsing and extraction.
5	The machine needs to be single motor VFD driven with microprocessor control, Touch Screen Control, Built in vacuum Breaker, Single Motor Drive.

6	Machines should be energy efficient with low water, chemical steam and electricity consumption, minimum 5 External liquid supply connections. The machines should come with all necessary safety features.
7	The equipment should weigh the linen and adjust the amount of water and energy according to the load.
8	Equipment must be US-FDA/CE/ European CE Certified
14	Barrier Washer Extractor with automatic dosing pump, Capacity – minimum 100 kg
1	The washer should have front loading type. Unloading of the washed garments shall be done from the other side (Unloading door).
2	Unloading door shall be placed at 180 degrees angle from the loading door, soft mount type with suspended construction allowing a 300G to 350 G.
3	DELETED
4	It should have automatic inner drum positioning system in loading or unloading position.
5	The Barrier Washer ensures that wash program is performed in full before it allows unloading on the clean side. This guarantees that linen has been properly washed and disinfected before unloading it on the clean side.
6	Mutual lock of loading and unloading door, can't be opened simultaneously.
7	Both the inner and outer wash cylinders should be constructed using stainless steel 304 and inner wash cylinder should be fitted with perforated spray lifters for improved agitation and quicker soaking of wash load.
8	It should have Automatic Outer door locking and unlocking with pneumatic system for maximum safety and efficiency.
9	In case of, fast forward, error, power failure & emergency stop, the machine will only allow opening on the dirty side.
10	Safety interlock on the loading door supervises the water level and the motor drive so that the door cannot open until the water level is below the inner drum and the drum rotation has stopped.
11	It should have end of cycle audio visual alarm.
12	It should have Pneumatic suspension for less vibration.
13	It should have variable Frequency controlled motor and silent rotation speeds.
14	The out of balance shall be determined electronically and based on the out of balance, the machine shall be able to determine the maximum allowable speed for extraction 300 to 350 G.
15	The equipment should automatically weigh the linen and adjust the amount of water and energy according to the load. It should have automatic dosing.
	Control Panel- The machine shall be controlled with a micro-processor with the following minimum features:-
1	The control shall display remaining wash time, error codes and program status indication etc.
2	The display shall be of LED/LCD-type, and shall be possible to display text and symbols etc.
3	Wash Programs: The machine shall have a capacity to store program "libraries" with minimum 25 different wash programs. It shall be possible to automatically start a wash program at a certain time.
4	Software to ensure the traceability of the linen, cycle time and also helps for data logging and process validation.
5	Software that ensures that any wash program performs to its end before it allows unloading on the clean side this would ensure that no manual bypass or override of the wash program is done for the completion of the wash cycle.
6	Control panel can be lockable with password.
	Liquid Detergent supply: - The chemical/detergent supply should be through dosing pump only with minimum 5 chemical boxes. The machines shall be available for use with only liquid supplies via external dosing pumps.
	Drive system: The machine shall have a motor powered by a variable frequency drive. There shall be no gearboxes, clutches or gear reducers.

	Water and drain: The machine shall be provided with two water inlets (Cold/Hot).
	Basket Volume- 1000 Ltrs (Minimum)
	Final Extract - More than 700 RPM or more
	G-Force - 300 G to 350 G
	Electric supply - 415V, 3Ø,AC, 50hz
	DELETED
	Equipment must be US-FDA/CE/ European CE Certified.
15	Barrier washer extractor with automatic dosing pump - Capacity -50 kg or more
1	The washer should have front loading and unloading of the washed garments shall be done from the other side (Unloading door).
2	Unloading door shall be placed at at 180 degrees angle from the loading door, soft mount type with suspended construction allowing a 300-350G.
3	DELETED
4	It should have automatic inner drum positioning in loading or unloading position.
5	The Barrier Washer ensures that any wash program is performed in full before it allows unloading on the clean side. This guarantees that linen has been properly washed and disinfected before unloading it on the clean side.
6	It should have 2 doors (Loading & unloading door) and Mutual lock of loading and unloading door, can't be opened simultaneously.
7	Both the inner and outer wash cylinders should be constructed using stainless steel 304 and inner wash cylinder should be fitted with perforated spray lifters for improved agitation and quicker soaking of wash load.
8	It should have Automatic Outer door locking and unlocking with pneumatic system for maximum safety and efficiency.
9	In case of, fast forward, error, power failure & emergency stop, the machine will only allow opening on the dirty side.
10	Safety interlock on the loading door supervises the water level and the motor drive so that the door cannot open until the water level is below the inner drum and the drum rotation has stopped.
11	It should have end of cycle audio visual alarm.
12	It should have Pneumatic suspension for less vibration.
13	It should have variable Frequency controlled motor and silent rotation speeds.
14	The out of balance shall be determined electronically and based on the out of balance, the machine shall be able to determine the maximum allowable speed for extraction up to 300-350G.
	Control Panel- The machine shall be controlled with an electronic micro-processor with the following minimum features:-
1	The control shall display remaining wash time, error codes and program status indication.
2	The display shall be of LED/LCD-type, and shall be possible to display text and symbols.
3	Wash Programs: The machine shall have a capacity to store program "libraries" with up to 30 different wash programs. It shall be possible to automatically start a wash program at a certain time.
4	Software to ensure the traceability of the linen and also helps for data logging and process validation.
5	Software that ensures that any wash program performs to its end before it allows unloading on the clean side this would ensure that no manual bypass or override of the wash program is done for the completion of the wash cycle.
6	Control panel can be lockable with password.
	Liquid Detergent supply: - The chemical/detergent supply should be through dosing pump only with minimum 5 chemical boxes. The machines shall be available for use with only liquid supplies via external dosing pumps.
	Drive system: The machine shall have a motor powered by a variable frequency drive. There shall be no gearboxes, clutches or gear reducers.
	Water and drain: The machine shall be provided with two water inlets (Cold/Hot).

	Basket Volume- 500 Ltrs.(Minimum)
	Final Extract - More than 800 RPM or more
	G-Force - 350 G or more
	Electric supply - 415V, 3Ø,AC, 50hz
	DELETED
	Equipment must be CE certified.
16	Drying Tumbler front loading - Capacity minimum 50 kg
1	Heavy duty, Front Loading, Auto-timed, Auto-reversible, Dual Motor drive, Open Pocket & Front display, and axial air flow, the dryer should be with temperature control system.
2	Control –Microprocessor with adjustable parameters such as temperature, programme and cool down time and feature to control the moisture control in the dryer.
3	Software for data logging and process validation for drying.
4	Temperature Controller - Auto digital control
5	Time Controller- Auto digital control for drying and cooling
6	It should have large door opening for easy loading and unloading. Door should be made up of SS 304 with toughened glass window with interlock for safety.
7	Inner Drum–Should be made of Stainless steel 304.
8	Moisture control feature for the continuous measurement for the garments in the cycle to prevent over drying and thus saving energy and time.
9	Safety features -The tumble dryer should be equipped with overheating protection and a temperature sensor that turns off the heat if the airflow is clogged.
10	The dryer should stop in case the door is opened during operation.
11	Door Opening - 800 mm or more
12	Basket Volume- 1000Ltrs.or more
13	Suction Blower- Heavy duty Centrifugal Suction Blower and dynamically balanced
14	Lint Screen - Self cleaning lint screen, facility of cleaning should be through front door.
15	Electric supply–380-415V, 3Ø, AC, 50hz.
16	Equipment must be US-FDA/CE/ European CE Certified.
17	Drying Tumbler front loading – Capacity minimum 30 kg
1	Heavy duty, Front Loading, Auto-timed, Auto-reversible, Dual Motor drive, Open Pocket & Front display, and axial air flow, the dryer should be with temperature control system.
2	Control –Microprocessor with adjustable parameters such as temperature, programme and cool down time and feature to control the moisture control in the dryer.
3	Software for data logging and process validation for drying.
4	Temperature Controller - Auto digital control
5	Time Controller- Auto digital control for drying and cooling
6	It should have large door opening for easy loading and unloading. Door should be made up of SS 304 with toughened glass window with interlock for safety.
7	Inner Drum–Should be made of Stainless steel 304.
8	Moisture control feature for the continuous measurement for the garments in the cycle to prevent over drying and thus saving energy and time.
9	Safety features-The tumble dryer should be equipped with overheating protection and a temperature sensor that turns off the heat if the airflow is clogged.
10	The dryer should stops in case the door is opened during operation.
11	Door Opening – 800 mm Ø (Minimum)
12	Basket Volume- 500 Ltrs.(Minimum)
13	Suction Blower- Heavy duty Centrifugal Suction Blower and dynamically balanced

14	Lint Screen – Self-cleaning lint screen, facility of cleaning should be through front door.
15	Electric supply–380-415V, 3Ø, AC, 50hz.
16	Equipment must be CE certified.
18	Flatwork Ironer -with Feeder, Folder & Stacker (Roller Size- 450-480 Ø mm x 3000-3300 mm length)
1	Flatwork Ironer should be attached with automatic clamp feeder along with folder and stacker.
2	Flat work should be a roller type.
3	Flat work ironer should have single roller.
4	One station automatic feeding with electro-mechanical clamps for a smooth and efficient quality feeding.
5	It should be microprocessor controlled
6	Standard automatic ironing speed control system.
7	Standard stand-by and sleeping modes for optimum energy savings.
8	Versatile stacker for delivery of linen stacks to the front or the rear of the machine.
9	Suitable for rapid ironing of linen like Bed sheets, Pillow cover or flat sheet etc.
10	Folder should be a single lane which should be capable of folding 2 primary& 3 secondary folding of the linen.
11	Folder width should be match with size of the ironer.
12	Folder speed should be synchronized with the speed of the ironer.
13	Folder should have self-diagnostic system along with safety parameters.
14	Roller Size- 450-480 Ø mm x 3000-3300 mm length
15	Control: Electronic Control Panel with automatic speed regulation system.
16	Safety – Finger Guard Protection and Start and stop of the machine with emergency switch.
17	Belts- Should be Nomex belts.
18	Ironing Speed –should be approx. 8 to 10 metre per minute
19	Electric supply- 415V, 3Ø, AC, 50hz.
20	Equipment must be US-FDA/CE/ European CE Certified.
19	Flatwork Ironer -with Feeder, Folder & Stacker (Roller Size- 450-480 Ø mm x 1900-2000 mm length)
1	Flatwork Ironer should have automatic feeder along with folding and stacking option.
2	One station automatic feeding with electro-mechanical clamps for a smooth and efficient quality feeding.
3	It should be microprocessor controlled
4	Standard automatic ironing speed control system.
5	Standard stand-by and sleeping modes for optimum energy savings.
6	Versatile stacker for delivery of linen stacks to the front or the rear of the machine.
7	Suitable for rapid ironing of linen like Bed sheets, Pillow cover or flat sheet etc.
8	Roller Size- 450-480 Ø mm x 1900-2000 mm length
9	Control: Electronic Control Panel with automatic speed regulation system.
10	Safety – Finger Guard Protection and Start and stop of the machine with emergency switch.
11	Padding- Polyester padding
12	Ironing Speed – minimum 9 metre or more per minute
13	Electric supply- 415V, 3Ø, AC, 50hz
14	Equipment must be US-FDA/CE/ European CE Certified.
20	Utility press with Ironing Table Size -
1	Table size should be 135 cm X 38 cm X88 cm (53"X15"X35")
2	Garment Tray with Heated Surface and adjustment of surface temperature.
3	It should have built in Vacuum function in the table.
4	Rectangular shape of the Ironing table for large working area
5	Polyester foam padding for better life.

