

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/36/18-19



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

Ansari Nagar, New Delhi-110 029

NIB Ref: HITES/PCD/NCI-AIIMS/36/18-19**Dated: 26.09.2018**

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 (Nos.)	Bid Security (BS) (Rs.)	Tender Processing Fee incl. GST (Rs.)
1	3000003419	PROTON Therapy	1	5,00,00,000	5,900
2	3000003420	IORT Machine (Electron Based)	1	36,00,000	2,950
3	3000003421	IORT Machine (X-Ray Based)	1	16,00,000	2,950
4	3000003422	Mobile CT Scanner for IORT	1	14,00,000	2,950
Pre-bid conference meeting with prospective bidders		Venue for pre-bid meeting		Date & Time of pre-bid meeting	
		Committee Room, (No. 149), 1st Floor, Dr. BRAIRCH Building, AIIMS, New Delhi-29.		09.10.18 at 02:30 PM	
Last date and time of online submission of tender			20.11.2018 at 12:00 Noon		
Last date and time of physical submission of EMD, Tender processing Fee, any other document specified in the Bidding Document			20.11.2018 at 2:00 PM		
Date of tender Opening			20.11.2018 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 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).</p>					

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**.
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 warrantee 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.

32. Schedule-wise Evaluation

- 32.1 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. 8.1 and 10.1	
	8.1	In addition to Section I – “Notice inviting e-Tender” (NIT), the TE documents include:	Added Point: Appendix A- Integrity pact	9
	10.1	Clarification of Bid document	Changed as under	10
C	11 to 21	Preparation of Bids	Change in GIB Clause no. 11.1 a., 11.1 A), 11.1 (B), 19, 21.1	
	11.1 Note a.		Changed as under	
	11.1 A)		Additional Para. xix) as under	
	11.1		Additional Note ‘d’ as under	
	19		Additional para 19.9 as under	
	21.1		Changed as under	25
D	22 to 24	Submission of Bids	Guiding notes given as under	25
E	25	Bid Opening	No Change	
F	26 to 36	Scrutiny and Evaluation of Bids	Change in GIB Clause no. 27.4	
	27.4		Added Point no. (xiii)	26
	33	Comparison of Bids	Additional para 33.2 as under	26
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.

11.1 **Note:**

- a. The tender Processing fee, BID SECURITY and **Integrity Pact (Appendix A) on non-judicial stamp paper** has to be submitted in physical form as per Section – I, Notice Inviting Tender of this tender enquiry.

11.1 **A) Techno-commercial Bid (Un-priced Bid):**

- xix) The Integrity pact (At Appendix-A) on non-judicial stamp paper shall be a part and parcel of this document and has to be signed by bidder(s) at the pre-tendering stage itself, as a pre-bid obligation and should be submitted along with the Techno-Commercial Bids. All bidders are bound to comply with the integrity pact clauses.

11.1 **(B) Price Tender:**

Note:

- d) **The Price is to be quoted for all the line items strictly as per the given price-bid format on the e-tender portal, failing which the bid shall be straight away rejected.**

19. **Bid Security (BS)**

- 19.9 HITES Bank details for necessary issuance of ‘Structured Financial Messaging System (SFMS)’ in case the Bid Security (i.e. EMD) is submitted in the form of Bank Guarantee:

Name of the Beneficiary	Bank Details	IFSC Code
HLL INFRA TECH SERVICES LTD.	HDFC BANK LTD, NOIDA, UTTAR PRADESH	HDFC0000088

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 documents pertaining to the event/RFx no. may be downloaded from the e-portal by clicking on the **‘Technical RFx’** option in the ‘top-left portion of the web-page’ when the RFx/event is in **Display Mode**.
- ii) All the necessary documents as prescribed in the NIB shall be prepared and scanned in different files (in PDF and/or Excel format or as per format instructed elsewhere) and uploaded for on-line submission of Proposal.
- iii) 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.

- iv) 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.
- v) 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.
- vi) The file name of price bid should not be different from the price bid format uploaded by the Bid inviting Authority in the e-portal. This can be downloaded from the **Notes & Attachment** under **Details** of item when the RFX/event is in **Display Mode** or as mentioned in point no. i) above.
- vii) **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.**

27. Scrutiny of Bids

27.4 (xiii) The Integrity pact (At Appendix-A) on non-judicial stamp paper shall be a part and parcel of this document and has to be signed by bidder(s) at the pre-tendering stage itself, as a pre-bid obligation and should be submitted along with the Techno-Commercial Bids. All bidders are bound to comply with the integrity pact clauses.

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)
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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.

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- 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 inter alia, 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	3000003419	PROTON Therapy	1	01 year	15 years
2	3000003420	IORT Machine (Electron Based)	1	05 years	05 years
3	3000003421	IORT Machine (X-Ray Based)	1	05 years	05 years
4	3000003422	Mobile CT Scanner for IORT	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 3000003419)****PROTON Therapy****Technical Specification for State-of-the-Art Compact Single-Room Proton Therapy System and construction of compatible Bunker facility**

AIIMS is developing the National Cancer Institute at Jhajjar as the apex center for cancer treatment and research. Hence, the facility for PROTON therapy is expected to be a state of the art in building design and equipment as well. The proposed facility should have modern, high end architectural finishes to ensure better health, safety & hygienic conditions and of aesthetic look. The interior and exterior should be so developed that the facility can be considered an iconic facility.

This Proton Therapy System should be a state-of-the-art pencil beam scanning technology based Compact Single-Room solution and capable of Image-Guided, Intensity Modulated Proton Therapy (IG-IMPT). The Proton accelerator must have the latest technology and should be fully computer controlled. The proton therapy system includes cyclotron/synchrotron, proton treatment room, treatment planning system, oncology information system, dosimetry and quality assurance equipment and patient fixation and immobilization devices.

The vendor need to build the compatible bunker and allied facilities and furnish all rooms related to proton therapy facility for ready availability for patient care and research. It should be capable of integrating with standard computer networking and PACS systems available in the market. Vendor should provide the time-line for shipping of equipment, rigging, installation, acceptance testing, beam modeling, on-site & off site training, clinical implementation and first patient treatment from the date of LC opening.

(A) The offered equipment should have the following technical features:**1.0 Clinical Specifications****1.1 Range in patient:**

The energy range necessary to treat from 1.5 cm to 30 cm over the clinical range of field sizes.

1.5 g/cm² to 32 g/cm² for field sizes < 25 cm x 25 cm

1.5 g/cm² to 22 g/cm² for field sizes > 25 cm x 25 cm

For ranges below 4 g/cm² the range shifters should be provided.