6	Integral steam boiler for better safety
7	Iron balancer equipped with the machine.
8	It should have overhead gantry to support iron hoses.
21	Heavy duty Sewing machine
1	Semi-Dry Automatic Lubrication to the Main Machine Parts.
2	Horizontal Axis Rotary Hook
3	Large Capacity Bobbin.
4	Extra Large Needle.
5	Sewing Speed RPM: 800
6	Max. Stitch Length: 5 to 12 mm
7	13mm Presser Foot Clearance
8	Maximum Stitch Length of 4mm.
9	Lock Stitch Machine.
10	Equipment must be CE certified.
22	Mobile Table with castor wheels
	Dimensions: 4feetX2 Feet. The folding table shall be specially designed for carrying rolling and folding of linen in the laundry. The frame of the table shall be fabricated out of MS welded construction with one bottom shelf for storage. Complete with heavy duty ball bearing for swiveling wheels. The table top shall be of polished Stainless steel.
23	Fresh Linen storage racks
1	Size –minimum 1200mmx460mmx1800mm
2	4 shelves; Made of Stainless Steel-AISI-304, Finished with Polishing.
3	Anticorrosion treated components, treated with seven steps of anti-corrosion process.
4	Surface free from flaws, roll marks, dents, lines etc.
24	Folding table
1	Rolling Table large size having S.S. top and under shelf. Top made of S.S. sheet. One under shelf of 18 S.S. Sheet having 4" dia. The castor wheel should have locking mechanism. Length – 100" Breadth – 50" Height – 50"
2	Should be able to use while folding and stacking of linen while in process.
25	Dispatch Counter
1	Construction: Counter Top should be made of granite top with appropriate size
2	Should be aesthetically good
3	Should be supplied with computer as per specification given for receiving counter.
4	Should provision for placing CPU, UPS, Mouse, Keyboard etc
26	Clean Linen Transportation Trolley - spring bottom type- Capacity minimum 100 kg
1	The dirty linen trolley shall be fabricated out HDPE fibre plastic / SS and should have spring bottom feature for the better movement and performance along with swivelling wheels.
2	Trolley has to be color coded to be used in clean and dirty area.
27	Clean Linen Transportation Trolley - spring bottom type- Capacity minimum 50 kg
1	The dirty linen trolley shall be fabricated out HDPE fibre plastic/ SS and should have spring bottom feature for the better movement and performance along with swivelling wheels.
2	Trolley has to be color coded to be used in clean and dirty area.
28	Reverse Osmosis/Water softener Plant 5000 LPH(If required)
1	Reverse Osmosis Plant 5000 Liters per hour capacity
2	Should have stainless steel skid mounts for pre-treatments and RO unit
3	Should have booster Pumps.
4	Should have direct bypass valve and auto flush systems.
5	Should have thin film composite membrane of equivalent.

6	Should have dry run protection of pump.
7	Should have auto flush timer.
8	Should have automatic tank level control.
9	Should have over voltage and over current protection.
10	Should have high efficiency reverse osmosis membrane.
11	Should have 10000 L purified water reservoir with bacterial vent filter to ensure microbiological integrity.
12	Should have re-circulation pump provides instantaneous delivery flow.
13	Should have comprehensive micro-processor monitoring and control system.
14	RO should of Eureka Forbes/Ion Exchange / Millipore / Kent / Aquacare / Rions make.
15	Consumable filters & other accessories of 2 each extra to be provided with first supply & unit rate should be quoted for these items for 5 years.
29	Hot Water System-Gas Manifold- (If required)
1	It should be supplied by the bidder with appropriate capacity to run laundry system without any break if laundry system runs 24x7.
2	Glass Lined Tank for water heater use.
3	Anode with low level of maintenance.
4	Low flue gas temperature for higher efficiency.
5	Additional pressure and temperature valve for safety
6	Fully automatic spark ignition & Automatic Control system
7	Sufficient number of cylinder with backup should be provided.
30	Diesel Boiler(If required)
	It should be supplied by the bidder with appropriate capacity to run laundry system without any break if laundry system runs 24x7. Sufficient backup should be provided with system.
	Note: For heating purpose, LPG/ Natural Gas / Steam (Diesel Boiler) can be used. Bidder has to provide supply of LPG/Natural gas / Boiler in case of steam heating and bear diesel & other recurring charges.
31	Air Compressor:
	It should be supplied by the bidder with appropriate capacity to run laundry system without any break if laundry system runs 24x7
32	Turnkey & Civil work
1	Bidder has to do all required turnkey as defined in the specs, institute will provide shell structure of approx. 6000 sq feet with one point electrical, water & drain supply, rest all bidder has to do from planning, designing, supply, installation and commissioning of all equipment on turnkey basis. In Addition to the above work, Bidder has to do all turnkey works (provide space & ancillary services) for future expansion of Laundry services equivalent to 50% of the total load mentioned in the tender
2	Bidders are strongly advised to visit the site and carry out the assessment of works. Total area dedicated for Laundry is approx.6000sq feet. Only those vendors who offer the entire range of state of the art equipment comprehensively as a package deal will be considered. Laundry has to be designed, built, operate and maintain by the supplier for 10 years.
3	Bidder has to submit the layout design proposed with material used for construction/civil works to NCI –AIIMS for approval, Bidder can start the execution of civil works after getting approval from NCI-AIIMS.
4	Civil works includes construction of brick wall, plastering, painting, etc required as per the approved lay out plan, laying of tiles on walls & floors, provision of doors & windows as per approved lay out plan. Levelling of floor (if required) before lying of suitable anti-slippery floor and strengthening of floor should be bidder's responsibility (if required).
5	Bidder has to construct toilets, rest room, change room(Male & Female),eye-shower and shower facilities for their workers.
6	Room for RO/softener water plant with proper exhaust has to be carried out by the bidder.
7	Room/space for AirCompressor (if required) for smooth operation should be provided by the vendor.
8	SS wall panelling has to be done on both sides of barrier washers, SS 304 should be of minimum 0.8mm

	thick with suitable insulation.
9	Any other necessary work not mentioned in BOQ/technical specifications/turnkey but required for successful completion of Installation, Commissioning, maintenance & operation of Laundry should be carried out by the bidder.
10	Bidder has to install CCTV cameras covering all major areas with recording of 30 days for the proper monitoring of workflow with the connection in the manager room. It should be integrated with Hospital security system.
	Electrical works
1	All electrical work required for commissioning and installation of equipment like cable wire, electrical outlets, switches, cable trenches, trays, railings, etc. should be fire proof, of reputed make, certified for electrical safety. All remaining work has to be done by the bidder including Electrical Isolators, MCBs, Electrical boards, Switches, Sockets and any other thing which are required for smooth running of Laundry Equipment.
2	Bidder has to supply suitable electrical control panel for all laundry system.
3	Institute will provide one point electrical supply at laundry and further distribution within the laundry will be responsibility of bidder as per approved layout. Bidder has to specify their electrical consumption with bid.
	Ventilation & Lighting
1	Provision of 2ftx2ft LED lights to provide illumination of 500 lux in all areas. LED lights to be flush mounted to the false ceiling.
2	Toughened glass sealed windows with curtains to be provided to allow natural sun light wherever possible.
3	Exhaust air fans to be provided wherever required to maintain the positive and negative pressures as per SOP/tendered specs.
4	Suitable tonnage of Air conditioning in office room to be provided for maintaining a temperature of 20 deg. C +/-2 deg. C .
	Plumbing Works
1	Institute will provide one point water& drain supply and further distribution will be responsibility of bidder as per approved layout.
2	All plumbing work associated with proper functioning of Equipment has to be carried out by the vendor. Drains are special open drains with removable covers having large discharge capacity for spontaneous discharge of water. Proper Lint Trap and Hair trap should be in the drain line.
3	Safe disposal of solid & liquid waste generated during the process of the work will be the responsibility of the contractor.
4	Any other plumbing works associated with proper functioning of Laundry has to be carried out by the vendor.
	Fire Fighting
1	Fire safety: Fire safety equipment will be installed as per the norms and requirements of the fire department and keeping in mind the norms and specifications of the different zoning areas of the Laundry.
a.	Fire detection and alarm system with conventional optical type smoke detectors, RIs/ MCP, fire control panel and its wiring with copper conductor FRLS wire shall be provided as per CPWD specifications.
i.	Make of smoke detectors as approved will be Apollo/ Edward/ Seimens/ Honeywell.
ii.	Make of RI, Hooters, MCP, Fire control panel will be of Agni/ Safex/ Minimax.
a.	Fire fighting system will be installed comprising of Hose reels, fire hydrants, landing valve, hose pipes, branch pipe, nozzles, valves as per CPWD specifications. The hosing and internal pipeline needs to be laid down by the vendor. However the water connection will be provided by the institute.
b.	Automatic sprinkler system with adequate size of pressurization pump with pressure gauge, flow switch, annunciation panel etc shall be installed by the vendor, as per CPWD specifications.
c.	Vendor will provide adequate fire extinguishers of required type. (According to Fire safety rules).
33	General Terms and conditions