1.2 Range modulation (SOBP width):

Steps of 0.4 g/cm² over full range

Steps of 0.2 g/cm² for ranges < 5 g/cm²

1.3 Range adjustment:

Steps of 0.1 g/cm² for ranges > 5 g/cm²

Steps of 0.05 g/cm² for ranges < 5 g/cm²

1.4 Average dose rates: Sufficient to produce >2 Gy/min per liter over full range of field size.

- 1.5 **Beam time structure:** ratio of instantaneous to average dose rate low enough to ensure safe operation and radiobiological response consistent with existing proton experience.
- 1.6 **Maximum field size:** Gantry beams: > 20 cm x 20 cm scanned beams
- 1.7 **Dose uniformity:** $\pm 3.0\%$ over treatment volume
- 1.8 **Dose accuracy:** $\pm 2\%$ absolute dose
- 1.9 **Monitor unit reproducibility:** $\pm 1.5\%$ (2 s.d.) for one day
 $\pm 3.0\%$ (2 s.d.) for one week
- 1.10 **Effective rotational SAD** (source to axis distance): > 2 m
- 1.11 **Distal dose fall off:** 0.25 g/cm² (80% - 20%) above range straggling. Vendor to specify as per system
- 1.12 **Lateral penumbra** (80% to 20%):
For a single spot it should be of 1.13x spot size (sigma)
For a map of even spots equally spaced by one sigma should be of 1.6x spot size (sigma)
For a map of spots optimized by the TPS for lateral penumbra enhancement it should be of 1.3 to 1.6x spot size (sigma)
- 1.13 **Robotic table:** Capable of $\pm 185^\circ$ rotation about vertical axis, $\pm 5^\circ$ pitch and yaw; and > 50 cm translation in all three axes. Minimum 200 Kg capacity.
- 1.14 **Gantry rotation:** Gantry rotation should be at least 185 degree.
- 1.15 **The accelerator** should be of either a superconducting cyclotron or synchrotron or synchrocyclotron.
- 1.16 The accelerator should be of compact footprint size to minimize structural cost, maintenance for maximum efficiency.
- 1.17 The life expectancy of the primary hardware components of the accelerator(s) should be of 30 years or greater.
- 2.0 **Treatment control system specification**
 - 2.1 Startup from standby less than 60 min
 - 2.2 Startup from cold < 120 min
 - 2.3 Shutdown at day's end < 15 min
 - 2.4 Manual setting of beam parameters (excepting patient/gantry positioning and beam modifiers) < 1 min
 - 2.5 Automatic setting of all beam parameters from record and verify system < 0.5 min
 - 2.6 Beam emergency stop (hard stop):
Ion Source: Less than 15 μ s
RF Interlock: Less than 10 ms
Mechanical beam shut off: Less than 600 ms
 - 2.7 Beam stop (soft stop): less than 1 sec or 0.2 Gy
 - 2.8 Beam start: Less than 3 sec from pressing "beam on" button to start of beam delivery, given beam available to treatment room
 - 2.9 Treatment Beam(s): The machine should be able to deliver IMPT pencil beam scanning.

- 2.10 Pencil beam scanning dedicated Nozzle: the vendor should provide the only pencil beam scanning dedicated nozzle. It should be of range shifter compatibility. It shall also possible to minimize the air-gap between nozzle and patient skin surface. Describe how this can be achieved for Head and Neck region.

3.0 Beam Energy specifications

- 3.1 Energy range: sufficient to provide 70 – 230 MeV measured at treatment nozzle exit
3.2 Energy precision: ± 0.15 g/cm² over entire energy range
3.3 Energy variability: ± 0.15 g/cm² over entire range, or sufficient to allow steps of 0.1 g/cm² (0.05 g/cm² for depths less than 5 g/cm²)
3.4 Beam intensity: Sufficient to deliver 2 Gy/min per litre minimum at nozzle/isocenter.
3.5 Position and angle stability: ± 1 mm and ± 1 mrad at nozzle exit

4.0 Beam transport, control and delivery system specifications

- 4.1 Beam control system must be able to handle 70 MeV – 230 MeV for gantry room.
4.2 Beam parameters at isocenter:
The spot size in the air at isocenter, 1 sigma of the Gaussian distribution at a range of 32 g/cm² should be 3.5mm and at a range of 7.7 g/cm² should be of 6mm.
4.3 Layer switching time: Less than 1 sec

5.0 Gantry specifications

- Gantry should be equipped with a nozzle or nozzle offering pencil beam scanning capabilities.
- 5.1 Rotation angle should be in the range of 185-360°
5.2 Rotation accuracy: $\pm 0.5^\circ$
5.3 Rotation step size: $\pm 0.1^\circ$
5.4 Rotation speed: 1 RPM
5.5 Braking: 5° from full speed to complete stop in 1 sec
5.6 Mechanical isocentricity: 1 mm isocenter over full rotation
5.7 **Safety:** System should have required and adequate interlocks to ensure safe movement and beam delivery. System should monitor beam continuously with at least one dose monitoring chamber incapable of saturation at the maximum conceivable beam current and minimum beam size. Beam position, energy, uniformity and intensity should be continuously monitored and automatically tuned at accelerator exit, along beam line, and at nozzle exit. Beam trip time for out-of-tolerance parameters shall be 150 μ sec. There should be a system for beam dump in each section of the beam line.
5.8 Emergency off buttons will be placed in treatment room and at the console in order to inhibit extraction and delivery of the beam.
5.9 Please describe and document, as applicable, safety records for your proton therapy delivery systems in clinical operation at the time of this request for proposal (RFP) response.

6.0 Pencil beam Scanning nozzle specifications

- 6.1 **Dose compliance:** The dose compliance must be such that at each point inside and outside the target volume, the dose is within $\pm 2.5\%$ (2 s.d.) of the intended value. If not, vendor to explain.
6.2 **Beam spot size:** Should be less than 8 mm FWHM at 250 MeV and less than 11 mm FWHM at 120 MeV
6.3 **Field shaping:** Either by pencil beam scanning technique of continuously, layer by layer and spot scanning or proton multileaf collimator system/technique (Proton MLC)
6.4 Beam position of less than 1 m from isocenter should be of ± 1 mm
6.5 Scan repetitions: Beam scanning can be controlled to repeat scans multiple times in the course of a clinically relevant beam delivery (e.g., delivery of 100 cGy-equivalent) to mitigate the effects of patient motion.

6.6 **Safety:**

- 6.6.1 If a beam monitor is out of tolerance, the beam must be shut off immediately, before more than 0.5-1.0% of the total treatment dose is delivered anywhere in the treatment volume.
- 6.6.2 All physically moveable devices such as beam monitors, apertures, etc., must be interlocked and monitored for correct position.
- 6.7 Beam modulation: A collimation or beam control system should be provided for precise and sharp shape modulation.
- 6.8 **Spot scanning:** A minimum of three beam spot sizes of 2.5, 5 mm and 10mm or more FWHM should be provided with positional accuracy < 0.5 mm. Intensity regulated so that the number of protons per spot is controlled over a range from a maximum of 1×10^9 to a minimum of 1×10^7 .

7.0 **Beam Monitoring Dosimetry**

- 7.1 Dosimetry: More than 2 independent dosimeters should provide for continuous monitoring of the dose delivered to the patient:
 - 7.1.1 One dosimeter at a distance of less than 1 meter from isocenter.
 - 7.1.2 One dosimeter will not saturate at the highest possible beam current focused into a 3 mm x 3 mm area.
 - 7.1.3 At least two dosimeters must measure the total beam current, whereas the third may measure a fraction of the total field, in the center of the beam, and not less than 5 cm diameter.
- 7.2 Beam energy modification: The range of the protons must be capable of being changed during treatment to produce an effective spread out Bragg peak over a range from 1 g/cm² to 16 g/cm² in 0.5 g/cm² steps. Energy switching should be accomplished such that layer-to-layer lag time is less than 1 second.

8.0 **Patient support system specifications**

- 8.1 The patient support systems should have full 6D movements, with < 0.1 mm and < 0.1° precision over a range of motion sufficient to employ in-room imaging and treatment delivery.
- 8.2 The support system should be capable of handling patients up to 200 Kg.
- 8.3 The patient support system must be compatible with standard radiotherapy immobilization devices and the ancillary imaging equipment.
- 8.4 Attenuation (i.e. intensity) of the treatment beam through the support assembly at any angle shall be < 5%.
- 8.5 Software control or hardware interlocks should prevent patient support system/nozzle/floor collision.
- 8.6 The patient support system shall be capable of accommodating anesthesia equipment with mechanisms for attaching IV poles, cardiac monitors, CO2 monitors, etc. The system will permit placement of a patient on a treatment table and induction of anesthesia in a separate induction room; movement from the induction room to the treatment room; docking with the treatment unit; imaging for alignment; and treatment, all without moving the patient from the table.

9.0 **Patient positioning, alignment and image guidance system specifications**

- 9.1 The minimum three green laser patient alignment system should be provided
- 9.2 **Image guidance system:** The image guidance system for patient alignment should consist of high quality CT imaging. This can be accomplished by gantry mounted CBCT or in-room imaging system for 2D, real-time and 3D image guided treatment delivery verification.
- 9.3 Flat-panel based CBCT system should have capability of having spatial resolution of greater than 7lp/cm, low contrast sensitivity of 15mm@1% and CT number and uniformity accuracy of $\pm 40\text{HU}$.

- 9.4 X-ray imaging System: KV-based planar x-ray imaging for offline verification and stereoscopic image guidance system for real-time verification should be provided.
- 9.5 Real-time patient position monitoring system via an infrared reflector system, optical surface matching system, or other equivalent solutions should be provided.
- 9.6 System should have the capability of integrating with latest compatible respiratory management/gating systems.
- 9.7 The patient alignment system shall be well-integrated such that image acquisition; automated fusion with planning images; movement of the patient; secondary image acquisition and fusion for confirmation can all take place without the necessity to leave the room.
- 9.8 The system shall be capable of aligning a patient at isocenter with < 1.0 mm accuracy.

10.0 Proton-specific treatment planning system specification:

The vendor should provide latest state-of-the-art Advanced Treatment Planning System (TPS) capable of performing proton-based conformal planning, scanned pencil beam based intensity modulated proton therapy planning, 4D-treatment planning and adaptive treatment planning for radiotherapy treatment delivery. In addition the same system should also be capable of performing photon based 3D planning, IMRT, VMAT, 4D planning, adaptive re-planning. The offered system should have the following requirements and technical specifications.

- 10.1 The advanced treatment planning system should have latest technology of hardware and software features commercially available. Any advanced version, which is released available during commissioning time, should be provided.
- 10.2 DICOM RT import and export capability for images, structures, isocenter, beams and doses with full DICOM - RT capabilities.
- 10.3 As applicable, capable of interfacing with the electronic medical record system used by NCI-Jhajjar
- 10.4 Three number of treatment planning systems with calculation licenses for conformal planning, IMPT, 4D, adaptive planning capabilities and additional three numbers of systems for enabling contouring segmentation and virtual simulation with individual licenses should be provided.
- 10.5 The system should be integrated with CT-Simulator, MRI, PET imaging system and proton therapy treatment delivery system, oncology information system, networking system, beam data acquisition system and patient QA software system.
- 10.6 System should provide tools for import and segmentation of CT, MRI, 4D CT, CBCT, DWI- MRI, DCE- MRI, 4D-MRI, PET and 4D PET. The patient data must be transferred from CT, MRI, PET systems via DICOM, CD and DVD's.
- 10.7 System should have tools for creating a rich representation of the patient anatomy, which is used in the treatment planning process. This includes rigid and deformable image registration and fusion for CT, CBCT, MR and PET, manual and semi-automatic contouring tools and model-based segmentation.
- 10.8 The system should be capable handling manual and semi-automatic organ and target delineation, model-based organ delineation, atlas-based organ delineation using the clinic's patient database, ROI expansion, algebra and administration, streamlined handling of multiple image datasets, visualization of ROI in 2D and 3D, 4D-CT movie function, rigid image registration and fusion tools for multiple image series, support for CT-PET/CT, MR, CBCT and 4D-CT Creation of 4D-CT projections (maximum, minimum, average).

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- 10.9 System should have following features/tools for the planning capabilities that are common for all external beam treatments irrespective of beam modality (photons, protons, electrons). The features such as geometrical beam configuration setup tools, patient setup tool using kV-beams with DRR, support for multiple DRRs per beam, room view, multiple beam sets for creation of mixed-modality boost plans including pretreated dose of any modality imported from any other system (e.g., IMRT), auto-scaling of dose to prescription, bolus handling, template support for beams, clinical goals, plan-generation protocols that can automatically create structures, plans, beams and optimization setup by loading a protocol, commissioning tools for modeling of CT and cone-beam CT(CBCT) machines (for HU to density calibration), tools for data preparation for quality assurance report templates.
- 10.10 System should have the generic optimization engine used for all plan optimization, irrespective of beam modality and treatment technique with features such as multi-purpose optimization engine, robust optimization based on density, patient setup uncertainties and multiple images, physical objective and constraint functions, such as min/max dose, min/max DVH, min/max TCP, NTCP or EUD, uniform dose and target conformance, templates for objectives and constraints.
- 10.11 System should be able to calculate for photon, electron and proton beam modalities having advanced kernel based calculation algorithms including Monte-Carlo calculation algorithms or its equivalent algorithms.
- 10.12 System should have a comprehensive evaluation tools for comparison of various treatment in terms of dose distribution, dose statistics, clinical goals and dose volume histograms. Doses can be weighted and added. System should be capable of doing dose comparison and weighted summation of imported doses from any other system.
- 10.13 System should have tools for designing and optimizing actively scanned pencil beam proton treatment plans. It includes for robust optimization, which make it possible to create treatment plans that are robust to geometrical and dosimetric uncertainties, as well as support for block apertures.
- 10.14 System should have features such as optimization of pencil beam scanning using multi-field optimization and single-field uniform dose techniques, step-and-shoot spot scanning, optimization including lower and upper spot weight limits of delivery system, robust optimization.
- 10.15 Allow for some control of radiobiological factors in the dose calculations, e.g., proton Cobalt-Gy equivalence and radiobiological modeling.
- 10.16 System should have capability of doing dose calculation using CBCT imaging, deformable dose accumulation over the fractionations using advanced deformable image registration for adaptive proton and photon based treatment planning with advanced Monte Carlo dose calculation.
- 10.17 The latest configuration of the computer/PC available at the time of shipping should be the basic platform for the TPS.