1	Any person who is in Govt. Service anywhere or an employee of the institute should not be made a partner to the contract by the bidder directly or indirectly in any manner whatsoever.
2	If any information furnished by bidder is found to be incorrect at any time, the contract is liable to be terminated without any notice and the security deposit is liable to be forfeited by the institute.
3	The bidder shall comply with the labour laws applicable and Institute shall not be responsible for any litigation/default from agency side.
4	The firm will verify the antecedents of all employees working, by police verification and will keep attendance and other relevant records at it's cost and will produce these on demand of any authority. The list containing the names/addresses of the personnel appointed by the agency shall be made available to the Institute Authorities with their bio-data within 10 days from the date of deputing.
5	In case any person engaged by the contractor is found to be inefficient, quarrelsome, infirm, and invalid or found indulging in unlawful or union activities, the Contractor will have to replace such person with a suitable substitute at the direction of the competent authority.
6	The institute shall not provide any sort of accommodation to the staff or person deployed by the contractor and no cooking/lodging will be allowed in the premises of the institute at any time.
7	Institute will decide the timing of collection of linen, to be followed by the vendor (Delivered within 24 hrs of collection).
8	If any situation arise out in violation of any terms and conditions of the contract executed between the parties to terminate or cancel or at the time of expiry of the contract, the vendor will be held responsible to preserve the laundry equipment intact and handover the same in functional status. Otherwise vendor shall be liable to pay the damages occurred due to any lapse on his part and the amount of the damages of equipment will be deducted from the amount of security deposited.
9	The contractor shall not, at any stage, cause or permit any sort of nuisance in the premises of institute or do anything which may cause unnecessary disturbance or inconvenience to others working there as well as to the general public in the institute premises and near to it.
	Manpower Requirement
1	The vendor will depute adequate manpower to meet the SOP & load requirement as defined in the tender.
2	Workers with adequate knowledge and experience of working in laundry to be employed. Due certification/verification of employees with health check-up is mandatory.
3	Medical examination of staff:-The bidder shall employ only those persons in the laundry who are found to be medically fit. Hospital reserves its rights to examine any of the employees for medical fitness without prior notice. Expenses, if any incurred by the NCI-AIIMS on medical examination of such employees, shall be borne and paid by the bidder.
4	Wages and insurance:-The vendor shall comply with the laws applicable to employees working in the laundry regarding working hours, minimum wages, safety, cleanliness, leave, over time allowances, provident fund, retrenchment benefit, and medical benefit like ESI etc.
5	It shall be the responsibility of the vendor to employ adequate number of cleaners and sweepers and provide them with adequate and necessary equipment/ materials for keeping the laundry scrupulously clean and in a sanitary condition to the satisfaction of the institute. Anti-rodent and pest control measures will also be strictly followed and it will be the responsibility of the vendor to ensure that premises are free of these.
6	NCI-AIIMS management has no liability for the manpower deployed by the party, their health and safety. Firm will provide uniforms, aprons and other protective gear to ensure proper protection to all workers. All workers will be immunized by the firm before employment & during the course of employment as & when needed. All personnel involved in collection, transport, sorting, and washing of soiled textiles should be consistently & appropriately trained at frequent intervals especially for the use of, appropriate personal protective equipment (PPE). NCI-AIIMS possess no other liability other than the cost of cleaning.
7	The laundry services for AIIMS-NCI shall be provided on all days (including Sundays & Holidays) during the contract period. Failure to provide service shall attract penalty.
	Washing Chemicals/Detergents/Etc

	The vendor shall be responsible for procurement of all the detergents/washing chemicals etc. The institute authorities can make surprise check to verify that the items used are as per approved formula and right quantity of these are being used. All the Washing Chemicals/Detergents/etc has to be in liquid form.
	Supervision and Quality control
1	NCI-AIIMS, management shall have the right to terminate the contract of the services rendered by the vendor, which are not of the requisite standard.
2	Management shall demand and be supplied with a sample of any washing chemical or detergent for inspection and analysis & if required to be sent for testing by the approved laboratory.
3	NCI-AIIMS, authorities will have unfettered right to inspect the premise, process of laundry, finished product at any time and the vendor shall cooperate with the authorities.
	Security and safety
1	NCI-AIIMS, shall not be held responsible for any loss or damage due to any reasons whatsoever to any type of inventory that may be kept in the said Laundry store by the vendor. The premises provided to the vendor should only be used for the purpose as mentioned in the contract (i.e. Laundry services for NCI-AIIMS, only). Under no circumstances, the premises are to be used for any other purpose, than what has been mentioned in the contract. The general safety & ensuring fire safety of the premises is the responsibility of the contractor.
2	Bidder has to install CCTV cameras covering all major areas with recording of 30 days for the proper monitoring of workflow with the connection in the manager room. It should be integrated with Hospital security system.
	Payment
1	Payment will be made for OPEX on monthly basis by NCI-AIIMS
	Penalty
1	During the Warranty period, desired Uptime of 95% of 365/366 (Leap Year) days (24 hrs), if downtime more than 5%, the warranty period/CAMC period will be extended by double the downtime period.
2	Vendor has to meet and follow SOP for laundry laid by the institute (including infrastructure, equipment, manpower & Quality control and assurance for the maintenance and operations of laundry services etc.) and not following the standards will lead to a penalty of Rs500per instance.
3	The laundry area may be inspected periodically by the Hospital management and on satisfactory report, bills will be processed for payment.
4	Any complaint has to redressed within 24 hours
5	In case lesser number of linen is returned to the concerned area, a penalty of double the cost of lost linen would be deducted from the OPEX bills.
34	Standard Operating Procedure(SOP) for Laundry
1	The laundry facility at NCI- AIIMS should be designed for efficiency in providing hygienically clean linen.
2	A laundry facility is to be partitioned into two separate areas - a "dirty" area for receiving and handling the soiled laundry and a "clean" area for processing the washed items. Ideally, soiled and cleaned linen areas should be separated by a physical barrier. The partition (barrier wall) made of a non-porous material, should be from floor to ceiling, preventing air/dust contaminating the clean area.
3	The layout design to be approved by the consignee.
4	A transit zone should be provided between dirty and clean areas of the laundry, where hand washing/drying and change of outer garment/PPE is carried out. A wash area should be placed in between the clean and dirty areas, where staff can wash/sanitize before proceeding to the clean area.
5	To minimize the potential for recontaminating cleaned laundry with aerosolized contaminated lint, areas receiving contaminated linen ideally should be at negative air pressure relative to the clean areas (airflow should be from clean to dirty areas at all times).
6	Laundry at NCI-AIIMS will run minimum from 8AM to 8PM on all days (365days)and in case of emergency/disaster24x7.
7	Bidder has to maintain all equipment as per standard for 10yrs with all required consumables &

	calibration.
	Inventory management in laundry
1)	Inventory management of linen which are to be processed in laundry will be done in laundry premises, NCI-AIIMS.
2)	Linen items will be issued to the in-charges of various areas/ wards from laundry, after tagging.
3)	Proper records inclusive of number of linen, type of linen, name & ID of the person indenting the linen and name & ID of the person receiving the linen will be maintained.
4)	Indenting of inventory will be done by authorized personal of NCI-AIIMS.
5)	All the linen sent to laundry will be checked by bidder for any defects (torn, stained etc.) and if any defect is found then it will be replaced by the bidder from the inventory and the same will be updated in records. If any defect is found by the in-charge from the user area the defective piece will be sent back to the laundry and the record of the same to be maintained
6)	Linen which will be discarded will be marked condemned/Not for use and handover to NCI-AIIMS.
A	Collection of dirty linen from various areas of the hospital
1	Contaminated linen should be handled with minimal agitation to avoid contamination of air, surfaces and persons.
2	Linen which is heavily soiled with blood or other body fluids, or other fluids which could leak and further contaminate other linen, shall be contained within suitable color-coded impermeable, water-tight bags which should be labelled and securely closed.
3	The linen shall be free from foreign materials such as sharp objects (e.g. hospital sharps and glass) metal objects, food remnants and paper products (including tape and plaster). Linen should be visually inspected at all levels (wards, OT, ICUs, etc) to ensure that it is free from these foreign materials.
4	Linen not contaminated with blood or other body fluids may be segregated, placed into appropriate laundry bags/containers and securely closed.
5	Trolleys used for collection of dirty linen should be covered all times.
6	Colour of the trolley for collection of linen should be different from the ones used for distribution of clean linen.
7	Personnel handling dirty should wear gloves, gowns and masks.
8	Proper, legible & clear records to be maintained at the time of receiving linen from various areas. Records should be inclusive of (Number of linen received, types of linen received, Condition of the linen received, Name of the person delivering the linen, Name of the person receiving the line) Damaged, torn linen received from any of the areas should be immediately communicated to the in-charge of the respective area.
9	Details of the personnel giving and receiving linen must be recorded in a log book along with their signatures, ID number and full name.
10	Linen received from various areas should not be mixed and items must be returned back in the same manner
	Timings of Collection of Linen
	i. From OTs : Collection of linen will take place from 9-10AM, 2-3PM and 6-7pm all days
	ii. Collection of linen from ICUs : will take place from 11 to 12noon all days
	iii. Collection of Linen from wards, OPD& other area: will take place from 10AM to 12noon all days
	Collection of Linen
1	Soiled and clean linen should be transported in different coloured trolleys, bins, bags or other transport means, including vans or other motor vehicles.
2	Bags/containers containing soiled linen should be handled carefully to avoid damage and the release of possible contaminated aerosols into the air.
	Unloading and storage of soiled linen at laundry premises
	It shall be ensured all times that dirty linen when unloaded for wash shall be stored in an area separated by a barrier wall, and should not come in contact with clean linen.
B	Sorting of dirty linen

1	Sorting of dirty linen for washing is one of the most important operations in the linen process.
2	Sorting shall be according to soil quantity (e.g. light, heavy, foul), time taken to process (i.e. whether large or small item), nature of process (e.g. dry folded, flatwork, starched, unstarched), fibre type, fabric structure, garment structure, color, color fastness of dyes, soil type
3	Proper, legible & clear records to be maintained of the type of linen and number of linen received at the receiving counter of the laundry.
C	Linen Processing:
	Decontamination, Disinfection and Washing Requirements
1	The minimum requirements for washing and disinfection are:
	a) Alkali – for soil removal and suspension
	b) Liquid surfactant or detergent – for removal of soil and prevents re-soilage
	c) Chlorine bleach/peroxide bleach – for disinfection and whitening
	d) Neutralizer – for souring/neutralizing after bleaching
	e) Fabric softener if applicable.
2	The recommended wash cycle is as follows:
a.	Pre-wash
	i. Wetting (flushing)
	ii. Pre-wash 1 (alkali)
	iii. Prewash 2 (rinsing)
b.	Main wash (using detergent or surfactant) with minimum temperature and wash time
c.	Rinsing cycle:
	i. Rinse 1 (with bleach)
	ii. Rinse 2 (water)
	iii. Rinse 3 (neutralizer and/or fabric softener)
d.	Water Extraction
e.	Separation
f.	Drying
g.	Tumble drying is preferred over other methods.
h.	Ironing
3	Thermal disinfection
a.	Soiled linen that is to be thermally disinfected shall be washed so that the temperature of the load is maintained at a minimum of 65°C for not less than 10 minutes, or at a minimum of 71°C for not less than 3 minutes. It is known that 60°C for 30 minutes kills HIV, 70°C for 10 minutes kills vegetative microorganisms and 98°C for 2 minutes kills the Hepatitis B virus.
b.	If the thermal stability of the soiled linen is such that temperatures above 71°C are permissible, the time for disinfection may be appropriately reduced.
c.	The loads used in the machines should be as specified by the manufacturers' recommendations. The proper function of the machines such as the time and temperature of cycles should be checked regularly with calibrated instruments. Any sensing elements should be placed so that they measure the actual wash temperature (i.e., the temperature of the water in contact with the load).
d.	As it will take time for heat to penetrate the load, an allowance for mixing time and load level shall be made to ensure that the load is maintained at the correct temperature for the minimum time period. For low loading 4 minutes shall be allowed, and for high loading 8 minutes. The minimum time/temperature combinations are therefore—
	i. 65°C maintained for not less than 10 minutes; minimum cycle time 14 minutes for low loading or 18 minutes for high loading; or
	ii. 71°C maintained for not less than 3 minutes; minimum cycle time 7 minutes for low loading or 11 minutes for high loading.
e.	Steam or Gas may be used as heating elements.
4	Chemical disinfection

a.	Soiled linen that is heat sensitive and cannot be thermally disinfected shall be washed using a wash cycle and appropriate chemicals registered with the Food and Drug Administration.
b.	No chemical listed as prohibited or banned by the national regulations from environment point of view shall be used.
D	Storage and delivery of clean linen
	Cleaned linen should be stored in a clean, dry place in a manner that—
i.	Is distinctly separated from soiled linen;
ii.	Prevents contamination (e.g. by aerosols, dust, moisture and vermin); and
iii.	Allows stock rotation, so that the oldest stock may be used first.
iv.	Laundered linen should be stored on non-porous, clean shelves. It is highly recommended that healthcare facilities shall maintain at least 5 par stock level in all user areas
E	Packing and delivery
	Depending on the size of the delivery and the nature of the items to be delivered, cleaned linen which is to be returned to the client should be packed (either loose or tied in bundles) into
i.	Clean trolleys, bins, baskets and covered to prevent soilage, or
ii.	Clean bags and securely fastened.
	Timings of Distribution of Linen (Indicative)
i.	Distribution of Linen to OTs: Distribution of Linen will take place from 8AM to 9AM all days in morning
ii.	Distribution of Linen to ICU: Distribution of Linen will take place from 9AM to 10AM all days in morning
iii.	Distribution of linen to wards, OPD& other area: Distribution of Linen will take place from 10AM to 2PM all days
F	Quality Control
1	As a matter of good laundry practice, the laundry shall have ongoing Quality Control programs that record and monitor all key laundry processes. The programs shall include clear procedures for—
a.	achieving and maintaining effective washing, disinfection, drying, finishing as well as appropriate product life;
b.	preventative maintenance systems that ensure correct and safe operation of all plant and equipment including appropriate calibration of all key equipment such as water level controls, temperature controls and other process timer controls that ensures compliance and process stability.
2	Microbiologic Sampling of Linen: Will be done once in six months.
3	Laundry Premises should be clean and Hygienic always 24*7
4	Transport Trolley and all other trolley (Both for dirty and Clean Linen) should be maintained in cleaned and hygienic on daily basis. Transport trolley for both clean and dirty linen should be of different colour .
5	Washed linen to be checked for following parameters:
a)	Whiteness: Reflectiveness value: minimum 85 % No yellowing or greying
b)	Stains: Upto 3 cm stain in 5% of washed linen. No stain >3cm will be acceptable in any cloth
c)	Odour: No Odour
d)	No Discoloration
e)	No Moist linen
f)	No cut/ holes > 1 cm allowed in any linen
g)	No holes allowed in linen of OT & ICUs
h)	Tears/Torn linen : No torn linen will be acceptable For checking the above parameters the linen will be randomly inspected and if more than 2% of the inspected linen has above defects the penalty will be liable at each instance.
6	Other parameters for Quality Checks to be checked

a)	Checking the pH (Range should be within 6.5 to 8.2) of wet linen at the end of the process: Clear, legible, orderly record to be maintained and to be produced when asked.
b)	Checking the hardness (Calcium& Magnesium) of water being used to wash the linen (Limit 50- 100 PPM) : checks to be done at the input point , during the process & output point. Clear , legible, orderly record to be maintained and to be produced when asked
c)	Clear , legible, orderly records of linen being sent for the rewash, repair, discarded to be maintained and to be produced when asked
d)	All the chemicals, detergents, alkali, neutralizers, softeners, etc should be of OEM approved brands.
e)	Proper record to be maintained of any repair, replacement of any item of any machine, equipment etc
f)	No dirty linen should be left in laundry before the closing of the same. For checking the above parameters the linen will be randomly inspected and if the inspected linen has above defects the penalty will be liable at each instance.
G	Recommended Personal Protective Equipment in the Workplace:
1	Personnel assigned to area/s where used or infected linen is processed should use Personal Protective Equipment
2	PPE worn in the dirty area should not be worn in the clean area.
3	In area/s where clean linen is sorted, pressed, folded, and packed, personnel should wear cap or hairnet, mask and gloves. Clean protective cotton gloves may be used when handling flatwork ironer and automatic folder.
	I Personnel
	Training and Education
1	The laundry manager shall have appropriate knowledge of the potential infectious hazards of soiled linen; regular information and education should be given to laundry staff about potential infectious hazards and techniques to prevent the spread of micro-organisms in the environment to finished linen and to themselves, as well as safe and appropriate handling procedures for soiled and clean linen. An orientation/training module designed for the laundry staff is to be implemented in the facility as part of infection control training.
2	The key staff members are fully trained in appropriate laundry skills and technology; those skills should be maintained by ongoing training and supervision; only appropriately trained personnel handle and store chemicals.
3	Instruction to staff in personal hygiene, particularly the need for hand washing after handling soiled linen or removal of protective clothing.
4	Medical evaluations of staff is mandatory before placement to ensure that personnel are not placed in jobs that would pose undue risk of infection to them, other personnel, patients, or visitors. All personnel must have a medical record kept upon employment. The record should contain the following, among other pertinent data:
	a. Presence or absence of symptoms attributable to, and past history of tuberculosis, viral hepatitis, mumps, measles, rubella, varicella, sexually-transmitted infections.
	b. Presence or absence of an immuno-compromised state
	c. Immunization history.
	d. Complete physical examination.
5	Periodic evaluations may be done as indicated for job reassignment, for ongoing programs or for evaluation of work-related problems.
6	The staff need to report all infections such as gastroenteritis, dermatitis, pustules, skin lesions and boils and seek immediate medical attention.
7	Occupational exposures including needle stick injuries should be immediately reported to the supervisor and/or to the Infection Control officer of the facility. A sharps container should be available in the sorting and wash area.
8	Immunization requirements for linen and laundry personnel should be undertaken
	<u>It will be the responsibility of the bidder to abide by the SOP laid down for laundry by the NCI and to adopt to changes in SOPs from time to time. To monitor compliance to the SOP spot checks will be</u>

	<u>undertaken by NCI personnel.</u>
	Note: The proofs of the quality certifications for each equipment as mentioned in the tender specifications are to be submitted along with Technical Bid.
	Added Para: NCI-AIIMS will provide dual metered electricity supply (1 from DG & 1 from grid supply) for Laundry. Electricity charges at prevailing institutional electrical supply rates in the State of Haryana shall be deducted from the OPEX bill as per actuals for that period. It shall be the responsibility of the bidder to record the electricity meter readings for the billing period. NCI-AIIMS reserves the rights to verify the same if required.
	Added Para: All machinery/equipment paid for by NCI-AIIMS under CAPEX shall be the property of NCI-AIIMS from the the date of issue of LC/CRC.
	Added Para: The ANNEXURE 2 (page 101-102) is an indicative BOQ given for various areas of the Laundry. The bidder may add or delete any of the items in ANNEXURE 2 as per requirement unless minimum number of the item has been specified therein.