11.0 Oncology Information System

- 11.1 The record and verify system shall accept parameters from the treatment planning system in standardized DICOM format with connectivity to PACS & HIS. The system should be HL7 compliant as well.
- 11.2 The system shall have a method to correlate patient demographic information with prescriptions and treatment parameters.
- 11.3 The system shall monitor all treatment-related equipment parameters, such as beam-on time, field size, beam modifiers, gantry position, table position, and patient-specific beam modifiers.
- 11.4 The system shall have a fault recovery system for completing interrupted treatments.
- 11.5 The system shall have an automated backup system.
- 11.6 The system shall be compatible with standard photon beam systems, as well as proton therapy systems.
- 11.7 The system shall be fully DICOM-compliant.
- 11.8 As applicable, the system shall interface with the electronic medical record system used by NCI-Jhajjar.
- 11.9 The OIS shall provide the capability to integrate simulation, CT, MRI, PET and electronic portal imaging system images into the OIS database to provide a readily available reference during the patient's course of treatment.
- 11.10 The Hardware capacity should be of 20 TB or more with rack mounted server system more server system to handle our busy department workload. In addition 10 Image Workstations for Review and Approval; a networked color image DICOM laser printer; capability for high speed internet connectivity for Online Service support. Vendor should provide licenses in order to use ten user simultaneously. (Vendor should ensure staggered upgradation of the storage capacity to match the technical development over time)

12.0 Proton-Specific Dosimetry and Quality Assurance equipments:

Vendor should provide the latest technology of proton-specific dosimetry equipments required for acceptance testing, commissioning of beam delivery systems, acceptance testing and commissioning of TPS, periodic QA checks, and verification of patient dose delivery.

12.1 Absolute dosimetry system: Vendor should provide the system of latest technology for absolute dosimetry measurement with proton-specific suitable ionization chambers for and electrometer with suitable interface and holders for absorbed dose determination as per the IAEA-TRS 398 protocol.

12.2 Reference dosimetry 3D water phantoms: Vendor should provide the latest technology based 3D water scanning system with electrometer system which is specifically meant for proton beam commissioning dosimetry with all necessary systems including beam data acquisition software and hardware systems and water reservoir and electronics etc. Scanning System should be able to measure transverse and depth-dose profiles in water with a resolution of 0.1 mm (scanning dimensions: 450 x 500 x 250 mm or equivalent) and to cover larger beam ranges and to allow measuring low-dose levels at larger lateral distances from the beam axis. The latest high end laptop computer should be provided with this software system to be provided.

12.3 Vendor should provide the latest technology **proton-specific detectors** of thimble, both large electrode diameter of plane-parallel ionization chambers i.e. bragg peak chambers, thin window bragg-peak chambers required to measure absorbed dose, output factor, beam energy range, pristine bragg-peak, spread out bragg-peak SOBP width, integrated depth dose curves, beam profiles, in-air profile measurements etc.

12.4 **Multilayer ionization chamber (MLIC)** vendor should provide one large diameter Multilayer ionization chamber (MLIC) for depth-dose profile measurements in the

range 2–335 mm in water equivalent thickness (WET). MLIC should have 180 air-vented ionization chambers of 12 cm diameter with a water equivalent intrinsic resolution of about 2 mm.

- 12.5 **Film dosimetry:** Film dosimetry is performed using radiochromic films: EBT3 Gafchromic films in combination with an Epson flat scanner Expression 11000XL Pro, with transparency unit, providing 0.17 mm resolution (150 DPI). The film dosimetry software suitable software is used for scanning, calibrating, and analyzing the films. Film dosimetry is often considered as the reference detector for 2D dosimetry or at least as an independent device to cross-check 2D fluence measurements obtained with other devices such as scintillating screens.
- 12.6 **Scintillation detector:** A high-resolution scintillator based detector with an Ethernet CCD camera required to acquire 2D fluence maps or spot maps. Detector should have maximum field size of 300 mm x 300 mm with an inherent resolution of 0.5 mm with a certificate specifying tolerances on the uniformity and geometric distortion usually lower than 2% and 1 mm, respectively. The software should allow acquiring time integrated images (over up to 90 s) or videos (sequence of images) with a maximum frequency of 7.5 frames per second.
- 12.7 **2D-Array Patient dose verification dosimetry system:** Vendor should provide ONE 2D Array detectors with suitable phantom for patient-specific dose verification of proton beam. Two-dimensional arrays of ionization chambers are required to verify scanned proton beam delivery in two dimensions and can also serve for patient specific QA measurements. The panel of detectors based 1405 or more vented ionization chambers arranged in a 27x27 cm matrix or more with calibration certificate. The bias voltage applied to all ionization chambers is 1000 V to minimize ion recombination. This detector should be possible to accommodate with suitable phantom during the commissioning as well as patient QA. The suitable dosimetry software system for patient dose verification also should be provided.
- 12.8 **Periodic QA/Safety Devices/detectors and Software Systems/Tools**
- 12.8.1 A simple **Isocenter alignment device** (two numbers) that can measure accuracy of the gantry angle, collimator angle, couch angle, isocenter accuracy, optical-radiation field congruence, optical field readouts, etc shall be supplied.
- 12.8.2 An electronic (**digital**) **spirit level** should be provided for measuring or marking incline or leveling surfaces and water phantom tank and checking collimator and gantry angles of Linear accelerators.
- 12.8.3 **Daily/Weekly/Monthly QA devices/detectors and software system (two numbers)** that can perform daily QA like radiation field flatness, symmetry, output consistency, etc shall be provided Vendor should provide appropriate/suitable necessary dosimeter and software system/modules that can store analyze all the data and report the data in a user friendly format. Provide comprehensive details on the systems offered.
- 12.8.4 **Electron-Density phantom (one number):** The electron-density phantom commissioning CT scanners for in homogeneity correction based dose calculation in treatment planning system shall be supplied that has different electron density inserts for calibrating CT numbers (Hounsfield units) against electron density and mass. Furnish complete description about the offer phantoms.
- 12.8.5 The calibrated **Digital Thermometers (one numbers):** The Portable digital thermometer to use in radiation dosimetry for measuring temperature inside a medium including water should be supplied. It should use the latest in temperature sensor technology.

- 12.8.6 The calibrated **Digital Barometers (one numbers)**: The Portable digital barometer to use in radiation dosimetry for measuring pressure inside the room should be supplied.
- 12.8.7 **Latest technology one Photon and one Neutron Survey Meters and one contamination monitor (each one number)**: one Photon and one neutron survey meter is used for surveying and monitoring of proton, photon and neutron and other contamination measurements around the proton therapy facility.

13.0 Mould Room and Patient Fixation and Immobilization Devices requirements

The mould room and patient fixation and immobilization devices/accessories/ tools are required in developing and implementing of a comprehensive, modern proton therapy program in the department of Radiation Oncology.

Vendor should provide a complete two sets of carbon fibre based patient fixation and immobilization devices including base plates, head rests, vacuum cushions for all sites for the treatment room and treatment planning CT simulator (**2 sets**).

Vendor should provide the proton therapy suitable/compatible carbon-fiber based patient positioning and immobilization Devices/systems will be provided for Brain, Head and Neck, breast, thorax, abdomen and pelvis and extremities with 2000 sheets of thermoplastics sheets for all above treatment sites.

14.0 General Requirements

- 14.1 **Expected Timeline**: The construction work for the bunker should be started only after getting all regulatory approval. The Bunker should not take more than 12 months. The equipment will be shipped at site only after completion of the bunker. The time for installation should not be more than 10 months.

14.2 Training and Staff requirement during Commissioning

Training: Training for the staff should happen in an institute of excellence which is attached to teaching center for at least 5 years and treating more than 20 patients per day.

1. **Off Site training**: Vendor must quote unit rate for Offsite training per person for a period of 2 weeks (including air fare, local logistics and accommodation etc.) cost of 8 persons will be loaded for bid ranking purpose. However, NCI-AIIMS reserve the right to increase or decrease the number of persons being sent for training and accordingly payment will be made on per person basis.

2. On-site training:

The vendor should provide onsite training for user department/s for at least 4 weeks after successful commissioning of the machine.

- 14.3 The vendor should provide two personal duly familiar with the quoted model for carrying out the commissioning of the Proton machine after the customer acceptance is over.

14.4 Equipment Warranty and Comprehensive Annual Maintenance Contract (CAMC)

14.4.1 Warranty: 1 year

14.4.2 CAMC: 14 Years extendable for another 5years

- 14.5 All necessary cabling like LAN, DICOM & PACS for data interface between TPS and proton therapy system; CT-SIMULATOR & proton therapy system should be provided with adequate number of terminals.

- 14.6 All the internal wiring including that of telephone, LAN, DICOM & PACS etc. will be concealed variety. Earthing: Double earthing with copper plate shall be provided for the treatment system and all accessories like UPS. The earthing for the AC should also be done by the suppliers. The earthing cable/wire shall be routed end-to-end through an insulated conduit. Switches light and power points should be of modular type and of standard make as listed below. All wires used must be FRLS (Fire Retardant with low smoke) type only.
- 14.7 The PROTON facility should be DICOM connected with all existing radiation facility and Imaging facility including CT, PET, MRI, etc.
- 14.8 **Facility availability:** at least 98% of the time, with clinical beam available for treatment or quality assurance between 6:00 AM and 10:00 PM, Monday through Saturday. Specific time required for preventive maintenance that should be mentioned. The preventive maintenance if any should be scheduled in the holidays after prior written approval from the department. In case the facility downtime exceeds there will be a penalty of INR 1 lac per hour **OR** the vendor will require to provide free of cost CAMC after the stipulated time duration.
- 14.9 **Treatment room ceiling height:** Sufficient to accommodate current and future ceiling mounted imaging devices, > 12 feet
- 14.10 **Anesthesia Equipment:** Treatment room, console, anesthesia and recovery room must have anesthesia and monitoring equipment installed. This will include in-room access to gases as well as a number of ports sufficient for cabling of current and predicted future monitoring equipment.
- 14.11 **Room ports:** Five or more adequate number of ports should be installed in treatment room to allow future addition of cables and other equipment into the treatment room. The ports will be distributed in size from 2 inch to 4 inches and will run from the treatment control area to a minimum of two locations inside the treatment room.
- 14.12 **Patient viewing and communication:** Treatment room will have patient viewing and communication equipment. This will consist of a minimum of 4 cameras mounted (preferable on zoom and one wide angle) so that at least one camera is capable of meaningful observation of the patient at any gantry or table position. Two-way audio communication should be provided.
- 14.13 **Room access time:** The room should be designed such that it will take no more than 15 seconds to emergently stop a treatment, open the door and reach the patient.
- 14.14 **Radiation monitoring:** All appropriate and regulatory required proton, photon and neutron monitoring equipment, warning signs and access control should be provided for appropriate areas of the facility.
- 14.15 **Neutron production:** The system shall be designed with minimal materials intersecting the beam line to minimize the production of neutrons in the proton delivery system. The vendor should provide an estimate of neutron activity (both dose and half-life) upon beam stop after full operation.
- 14.16 **Residual radioactivity:** The vendor shall provide an estimate of residual radioactivity of all system and building components assuming a 30 year operational lifetime of the facility.
- 14.17 The Anesthesia room shall be provided with wall-mounted storage cupboards; to store: Anesthesia and other related equipments
- 14.18 Sufficient number of Open Racks of high Quality vendors should be provided to house the immobilization materials
- 14.19 TPS room should be provided with LED X-ray film viewer with adjustable brightness; capable of holding 3 films of 14"x17" size-2 nos.

14.20 The CONSOLE room shall be provided with wall mounted storage cupboards with MDF laminate shutters; to be fixed on the wall above the workstation (approx 1800mm length; 750 mm height; 300 mm depth).

15.0 National Regulatory Body and Radiation Safety and Protection Requirement:

The vendors should visit the site and user department to get the Plan Layout and should facilitate and coordinate with user department in communicating with AERB in providing all required information pertaining to radiation safety compliance of the concerned equipment till the clinical commissioning process of first patient treatment commencement.

(B) SCOPE OF CONSTRUCTION OF COMPATIBLE BUNKER FACILITY OF PROTON THERAPY CENTRE AT NCI-JHAJJAR

During planning and making of the building the vendor must follow the latest NBC code for all practical purposes. The building should be built with adherence to the following clause:

- 1) The design of building shall ensure control of noise due to walking, movement of trolleys and banging of doors etc. by providing sound proofing materials where ever required.
- 2) The architectural design should take in to account the requirements of physically challenged persons.
- 3) Furnishings in the room should be complete in all respects including, online data/information technology systems including permanent telephone & internet lines, power points etc.
- 4) There should be 100% power backup after factoring necessary redundancy
- 5) Mechanical services shall be designed and installed with provisions to contain noise and the transmission of vibration generated by moving plant and equipment schedules to achieve acceptable noise and vibration with respect to human beings specified by ISO standards 13.140 and 13.160

The system should be installed and handed over in working condition with all necessary electrical, wall finishing, air conditioning, flooring and plumbing work undertaken by the vendor in consultation with the user dept. at NCI-Jhajjar.