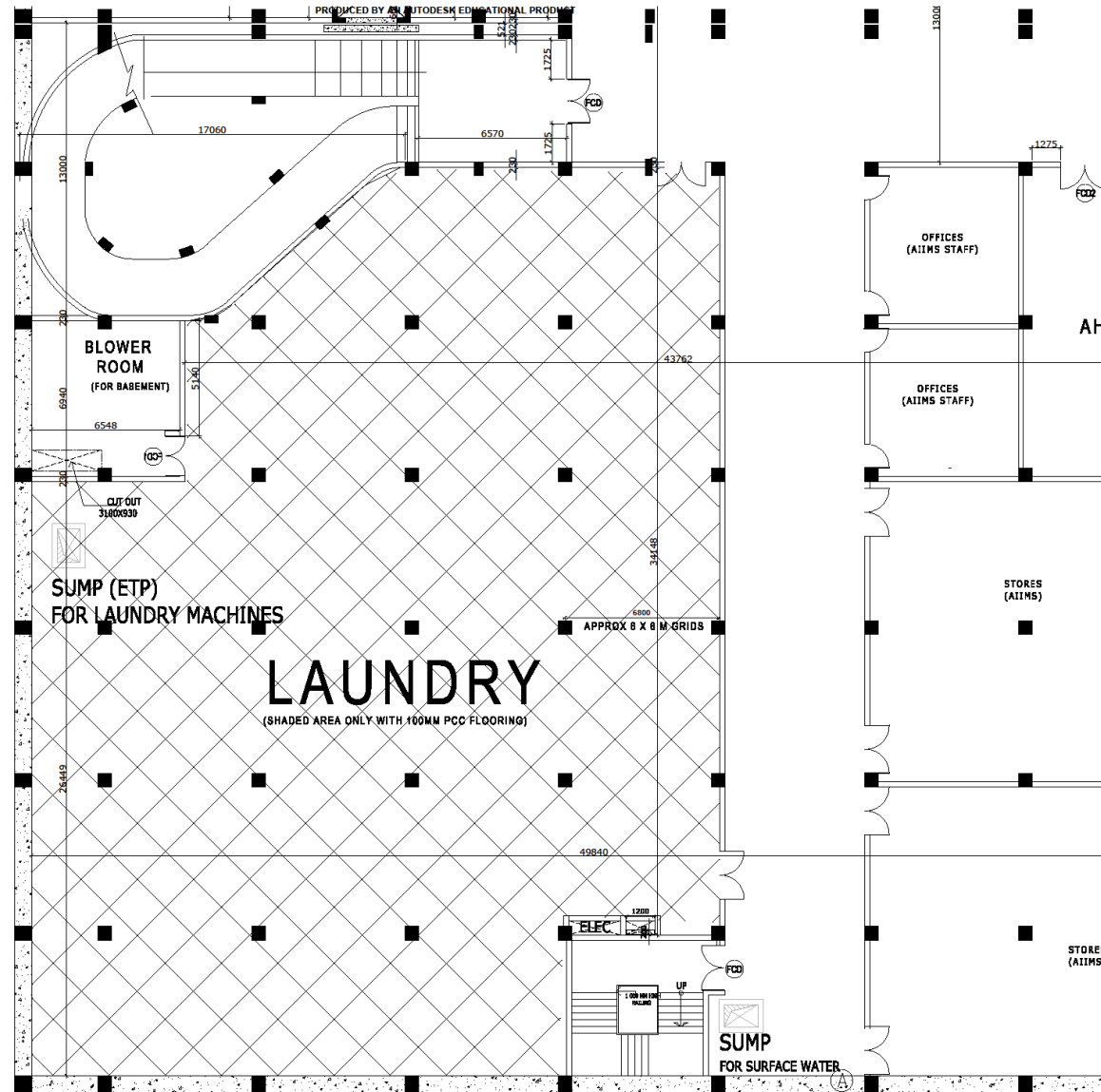
Annexure 1 for Laundry															
Sr. no	Name of Linen items	Indicative annual laundry load (in pieces) when NCI is fully operational (a)	Unit Rate per piece of linen for the respective year of operation										Total Cost for all 10 years (b)	Laundry cost of each linen item for 10 years 'c' = grand total of 'a x b' for each year of operation [for bid ranking purpose only]	Offered in price bid (Yes/No)
			1st year	2nd Year	3rd year	4th Year	5th Year	6th year	7th Year	8th Year	9th Year	10th Year			
1	Bed sheet	400000													
2	Draw Sheets	120000													
3	Patient coat	100000													
4	Patient Payjama	80000													
5	Women skirt	8000													
6	Women jacket	400													
7	Pillow cover	80000													
8	Turkish Towel	4000													
9	Hand Towel	4000													
10	O.T Towel	400000													
11	D.L Wrapper	120000													
12	screen cover	16													
13	O.T Gown	120000													
14	Curtain	2000													
15	Surgical Shirt	80000													
16	Surgical Pajama	80000													

17	Surgical Frock	40000															
18	Perineal Sheets	8000															
19	Abdominal Sheets	10000															
20	Face Towels	1000															
21	Coach cover	400															
22	Trolley cover	40000															
23	Ch. Coat	8000															
24	Ch. Payjama	2000															
25	Baby Frock	12000															
26	Baby Sheets	24000															
27	Door Panel	120															
28	Legging	8000															
29	D.L Bag	120															
30	Binder	40															
31	Floor Mop	200															
32	Blanket Cover	50000															
Indicative OPEX cost for 10 years for the purpose of bid ranking only 'd'														d = grand total of 'c' for Sr No. (1 - 32)			
Note: 1. It is mandatory for the bidders to quote unit rates for all 32 linen items for all the 10 years of operations																	
2. Bidder should submit this in the technical bid by mentioning yes/no in the last column without entering any price in the technical bid																	

Annexure 2				
Sr. no	Area	Description	Minimum Load/Capacity/Quantities required	
1	Collection	Dirty linen collection trolley- 3 containers minimum 40 Kg capacity.	60	
2		Dirty linen transportation Trolley - spring bottom type capacity minimum 100 Kg	As per requirement	
3		Dirty linen transportation trolley- Spring bottom type capacity minimum 50 Kg	As per requirement	
4	Washing	Receiving counter	As per requirement	
5		Computer with Printer	As per requirement	
6		Industrial Weighing machine	As per requirement	
7		Office Table	As per requirement	
8		Chair with Hand rest	As per requirement	
9		Washer with minimum Load 3000 Kg/ Day + 25% extra for expansion without adding addl. Equipment	Storage Cupboard (2x2)	As per requirement
10			Almirah	As per requirement
11			Dust Bin	As per requirement
12			laundry scrub station with 2 sink	1
13			Sluicing Machine with automatic dosing- capacity minimum 30 Kg	1
14			Barrier Washer Extractor with automatic dosing pump capacity minimum 100 Kg	2
15		Barrier Washer Extractor with automatic dosing pump capacity minimum 50 Kg	2	
16	Drying with minimum Load 1500 Kg/ Day + 25% extra for expansion without adding addl. Equipment	Drying Tumbler Front Loading capacity minimum 50 Kg	2	
17		Drying Tumbler Front Loading capacity minimum 30 Kg	2	
18	Ironer with minimum Load 1500 Kg/ Day +25% extra for expansion without adding addl. Equipment	Flatwork Ironer with feeder, folder & Stacker (3000-3300mm L)	1	
19		Flatwork Ironer with feeder, folder & Stacker (1900-2000 mm L)	1	
22		Utility Press with Ironing table	As per requirement	
24		Heavy Duty Sewing machine	As per requirement	
25	Storage Room	Mobile Table with castor wheels	As per requirement	

26		fresh linen storage racks	As per requirement
27		Folding table	As per requirement
28	Delivery	Dispatch Counter with PC	As per requirement
29		Clean linen transportation Trolley - spring bottom type capacity minimum 100 Kg	As per requirement
30		Clean linen transportation trolley- Spring bottom type capacity minimum 50 Kg	As per requirement
31	Additional Items	Reverse Osmosis/ water softner Plant 5000 LPH	As per requirement
		(If required)	As per requirement
32		Hot water System - Gas Geyser (If Required)	As per requirement
33		Diesel Boiler (If Required)	As per requirement
34		Air compressor (If required)	As per requirement
35		Turn Key as per specs for 6000 sq feet	As per requirement

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B. GENERAL POINTS:**1. Warranty:**

- a) The bidders must quote for Five years Comprehensive Warranty as per Conditions of Contract of the bidding document for complete equipment (Including all spares, labour and third party items) and Turnkey Work (if required) from the date of satisfactory installation, commissioning, trial run, handing over and acceptance of the goods by the User Department.
- b) The warranty charges shall not be quoted separately.
- c) All software updates should be provided free of cost during Comprehensive Warranty period.
- d) During the Warranty period, desired Uptime of 95% of 365/366 (Leap Year) days (24 hrs), if downtime more than 5%, the warranty period/CAMC period will be extended by double the downtime period. Complaints should be attended properly, maximum within 8 hrs.

2. After Sales Service:

After sales service centre should be available at the city of Institution on 24 (hrs) X 7 (days) X 365 (days) basis. Complaints should be attended properly, maximum within 8 hrs. The service should be provided directly by Bidder/Indian Agent. Undertaking by the Principals in the "Manufacturer Authorisation Form" that the spares for the equipment shall be available for at least 10 years from the date of supply of equipment.

3. Training:

On Site training to Doctors/ Technicians/ staff is to be provided by Principal/Indian Agents (if they have the requisite know-how) for operation and maintenance of the equipment to the satisfaction of the User Department.

4. Comprehensive Annual Maintenance Contract (CAMC) of subject equipment:

- a) The cost of Comprehensive Annual Maintenance Contract (CAMC) which shall include preventive maintenance including testing & calibration as per technical/service/operational manual of the manufacturer, labour and all spares, after satisfactory completion of Warranty period may be quoted for next five years on yearly basis for complete equipment including third party items as per Price Schedule.
- b) The cost of CAMC may be quoted along with GST applicable on the date of Bid Opening.
- c) Cost of CAMC will be added for Ranking/Evaluation purpose on NPB basis.
- d) Before commencement of CAMC period, the suppliers shall furnish a Performance Bank Guarantee for 2.5% of the cost of the equipment (as per Performa given in bidding document) valid till 3 months extra after expiry of entire CAMC period. The Performance Bank Guarantee for CAMC will be applicable in case of equipment cost is more than Rs.10 lakh.
- e) All software updates should be provided free of cost during CAMC. In case of failure by the supplier, the Bank Guarantee of CAMC will be forfeited.
- f) The payment of CAMC will be made on half yearly basis after satisfactory completion of said period duly certified by end User.

- g) During the CAMC period, desired Uptime of 95% of 365/366 (Leap Year) days (24 hrs), if downtime more than 5%, the warranty period/CAMC period will be extended by double the downtime period. Complaints should be attended properly, maximum within 8 hrs.

5. Uptime & Downtime Penalty Clause:

- a) The firm should provide uptime guarantee of 95% during warranty period and CAMC period.
- b) During the Warranty period and CAMC period, desired Uptime of 95% of 365/366 (Leap Year) days (24 hrs), if downtime more than 5%, the warranty period/CAMC period will be extended by double the downtime period. Complaints should be attended properly, maximum within 8 hrs.

6. Turnkey Work:

Turnkey Work is to be indicated in the Technical Specification wherever required. The Bidder shall examine the existing site where the equipment is to be installed, in consultation with User Department. The Bidders are required to quote separately for the equipment and Turnkey Work as per Price Schedule. The Turnkey Work costs may be quoted in Indian Rupee and the same will be added for Ranking Purpose.

The Turnkey Work should completely comply with AERB requirement, wherever required.