REGULATORY GUIDELINE to ADHERE

- 1) The vendor must strictly adhere to the guideline for hospital Safety laid down by “National Disaster Management Authority” Govt of India (National Disaster Management Guidelines: Hospital Safety. A publication of the National Disaster Management Authority, Government of India. ISBN: 978-93-84792-03-9 978-93).
- 2) CPWD guideline for **General Specifications for Heating, Ventilation & Air-Conditioning (HVAC) Works (2017)**; Govt of India.
- 3) AERB guideline for building the bunker and patient treatment area and adhere to the approved layout design

DESIGN PHILOSOPHY & SCOPE OF WORK

The proposed site of PROTON therapy facility will be located next to the OPD block (NCI-Jhajjar) and will connect with the OPD block by a 3.75 meter wide tunnel at the basement level. The PROTON therapy facility hence will be partly located in the new bunker block and partly in the basement of the OPD block (as specified in the drawing).

The vendor should follow the below mentioned concept during developing the facility

Building aesthetics should be attractive and refreshing. It is important in enhancing the hospital's public image. A better environment also contributes to better staff morale and patient care.

Aesthetic considerations include:

- 1) Increased use of natural light, natural materials, and textures
- 2) Use of artwork
- 3) Attention to proportions, color, scale, and detail
- 4) Bright, open, generously-scaled public spaces
- 5) Homelike and intimate scale in patient rooms, day rooms, consultation rooms, and offices
- 6) Compatibility of exterior design with its physical surroundings
- 7) Compliance with Environmental and Energy efficiency norms and obtaining at least 3 Star GRIHA rating.

The vendor will design, built, furnish the entire facility, including the tunnel.

- 1) The proposed building for Proton Facility comprises of three levels, the highest level includes Power supply room and Water cooling room, any office, and storage space required by vendor.
- 2) The treatment level contains cyclotron, the treatment room, the main control room, and treatment control room, anesthesia & Recovery room, Patient Toilet and Change room.
- 3) Cyclotron and gantry support structures will be at the bottom level.
- 4) The building design must consider not only equipment to be supplied under the initial configuration, but also upgrades planned for the future
- 5) The vendor has to connect the PROTON bunker with the existing OPD block at the basement level with a 3.75 meter wide tunnel X10 meter length.
- 6) The tunnel should be made in a way that in future it can be separated out totally if a future expansion in the opposite side is planned. Future expansion work should be possible with the functional present facility remaining unaffected.
- 7) The vendor should also make arrangement for fire exit.
- 8) The PROTON BUNKER should have the following rooms other than (Cyclotron Pit, Treatment Room, and Gantry)
- 9) **Description of different rooms and relevant finish**

Room	Size (Sq. M)	Floor	Wall	Comments
Anesthesia & Recovery	30	Marble/Granite	Marble/Granite	Theme of this area should be taken care of pediatric patients
Toilet 2 (patient TOILET ONE FORMALE AND FOR FEMALE)	5	Marble/Granite (Anti-Skid type)	Marble/Granite	Consider Male/female patients, Pediatric and Physically challenged patients
Change Room (2 nos)	4	Marble/Granite	Marble/Granite	Provide Locker for patients/ Hangers/500 Gowns every year
Treatment Control Room	20	Marble/Granite	Marble/Granite	
Physics QA room	10	Kota stone	Painting	May be placed in Upper Level
Main control room				

10) The PROTON vendor shall be responsible for building the following rooms in the OPD block (FINISH and Furniture) only in the scope of the vendor

Room	Size (Sq. M)	Floor	Wall	Comments
Patient waiting area	120	Marble/Granite	Marble/Granite	A reception desk has to be created of Marble, Theme of this area should be taken care of pediatric patients
TPS room	50	Marble/Granite	Marble/Granite	Consider for workstation
Doctors Room	20	Marble/Granite	Marble/Granite	Provide wash basin
Research room	20	Marble/Granite	Marble/Granite	
Discussion Room/Meeting Room (May be shared with the Vendor Engineers)	100	Marble/Granite	Marble/Granite	(Details in Meeting room specification)
Counselling room	25	Marble/Granite	Marble/Granite	Provide wash basin
Storage Room	35	Marble/Granite	Marble/Granite	
Patient Examination Room	25	Marble/Granite	Marble/Granite	Provide wash basin
Server Room	35	Marble/Granite	Marble/Granite	
Proton Lab	50	Marble/Granite	Marble/Granite	
Store room /Reception room	35	Marble/Granite	Marble/Granite	

11) All rooms should have false ceiling.

1.0 BUILDING MATERIAL

1.1 Reinforced Cement Concrete: The type, mix and control of RCC works in the PROTON Therapy area shall be as per the norms of latest AERB regulations.

1.2 Painting

- (i) All internal surfaces should be painted with two coats of superior grade acrylic emulsion over a coat of primer of approved make and colour. The surface preparation must be done properly and with cement based putty only.
- (ii) Ceiling surfaces shall be painted with Oil bound distemper in areas without false ceiling.
- (iii) All service areas / Rooms shall be painted with Oil bound distemper/enamel paint/Texture Paint

(iv) There should be provision of Skylight/windows in the treatment room

1.3 Flooring And Wall Finish:

- (i) Flooring should be of high quality marble or Granite in the entire area (Console, Anesthesia room, Recovery room, Change room, Physics QA room MCR, TCR and rooms in the OPD block)
- (ii) Entire wall should be covered with matching Marble/Granite finish
- (iii) Toilet flooring shall be anti-skid finish
- (iv) Main staircase shall be finished with Marble.
- (v) Fire escape staircase shall be finished with Kota Stone.

1.4 External Façade & Glazing

- (i) The external façade should elegantly match the adjacent buildings. A spider glass based facade in all sides is required from a height of 3 feet from the ground.
- (ii) The vendor may consider a curved front with glass.
- (iii) The facade should be supported by a grid of stainless steel tensioned CABLES along with LED glass clamps.
- (iv) The glass should have thermal insulation
- (v) Those 3 feet should be of granite/marble covered.

1.5 Doors & Windows:

- (i) The vendor should consider toughened glass based separating wall between the patient waiting area and the connecting corridor.
- (ii) The vendor must provide Automatic sliding door systems at the entry of proton therapy facility and the reception area. The following specification may be considered

1.6 **Designing of the roof:** The vendor must ensure to provide suitable camouflage in the roof around any service facility (Chiller, AC Outdoor units etc.). This should be in all direction including the top should be covered. The ultimate look should match the entire building.

2.0 **ELECTRICAL SYSTEM:** Lighting should confirm to NBC for Lighting. All electrical system, fixtures, fittings etc. should confirm to CPWD specifications, latest IS code.

2.1 External Lighting

The vendor should make provision of lighting in the building façade and canopy. The external lighting should be controlled automatically using Timer. The lighting design shall be as per NEC/ECBC to attain required illumination level.

2.2 Internal Electrification:

- (i) Modern designer LED light fitting is to be considered in all areas including general areas, office areas, etc. The internal lighting should be uniform, glare free. Intelligent lighting control system should be considered.
- (ii) The vendor should provide Ambient light (Philips/Other International make) in the treatment room and remaining internal lighting should be LED based and should match the building design and aesthetics.
- (iii) The requirement of light should be as follows

Area/Room	Type of Work	Minimum Lux Level
Doctors Room	General Lighting	150
Doctors Room	Working Table	1000-500
Waiting area		150

Toilet/Change room		200-100
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(iv) Light and power outlets on emergency supply wherever required shall be on separate emergency circuit connected with battery backup (UPS) to the generator supply.

2.3 **Emergency Lighting System**

The vendor must adhere to the ISO 7010 guideline for providing emergency backup based on LED signage's as required in the facility. All relevant signage's should be LED based and emergency light fitting should be LED based.

2.4 **Lightning Protection System**

Lightning protection system for the building shall be provided as per IS 2309.

2.5 **Telephone system:** Telephone outlets must be provided generally in all areas except public waiting areas, lift lobby, toilets, Mechanical/Electrical rooms, clean/dirty utility and staircases.

2.6 **CCTV system:** The scope of work shall include supply, installation, testing & commissioning of following:

- (i) Dome cameras in waiting area/corridors/entry & exit/ Lift & staircase lobbies
- (ii) PTZ cameras in building periphery/wherever required
- (iii) The proposed system shall be IP based type. The purpose shall be surveillance of vehicular & human traffic within the premises. Main components of CCTV system comprise of cameras, NVRs, LED Monitors, racks, cables and cable containment system etc.
- (iv) **Areas covered by the system are as follows:**
 - Entry & Exit - PTZ camera with night vision
 - Main/Emergency - PTZ camera with night vision entry of the building
 - Main/Emergency/General entry - IR Dome camera with night vision
 - Lobby/Reception/Lift lobby/ - IR Dome camera with night vision
 - Fire escape staircase/ Corridors/waiting area - IR Dome camera with night vision above mentioned cameras shall be IP based type.

2.7. **Fire Alarm System:** The fire detection and alarm system should have a centralized microprocessor based analogue addressable type system with a computerized central monitoring station to be located in the security gate.

3.0 FIRE FIGHTING SYSTEM: As per India Govt Fire Policy/Rules

4.0 HVAC SYSTEM: The cooling of the PROTON bunker ONLY is in the scope of the vendor. Load calculation should be according to the table from ASHRAE GRP 158, Load Calculation Manual (Heating & Cooling). The vendor must abide by the CPWD, 2017 guideline in this regard.

5.0 VENTILATION SYSTEMS: The vendor must abide by the CPWD, 2017 guideline in this regard. The number of air changes per hour in the ventilated areas (toilet) is ASHRAE standards

6.0 **CHILLER for the Facility**

The vendor should provide common water cooled chilling plant for the facility with screw compressors. AHU's with Hepa filters should be used for treatment areas. All HEPA filters shall be of disposable type Aluminum powder coated filter with filtration

efficiency of 99.97% down to 0.3 micron. Fresh Air Changes for all the areas must satisfy the ASHRAE requirements

7.0 ELEVATORS: Vendor should consider Electric traction type Passenger & Hospital Elevator.

- (i) Capacity: 3 ton
- (ii) Serving Floors: Ground & First floor
- (iii) Interior: Stainless steel
- (iv) Flooring: Aluminium Chequered plate or Granite flooring
- (v) Light: decorative luminaries with LED lamp

8.0 SEWERAGE SYSTEM

Vendor must provide sump with sump pump for waste –water and effluent drainage from the facility. The requirement of capacity should be calculated according to the load on the facility.

Rainwater from terrace should be collected with rainwater down take pipes and terminated 150 mm above ground. The rainwater should be allowed to flow in the surface and collected in drainage system.

9.0 INTERNAL BEAUTIFICATION AND EXTERNAL LANDSCAPING should be made to give the facility a state of the art look.

The indoor landscaping should be done with easily maintainable plants in the patient waiting area and the treatment level (wherever suitable).

The exterior should be landscaped with decorative fountain, perennial plant/garden with properly lighted.

10.0 ACCESS CONTROL:

- (i) The vendor must provide access control system based on biometric/finger print access in all room designated for proton therapy.
- (ii) It should have Face, Fingerprint identification method for 5000 users.
- (iii) Identification Speed should be less than 1 sec.
- (iv) There should be an option of emergency key.
- (v) The equipment should be backed by USB, TCP/IP.
- (vi) The equipment should have power back up facility for an emergency power cut off situation.
- (vii) The system should allow maintaining electronic log and there should be facility of online data transfer.
- (viii) The maintenance should be easy.

11.0 SOUND/PATIENT ANOUNCEMENT SYSTEM: There should be provision for patient's announcement system and roof mounted music system in the patient treatment level (including console, treatment room and recovery room). It should have the following feature

- (i) Streaming music via home Wi-Fi network plus Bluetooth
- (ii) Rich, room-filling sound
- (iii) Compatible with the entire Sound Touch family of wireless speakers
- (iv) Informational display
- (v) Preferable from BOSE/PHILIPS

12.0 FURNITURE

- (i) Anesthesia room shall be provided with wall-mounted storage cupboards; to store: Anesthesia and other related equipment's.
- (ii) Sufficient number of open racks of high Quality vendors should be provided to house the immobilization materials

- (iii) TPS room should be provided with LED X-ray film viewer with adjustable brightness; capable of holding 3 films of 14"x17" size-2 nos.
- (iv) The CONSOLE room shall be provided with Wall mounted Storage cupboards with MDF laminate shutters; to be fixed on the wall above the workstation (approx 1800 mm length; 750 mm height; 300 mm depth).
- (v) Revolving chairs height adjustable, High-back with hand-rest for Control room, TPS room - **30 Nos.**
- (vi) Workstation/Tables for Console room & TPS room: The Console room and TPS room should be provided with suitable workstations(s) of reputed brand, to accommodate the various Terminals in Console Room, TPS Room. The Workstation shall be providing with enough power sockets, LAN sockets etc. to enable smooth functioning of the LINAC and TPS.
- (vii) Patients waiting area should be well designed with high quality marble and comfortable sitting arrangement and equipped with 10 no (s) sofa
- (viii) Bookshelves: Five-door bookcase with glass doors, height approx. 1700 mm; to store manuals;
- (ix) CD/DVDs, spares etc-4 Nos.
- (x) The vendor must provide matching curtains in all relevant rooms