SECTION - VIII
QUALIFICATION CRITERIA

For Item at Sl. No. 1 (Rfx/Event number 3000002575) (i.e. Paperless Critical Care and Anaesthesia Solution)

1. The bidders should be a manufacturer or its authorised agent.
2. All the items, namely, Patient Monitor, Central Nursing Station, Anaesthesia Work Station, Ventilator and Electronic Charting System as per tender specifications should be of the same make/manufacturer.

In case the manufacturer does not quote directly, they may authorise their agent for all the items mentioned above as per proforma of “Manufacturer Authorization Form” as given in the bidding document to quote and enter into a contractual obligation.

3. Eligible bidder(s) should have successfully completed at least 1 (one) similar project anywhere globally for integration of Charting System with minimum 50% of the major BOQ line items, during the past 5 (Five) years prior to due date for closing of the bids.
4. In support of 3, the Bidder shall furnish Performance statement in the enclosed Proforma ‘A’. The Bidder shall also furnish copy(ies) of order(s) along with Satisfactory Performance/ Completion Certificate(s) in English/Hindi, in respect of above,. In case the certificate(s) is/are written in any other language, the same should be translated in English and submitted alongwith the technical bid duly signed.

For Item at Sl. No. 2 (Rfx/Event number 3000002576) (i.e. CSSD System)

1. **Status:** The bidder must be a reputed manufacturer of the Steam Sterilizer (as per specifications in tender document) or its authorized distributor (Sub-authorization is not acceptable for the supply of equipment). The firm should have National /International recognition in execution of CSSD works of international standards and sustained history of credible performance. The firm manufacturing the sterilization equipment should have ISO 9001:2000 or above Certification.

2. **Minimum Work of Similar Nature:**

Eligible bidder(s) should have in the past 7 (seven) years prior to closing of bid submission, successfully executed CSSD orders at Govt. hospitals/institutes of national importance or at any other reputed hospitals/institutes globally as stated below:

a. One order of CSSD on SITC basis, each for a minimum value of 80% of the estimated CAPEX cost of Rs. 6 cr.

or

b. Two orders of CSSD on SITC basis, each for a minimum value of 50% of the estimated CAPEX cost of Rs. 6 cr.

or

c. Three orders of CSSD on SITC basis, each for a minimum value of 40% of the estimated CAPEX cost of Rs. 6 cr.

Note:

(i) The copies of order(s) along with the completion certificate(s) indicating that the specified order(s) have been completed are to be submitted with technical bid. The value(s) of such executed order(s) shall be brought to the current costing level by enhancing the actual value of order(s) at simple rate of 7% per annum, computed from the date of completion of such execution to the last date of receipt of tenders. Executed order value shall be limited to the upfront charges paid (DDP price) for items in the ordered BOQ, on Supply, Installation, Testing & Commissioning (SITC) basis, inclusive of warranty. CAMC & any other recurring costs will not be taken into consideration.

(ii) In case the bidder is a 100% owned Indian Subsidiary of an International firm, the Global experience of the parent international firm shall also be considered.

3. **Financial Status:** Eligible Bidders should not have incurred any loss in more than 2 years during the last five years ending 31st March 2017 or 30th June 2017 or 30th September 2017 or 31st December 2017. Copies of audited Profit & Loss account and Balance Sheet (duly self certified) for the immediate last five consecutive financial years should be submitted along with the bid.

For Item at Sl. No. 3 (Rfx/Event number 3000002577) (i.e Laundry System)

1. **Status:** The bidder must be a reputed manufacturer of the Hospital Laundry equipment or its authorized distributor (Sub-authorization is not acceptable for the supply of equipment). The firm should have National/International recognition in execution of Laundry System of international standards and sustained history of credible performance. The firm manufacturing the Laundry equipment should have ISO 9001:2000 or above Certification.
2. **Minimum Work of Similar Nature:**
Eligible bidder(s) should have in the past 7 (seven) years prior to closing of bid submission, successfully executed Hospital Laundry orders at Govt. hospitals/institutes of national importance or at any other reputed hospitals/institutes globally as stated below:
 - a. One order of Hospital Laundry on SITC basis for a minimum value of 80% of the estimated CAPEX cost of Rs. 4 cr.
or
 - b. Two orders of Hospital Laundry on SITC basis, each for a minimum value of 50% of the estimated CAPEX cost of Rs. 4 cr.
or
 - c. Three orders of Hospital Laundry on SITC basis, each for a minimum value of 40% of the estimated CAPEX cost of Rs. 4 cr.

Note:

- (i) The copies of order(s) along with the completion certificate(s) indicating that the specified order(s) have been completed, are to be submitted with technical bid. The value of such executed order(s) shall be brought to the current costing level by enhancing the actual value of order(s) at simple rate of 7% per annum, computed from the date of completion of such execution to the last date of receipt of tenders. Executed order value shall be limited to the upfront charges paid (DDP price) for items in the ordered BOQ, on Supply, Installation, Testing & Commissioning (SITC) basis, inclusive of warranty. CAMC & any other recurring costs will not be taken into consideration.
 - (ii) In case the bidder is a 100% owned Indian Subsidiary of an International firm, the Global experience of the parent international firm shall also be considered.
3. **Financial Status:** Eligible Bidders should not have incurred any loss in more than 2 years during the last five years ending 31st March 2017 or 30th June 2017 or 30th September 2017 or 31st December 2017. Copy of audited Profit & Loss account and Balance Sheet (duly self certified) for the immediate last five consecutive financial years should be submitted along with the bid.

1. **Status:** The bidder must be a reputed manufacturer of the Laundry equipment or its authorized distributor (Sub-authorization is not acceptable for the supply of equipment). The firm should have National /International recognition in execution of Laundry System of international standards and sustained history of credible performance. The firm manufacturing the sterilization equipment should have ISO 9001:2000 or above Certification.

2. **Experience:**
 - i) Eligible bidder(s) must have inline experience in the manufacturing/installation of the Laundry equipment for at least three projects in the last five years.
 - ii) Company should have an existing service set up in the state of Haryana/NCR for providing service for similar Laundry System inclusive of all components.
 - iii) The bidder must provide a satisfactory performance certificate for manufacturing/installation and commissioning/equipping of Laundry (National/International) of at least three establishments, which can be a public/private, 500 or more bedded hospital or State Health Service or a standalone Laundry System with a load of more than or equal to **2000 kg per day**.
 - iv) Bidder must have an average annual turnover of **rupees 1.2 crore** during the last 03(three) financial years ending on 31st March 2017.

PROFORMA 'A'**PROFORMA FOR PERFORMANCE STATEMENT**

(For the period of last five/seven years)

TE No. : _____

Date of Bid Opening : _____

Name and address of the Bidder : _____

Name and address of the Manufacturer : _____

Order placed by (full address)	Order no. and date ##	Description (Model no.) and quantity	Value of order (Rs.)	Consignee	Date of Delivery Period			Have the goods been functioning satisfactorily (attach documentary proof)**
					Contract	Actual	Reasons for Delay if Any	
1	2	3	4	5	6	7	8	9

We hereby certify that the details of all orders received in last 5 years of quoted equipment (including AIIMS, PGIMER, JIPMER, RML Hospital, Safdarjung Hospital, Institute of National importance) has been furnished. We hereby further certify that if at any time, information furnished by us is proved to be false or incorrect; we are liable for any action as deemed fit by the purchaser in addition to forfeiture of the Bid Security.

Name _____

Business Address _____

Signature of Bidder _____

Place: _____

Seal of the Bidder _____

** The documentary proof will be a latest certificate from the consignee/end user with cross-reference of order no. and date

The bidders are requested to submit the purchase order copies for the specific model quoted along with the Techno-commercial Bid.

SECTION – IX

BID FORM

To
CEO
HLL Infra Tech Services Limited
B-14A, Sector-62
Noida – 201 307

Ref. Your TE No. _____ due for opening on _____

We, the undersigned have examined the above mentioned bidding document, including amendment/corrigendum (*if any*), the receipt of which is hereby confirmed. We now offer to supply and deliver _____ in conformity with your above referred document for the sum as shown in the Price Schedules attached herewith and made part of this bid. If our bid is accepted, we undertake to supply the goods and perform the services as mentioned in the bidding documents, in accordance with the delivery schedule specified in the List of Requirements.

We further confirm that, if our bid is accepted, we shall provide you with a performance security of required amount in an acceptable form in terms of “General Conditions Contract”, Section - IV read with modification, if any “Special Conditions of Contract”, in Section - V, for due performance of the contract.

We agree to keep our bid valid for acceptance as required in the “General Instruction to Bidders”, read with modification, if any in “Special Instructions to Bidders”, Section – III or for subsequently extended period, if any, agreed to by us. We also accordingly confirm to abide by this bid up to the aforesaid period and this bid may be accepted any time before the expiry of the aforesaid period. We further confirm that, until a formal contract is executed, this bid read with your written acceptance thereof within the aforesaid period shall constitute a binding contract between us.

We further understand that you are not bound to accept the lowest or any bid you may receive against your above-referred advertised tender enquiry.

We confirm that we do not stand deregistered/banned/blacklisted by any Central Govt. Ministries/Departments/Hospitals/Institutes.

We confirm that we fully agree to the terms and conditions specified in above mentioned bidding document, including amendment/ corrigendum if any.

“We hereby certify that if at any time, information furnished by us is proved to be false or incorrect, we are liable for any action as deemed fit by the purchaser in addition to forfeiture of the bid security.”

Name _____

Business Address _____

Place: _____

Signature of Bidder _____

Date: _____

Seal of the Bidder _____

SECTION - X
PRICE SCHEDULE

(The below formats are for example. However, actual price format is given in the e tender portal for bidding)

A) PRICE SCHEDULE FOR DOMESTIC GOODS OR GOODS OF FOREIGN ORIGIN LOCATED WITHIN INDIA

1	2	3	4	5				6
Item Sr. No./ RFx no.	Brief Description of Goods	Country of Origin	Quantity (Nos.)	Price per unit (Rs.)				Total Price (at Consignee Site) basis (Rs.) 4 x 5(e)
				Ex - factory/ Ex -warehouse /Ex-showroom /Off - the shelf including packing charges (a)	GST (if any) Value (%age) (b)	Inland Transportation, Insurance for a period including 3 months beyond date of delivery, loading/ unloading and Incidental costs till consignee's site (c)	Incidental Services (including Installation & Commissioning, Supervision, Demonstration and Training) at the Consignee's site (d)	

Total Bid price in Rupees: _____ (in figures)

_____ (in words)

Note: -

1. If there is a discrepancy in prices the same will be evaluated as per clause 29 of GIB.
2. The charges for Annual CAMC after warranty shall be quoted separately as per Section-X – Price Schedule C

Name _____

Business Address _____

Place: _____

Signature of Bidder _____

Date: _____

Seal of the Bidder _____

B) PRICE SCHEDULE FOR GOODS TO BE IMPORTED FROM ABROAD

1	2	3	4	5						6	
				Price per unit (Currency)							Total price on CIP Named Port of Destination + Insurance (local transportation and storage)
Item Sr. No./ RFX no.	Brief Description of Goods	Country of Origin	Qty (Nos.)	FOB price at port of Lading /FCA price at airport (a)	Indian Agency Commission (% of FOB)**	Net FOB	Freight & Insurance (port of loading to port of entry) and other Incidental costs (b)	Incidental Services (including Installation & Commissioning, Supervision, Demonstration and Training) at the Consignee's site (c)	Extended Insurance (local transportation and storage) from port of entry to the consignee site for a period including 3 months beyond date of delivery (d)	Unit Price on CIP Named Port of Destination + Extended Insurance (local transportation and storage) (e) = a+b+c+d	4X 5 (e)

** To be paid in Indian Currency (Rs.)

Total Bid price in _____ (currency to be mentioned) _____ (in figures)
_____ (in words)

Note: -

1. If there is a discrepancy in prices the same will be evaluated as per clause 29 of GIB.
2. The charges for Annual CMC after warranty shall be quoted separately as per Section – X – Price Schedule C
3. The Bidder will be fully responsible for the safe arrival of the goods at the named port of entry in good condition as per terms of CIP as per INCOTERMS, if applicable
4. Actual Custom duty applicable on the date of bid opening and 2% C& F charges will be added to the CIP price to arrive at free delivery at consignee site for evaluation purpose.

Indian Agent (Name and Address) : _____

Indian Agency Commission - ___% of FOB

Name _____

Business Address _____

Place: _____

Signature of Bidder _____

Date: _____

Seal of the Bidder _____

C) PRICE SCHEDULE FOR COMPREHENSIVE ANNUAL MAINTENANCE CONTRACT (CAMC) AFTER WARRANTY PERIOD

1	2	3	4					5	6	7
Item Sr. No./ RFx no.	BRIEF DESCRIPTION OF GOODS	QTY (Nos.)	Annual Comprehensive Maintenance Contract Cost for Each Unit year wise*.					Total Annual Comprehensive Maintenance Contract Cost for Each Unit for 5 years (4a+4b+4c+4d+4e)	GST (if any) Value (%age]	Total Annual Comprehensive Maintenance Contract Cost (inclusive of GST) for 05 years 3 x (5+6)
			1 st	2 nd	3 rd	4 th	5 th			
			a	b	c	d	e			

* After completion of Warranty period

Total CAMC price in Rupees: _____ (in figures)

_____ (in words)

NOTE:-

1. If there is a discrepancy in prices the same will be evaluated as per clause 29 of GIB.
2. The cost of Comprehensive Annual Maintenance Contract (CAMC) which includes preventive maintenance including testing & calibration as per technical/ service /operational manual, labour and spares, after satisfactory completion of Warranty period may be quoted for next 5 years or the period as mentioned in the bidding document on yearly basis for complete equipment and Turnkey (if any).
3. The cost of CAMC may be quoted along with GST applicable on the date of Bid Opening.
4. Cost of CAMC will be added for Ranking/Evaluation purpose based on NPB as stipulated in the bidding document.
5. The payment of CAMC will be made as stipulated in GCC.
6. The uptime warranty will be 95 % on 24 (hrs) X 7 (days) X 365 (days) basis or as stated in Technical Specification of the Bidding document. The stipulations in Technical Specification will supersede above provisions.
7. All software updates should be provided free of cost during CAMC period.
8. The supplier shall keep sufficient stock of spares required during Comprehensive Annual Maintenance Contract (CAMC) period. In case the spares are required to be imported, it would be the responsibility of the supplier to import and get them custom cleared and pay all necessary duties.

Name _____

Business Address _____

Place: _____

Signature of Bidder _____

Date: _____

Seal of the Bidder _____

D) PRICE SCHEDULE FOR TURNKEY WORK

Schedule No.	TURNKEY WORK	Turnkey Work price (in Rs.)	GST (if any) Value [%age]	Turnkey Work price (in Rs.) (including GST)

Total turnkey work price in Rupees: _____ (in figures)

_____ (in words)

Note: -

1. The cost of Turnkey Work (Civil/Electrical/Mechanical Engineering work) as per Technical Specification (Section VII) may be quoted on lump sum along with GST applicable on the date of Bid Opening.
2. Cost of Turnkey Work will be added for Ranking/Evaluation purpose.
3. The payment of Turnkey Work will be made as per GCC.

Name _____

Business Address _____

Signature of Bidder _____

Seal of the Bidder _____

Place: _____

Date: _____

SECTION - XI**CHECK LIST**

The bidders should furnish specific answers to all the questions/issues mentioned in the Checklist detailed below:

Name of Bidder: _____

Name of Manufacturer: _____

Sl. No.	Activity	Yes/ No/ NA	Page No. of the Bids submitted	Remarks
1. a.	Have you enclosed Bid Security of required amount for the quoted schedules?			
b.	In case Bid Security is furnished in the form of Bank Guarantee, has it been furnished as per standard format of the bidding document?			
c.	In case Bank Guarantee is furnished, have you kept its validity 45 days beyond the validity of Techno Commercial Bid?			
2.a.	Are you exempted for furnishing bid security being MSE as defined in MSE procurement policy issued by department of MSME.			
b.	If yes, have you enclosed certificate of registration issued by department of MSME.			
c.	Does such certificate clearly mention the quoted item?			
3. a.	Have you enclosed duly filled bid form as per bidding document?			
b.	Have you enclosed Power of Attorney in favour of the signatory?			
4. a.	Have you enclosed clause-by-clause technical compliance statement for the quoted goods vis-à-vis the Technical specifications?			
b.	In case of Technical deviations in the compliance statement, have you identified and marked the deviations?			
5. a.	Have you submitted satisfactory performance certificate as per the Proforma for performance statement given in the bidding document?			
b.	Have you submitted the documentary proof that goods have been functioning Satisfactorily?			
c.	Have you submitted latest purchase order copies?			

Sl. No.	Activity	Yes/ No/ NA	Page No. of the Bids submitted	Remarks
6.	Have you submitted Manufacturer's Authorization Certificate as per bidding document?			
7.a.	Have you quoted prices of goods, turnkey (if any), CAMC etc. in the Price Schedule as per bidding document?			
b.	If the ATE calls for buy back, have you quoted buy back prices along with applicable GST?			
8.	Have you kept validity of 270 days from the Techno Commercial Bid Opening date as per the bidding document?			
9. a.	In case of Indian Bidder, have you furnished GST No.?			
b.	In case of Foreign Bidder, have you furnished GST No. of your Indian Agent?			
10.	Have you intimated the name and full address of your Banker (s) along with your Account Number, IFSC Code etc.?			
11.	Have you furnished documents establishing your eligibility & qualification criteria as per bidding documents?			

N.B.

- All pages of the Bid should be page numbered and indexed.
- The Bidder may go through the checklist and ensure that all the documents/ confirmations listed above are enclosed in the bid and no column is left blank. If any column is not applicable, it may be filled up as NA.
- It is the responsibility of bidder to go through the bidding document to ensure furnishing all required documents in addition to above, if any.
- Wherever necessary and applicable, the bidders shall enclose certified copy as documentary proof/ evidence to substantiate the corresponding statement.
- In case a bidders furnishes a wrong or evasive answer against any of the question/issues mentioned in the Checklist, its bids will be liable to be ignored.

Name _____

Business Address _____

Place: _____

Signature of Bidder _____

Date: _____

Seal of the Bidder _____

SECTION - XII

BANK GUARANTEE FORM FOR BID SECURITY

Whereas _____ (Name and address of the Bidder)
(Hereinafter called the "Bidders")
Has submitted its Bid dated _____ for the supply of _____
(Hereinafter called the "Bid")
Against the purchaser's ATE No. _____

Know all persons by these presents that we _____ having
our registered office at _____
(Hereinafter called the "Bank")
Are bound unto HLL Infra Tech Services Ltd., Noida (for and on behalf of AIIMS)
(Hereinafter called the "Purchaser")
In the sum of _____ for which payment will and truly to be
made to the said Purchaser, the Bank binds itself, its successors and assigns by these
presents. Sealed with the Common Seal of the said Bank this _____ day of _____
20____.

The conditions of this obligation are:

- 1) If the Bidder withdraws or amends, impairs or derogates from the bid in any respect within the period of validity of this Bid.
- 2) If the Bidder having been notified of the acceptance of his Bid by the Purchaser during the period of its validity:-
 - a. if the bidder fails or refuses to furnish the performance security for the due performance of the contract or
 - b. if the bidder fails or refuses to accept/execute the contract or
 - c. if it comes to notice at any time, that the information/documents furnished in its Bid are false or incorrect or misleading or forged.

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 Purchaser will note that the amount claimed by it is due to it owing to the occurrence of one or more the three conditions, specifying the occurred condition(s).

This guarantee will remain in force upto _____ (insert date of additional forty-five days after Bid validity) and any demand in respect thereof should reach the Bank not later than the above date.

.....
(Signature with date of the authorized officer of the Bank)
.....
(Name and designation of the Officer)
.....
.....
(Seal, name & address of the Bank and address of the Branch)

SECTION – XIII

MANUFACTURER’S AUTHORISATION FORM

The CEO
HLL Infra Tech Services Limited
B-14A Sector-62
Noida, Uttar Pradesh-201307

Dear Sir,

Ref: Your TE document No _____ dated _____

We, _____ who are proven and reputable manufacturers of _____ (*name and description of the goods offered in the bid*) having factories at _____, hereby authorise Messrs _____ (*name and address of the agent*) to submit a bid, process the same further and enter into a contract with you against your requirement as contained in the above referred TE documents for the above goods manufactured by us.

We also state that we are not participating directly in this bid for the following reason(s):
_____ (*please provide reason here*).

We further confirm that no supplier or firm or individual other than Messrs. _____ (*name and address of the above agent*) is authorised to submit a bid, process the same further and enter into a contract with you against your requirement as contained in the above referred TE documents for the above goods manufactured by us.

We also hereby extend our full warranty, CAMC as applicable as per clause 15 of the General Conditions of Contract, read with modification, if any, in the Special Conditions of Contract for the goods and services offered for supply by the above firm against this TE document.

We also hereby confirm that we would be responsible for the satisfactory execution of contract placed on the authorized agent and the spares for the equipment shall be available for at least 10 years from the date of supply of equipment.

We also confirm that the price quoted by our agent shall not exceed the price which we would have quoted directly”

Yours faithfully,

[*Signature with date, name and designation*]
for and on behalf of Messrs _____
[*Name & address of the manufacturers*]

Note:

1. *This letter of authorisation should be on the letter head of the manufacturing firm and should be signed by a person competent and having the power of attorney to legally bind the manufacturer.*
2. *Original letter may be sent.*

SECTION – XIV

BANK GUARANTEE FORM FOR PERFORMANCE SECURITY/CAMC SECURITY

WHEREAS _____ (Name and address of the supplier) (Hereinafter called “the supplier”)

has undertaken, in pursuance of Purchase Order/ Contract no _____ dated _____ to supply _____ (*insert description of goods and services*) (Hereinafter called “the Contract”).

AND WHEREAS it has been stipulated by you in the said contract that the supplier shall furnish you with a bank guarantee by a scheduled commercial bank recognized by you for the sum specified therein as security for compliance with its obligations in accordance with the contract;

AND WHEREAS we have agreed to give the supplier such a bank guarantee;

NOW THEREFORE we hereby affirm that we are guarantors and responsible to you, on behalf of the supplier, up to a total of _____ (*insert Amount of the guarantee in words and figures*), and we undertake to pay you, upon your first written demand declaring the supplier to be in default under the contract and without cavil or argument, any sum or sums within the limits of (amount of guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the supplier before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the contract to be performed there under or of any of the contract documents which may be made between you and the supplier shall in any way release us from any liability under this guarantee and we hereby waive notice of any such change, addition or modification.

This guarantee will remain in force upto _____ (*insert date of additional Ninety days after completion of satisfactorily warranty period in case of Performance Security and additional Ninety days after completion of satisfactorily CAMC period in case of CAMC security*) and any demand in respect thereof should reach the Bank not later than the above date.

.....
(Signature with date of the authorised officer of the Bank)
.....
Name and designation of the officer
.....
.....
Seal, name & address of the Bank and address of the Branch

SECTION – XV**CONTRACT FORM - A****CONTRACT FORM FOR SUPPLY, INSTALLATION, COMMISSIONING, HANDING OVER, TRIAL RUN, TRAINING OF OPERATORS & WARRANTY OF GOODS****ALL INDIA INSTITUTE OF MEDICAL SCIENCES***(Insert Name of concerned Centre/Hospital/Department/Section)***ANSARI NAGAR, NEW DELHI-110 029**

Contract No _____ dated _____

To _____

*(insert name of Supplier with address)***This is in continuation to this office's Notification of Award No _____ dated _____**

1. Name & address of the Supplier: _____
2. ATE No of Bidding Documents: _____ and subsequent Amendment No _____, dated _____ (if any), issued by the Purchaser
3. Supplier's Bid No _____ dated _____ and subsequent communication(s) No _____ dated _____ (if any), exchanged between the supplier and the purchaser in connection with this Bidding Document.
4. In addition to this Contract Form, the following documents etc, which are included in the Bidding Documents mentioned under paragraphs 2 and 3 above, shall also be deemed to form and be read and construed as integral part of this contract:
 - (i) General Conditions of Contract;
 - (ii) Special Conditions of Contract;
 - (iii) List of Requirements;
 - (iv) Technical Specifications;
 - (v) Quality Control Requirements;
 - (vi) Bid Form furnished by the supplier;
 - (vii) Price Schedule(s) furnished by the supplier in its Bid;
 - (viii) Manufacturers' Authorisation Form (if applicable);
 - (ix) Purchaser's Notification of Award

Note: The words and expressions used in this contract shall have the same meanings as are respectively assigned to them in the conditions of contract referred to above. Further, the definitions and abbreviations incorporated under clause 1 of Section II – "General Instructions to Bidders" of the Bidding Document shall also apply to this contract.

5. Some terms, conditions, stipulations etc. out of the above-referred documents are reproduced below for ready reference:
 - (i) Brief particulars of the goods and services which shall be supplied/ provided by the supplier are as under:

Schedule No.	Brief description of of goods/services	Accounting unit	Quantity to be supplied	Unit Price	Total price	Terms of delivery

Any other additional services (if applicable) and cost thereof: _____
Total value (in figure) _____ (In words) _____

- (ii) Delivery schedule: _____
- (iii) Details of Performance Security required: _____
- (v) Destination and despatch instructions: _____
- (vi) Consignee: _____

6. Warranty clause:

7. Payment terms:

(Signature, name and designation of the Purchaser authorised official)
For and on behalf of Director, AIIMS

Received and accepted this contract

(Signature, name and address of the supplier's executive duly authorised to sign on behalf of the supplier)

For and on behalf of _____
(Insert Name and address of the supplier)

(Seal of the Supplier)

Date: _____

Place: _____

CONTRACT FORM – B**CONTRACT FORM FOR COMPREHENSIVE ANNUAL MAINTENANCE
CONTRACT (CAMC)**

Comprehensive Annual Maintenance Contract No. _____
Dated _____

Between

Director, AIIMS

And

(insert Name & Address of the Supplier)

Reference: Contract/ Purchase Order No _____ dated _____ for supply, installation & commissioning, Training and CAMC of goods & services.

In continuation to the above referred Contract/Purchase Order, the Contract of Comprehensive Annual Maintenance Contract is hereby concluded as under: -

1	2	3	4					5	6
Items Sr. No./ RFx no.	Brief descriptio n of goods	Quantity (Nos.)	CAMC Cost for Each Unit year wise in Rs					GST Value in Rs (___ %)	Total CAMC Cost for 5 Years with GST (3) $X[(4a+4b+4c+4d+4e)$ + (5)]
			1 st	2 nd	3 rd	4 th	5 th		
			a	b	c	d	e		

Total value (in figure) _____ (In words) _____

- b) The CAMC commence from the date of expiry of all obligations under Warranty i.e. from _____ (date of expiry of Warranty) and will expire on _____ (date of expiry of CAMC)
- c) The cost of Comprehensive Annual Maintenance Contract (CAMC) which includes preventive maintenance, labour and spares, after satisfactory completion of Warranty period as contained in the above referred contract on yearly basis for complete equipment as per contract including Turnkey Work(if any).
- d) There will be 95% uptime warranty during CAMC period on 24 (hrs) X 7 (days) X 365 (days) basis, with penalty, to extend CAMC period by double the downtime period and other penalty as per contract.
- e) During CAMC period, the supplier shall visit at each consignee's site for preventive maintenance including testing and calibration as per the manufacturer's service/technical/operational manual. The supplier shall visit each consignee site as recommended in the manufacturer's manual, but at least once in 3 months commencing from the date of the successful completion of warranty period for preventive maintenance of the goods.
- f) All software updates should be provided free of cost during CAMC period.

- g) The Bank Guarantee valid till _____ [(fill the date) 3 months after expiry of entire CAMC period] for an amount of Rs. _____ [(fill amount) equivalent to 2.5% of the cost of the equipment as per contract] shall be furnished in the prescribed format given in Section XIV of the Bidding Document, along with the signed copy of CAMC within a period of 21 (twenty one) days of start of CAMC failing which the Performance Security (10% of the contract value) submitted shall be en-cashed payable to the Purchaser/Consignee.
- h) If there is any lapse in the performance of the CAMC as per contract, the proceeds Annual CAMC Bank Guarantee shall be forfeited and their bad performance will be considered while awarding future contracts.
- i) Payment terms: The payment of CAMC will be made against the bills raised by the supplier on six monthly basis after satisfactory completion of said period, duly certified by the concerned User Department. The payment will be made in Indian Rupees.

(Signature, name and designation of the Store Officer/ASO of the Purchaser)

(Signature, name and designation of the F&CAO of the Purchaser)
For and on behalf of Director, AIIMS

(Seal of the Purchaser)
Date: _____
Place: _____

Received and accepted this contract

(Signature, name and address of the supplier's executive duly authorised to sign on behalf of the supplier)

For and on behalf of _____
(Insert Name and address of the supplier)

(Seal of the Supplier)
Date: _____
Place: _____

Note:- The contract will be prepared on Non-judicial Stamp paper(currently of value of Rs. 100).

SECTION – XVI

CONSIGNEE RECEIPT CERTIFICATE

(To be given by consignee’s authorized representative)

The following store(s) has/have been received in good condition:

- 1) Contract/Purchase Order No. & date: _____
- 2) Supplier’s Name: _____
- 3) Consignee’s Name & Address: _____
- 4) Name of the item supplied: _____
- 5) Quantity Supplied: _____
- 6) Date of Receipt by the Consignee: _____
- 7) Signature of Authorized Representative of Consignee with date: _____
- 8) Name and designation of Authorized Representative of Consignee: _____
- 9) Seal of the Consignee: _____

SECTION – XVII

CONSIGNEE ACCEPTANCE CERTIFICATE

(To be given by consignee’s authorized representative)

This is to certify that the goods as detailed below have been received in good conditions along with all the standard and special accessories in accordance with the contract. The same has been installed and accepted.

- 1) Contract/Purchase Order No. & date:_____
- 2) Supplier’s Name:_____
- 3) Consignee’s Name & Address: _____
- 4) Name of the item Supplied :_____
- 5) Quantity Supplied :_____
- 6) Date of Receipt by the Consignee :_____
- 7) Date of Installation/Commissioning and Acceptance of Equipment: _____
- 8) The supplier has fulfilled its contractual obligations satisfactorily

OR

The supplier has failed to fulfill its contractual obligations with regard to the following:

- i)
- ii)
- iii)
- iv)
- 9) The amount of recovery on account of failure of the supplier to meet his contractual obligations is_____ (here indicate the amount).
- 10) Signature of Authorized Representative of Consignee with date:_____
- 11) Name and designation of Authorized Representative of Consignee:_____
- 12) Seal of the Consignee:_____