13.0 PROTON MEETING ROOM

Design Considerations:

- (i) TVs should be sized (minimum 65 inch) and located where all participants can view small text such as spreadsheets.
- (ii) There should be provision of a roof mounted modern projector and sound system.
- (iii) Effective video conferencing, web collaboration and teleconferencing require a room without echo.
- (iv) Consider alternative table shapes for efficient space utilization and enhanced collaboration.
- (v) The bottom edge of wall mounted TVs should be 48" from the floor.
- (vi) TV speakers should be utilized for audio.
- (vii) Dual-mode speakerphones should be installed on the tabletops:
- (viii) USB speakerphone mode- for computer based video conferencing and web collaboration.
- (ix) Teleconference mode- the dial pad and phone line connection should allow this phone to replace a typical teleconferencing phone.
- (x) USB connected video cameras should be mounted on top of the TVs. These are for computer based video conferencing and web collaboration.
- (xi) The tabletop should have built-in cable cubby with HDMI, VGA (+audio) and USB cables to connect laptops, video cameras and speakerphones.
- (xii) An auto-sensing HDMI switcher will be installed under the table. The sensor will detect VGA or
- (xiii) HDMI active inputs from laptops and output an HDMI signal to the TV.
- (xiv) Control panels should enable users to turn TVs on or off and to adjust the TV volume in place of remote controls. Control panels will either be installed on the table or on the wall.
- (xv) Table and comfortable chairs adequate in number should be provided.

14.0 Earth quake: Vendor must consider Seismic zone factor when calculating the building development.

In addition to the above mentioned items if any material/system has been inadvertently missed which is necessary for smooth functioning of the facility should be installed/added without any financial burden.

Item No. 2 (Rfx/ Event number 3000003420)**ORT Machine (Electron Based)**

The Intra-Operative radiotherapy System (Electron based) should be mobile, self-shielded, electron accelerator with beam stopper for intraoperative radiotherapy to be used in unshielded operating room. Offered equipment should be of latest state-of-the-art technology based design and latest model.

Equipment should also be capable of integrating with standard networking and PACS systems available in the hospital.

The offered equipment should have the following technical features:-

1. IORT system (Electron based)

1. The equipment should be a dedicated **electron accelerator**.
2. The equipment should be able to deliver at least 3 clinical electron energies.
3. Energy of the therapeutic beam should be from 6 MeV to 12 MeV.
4. Minimum dose rate of each beam, in the therapeutic mode (determined at the maximum depth, for the applicator with a diameter of 10cm) min. 1000cGy / min.
5. Field Symmetry should not deviate by more than 3% for any applicator.
6. Field Flatness (Homogeneity) (measured inside the flattened region, defined as 1 cm inside the 90% isodose contour edges, at Dmax) should not exceed 7% for 10cm circular field.
7. Variation in beam output and energy over the range of machine orientations shall be less than 1% and 2mm respectively. The vendor must be able to demonstrate this requirement during the acceptance testing of their unit.
8. The X-Ray Contamination specified in water at a depth of 10 cm beyond the 10% isodose line should be less than 1%.
9. The Dose per pulse shall be a value such that quality assurance (QA) procedures are simple to implement and are similar to those used in conventional radiotherapy treatment.
10. The surface dose shall be at least 85% of the maximum dose measured in the axis of the beam for all the applicators and for all the energies.
11. Dual (primary and backup) dosimetry system for measuring radiation output, based on vented ion chambers with automatic pressure and temperature compensation.
12. It is preferable to use AAPM TG51 protocol or IAEA TRS-398 protocol to determine energy and absolute calibration. If these protocols cannot be used, the vendor shall state in detail what alternative protocol is used to determine energy and absolute calibration. Any alternative protocol must achieve the accuracy required by the AAPM TG-51 or IAEA TRS-398 protocols for electron beams.
13. Equipment should have appropriate beam-stopper.
14. Internal shielding limits stray x-ray radiation at 3m distance from the patient plane.
15. Treatment head of the equipment should have at least 5 degrees of freedom.
16. Motion of the treatment head should be controlled by electric motors.

17. Complete unit (equipment) should be easily movable between operating rooms without installing additional equipment.
18. Equipment should have built-in, autonomous cooling system.
19. Vendor should provide appropriate clamp to mount the applicator to surgical table.
20. The offered equipment should have either **Hard Docking OR soft Docking**
21. Range of motion and treatment flexibility:- The treatment head shall have the ability to move in 5 axes with following minimum ranges:-
 - Gantry: +/- 45 degrees
 - Tilt: +20/-10 degrees
 - Vertical: 30 cm total range
22. The IOeRT system shall be connectable directly to the hospital power supply network

2. Software Management System

1. This software should be able to execute stability QA; - report, print, and store machine calibration results, perform quality checks and calculate the number of monitor units (MU) required to administer a prescribed dose at a specified depth with all energies and all types of applicators.
2. 2D dose visualization for PDD's and Isodose Curves.
3. Dose planning with the capability to mix different electron energies.
4. The software shall include an MU calculator based on treatment parameters.
5. The software shall be DICOM 3.0 Compliant and HL 7 compliant.
6. The software shall track and record daily QA sessions including:
 - Beam energy and output statistics
 - Functionality Tests
 - Interlocks

3. Treatment Planning System (TPS) for planning intraoperative radiotherapy treatments with electron beams:-

1. 3D Treatment Planning System for Electron based IORT for 1 workstation. Must include ability to calculate Dose Volume Histogram (DVH).
2. The 3D TPS shall have USFDA or European CE Certification with certification from an internationally, independently recognized certification institution
3. Simulation of the IORT procedure based on the pre-operative CT scans
4. Selection of applicator (size and bevel angle) from pre-defined list of applicators. Position and orientation of the applicator should be defined in 3D space and with respect to the patient
5. Calculate dose distribution using Pencil Beam algorithm taking into account electron density of patient's tissue and geometry of selected applicator (including bolus and shielding); and
6. Calculate dose distribution using electron Monte Carlo algorithm taking into account electron density of patient's tissue and geometry of selected applicator (including bolus and shielding)
7. Generate Treatment Reports with a full set of treatment parameters including:-
 - Position and orientation of applicator
 - Applicator's diameter and bevel angle
 - DVH

- Prescribed dose
 - Normalisation level (normalisation method)
 - Calculated Number of Monitor Units
8. It should have at least two 19" or more TFT flat screen LCD colour monitor for display of 1024 x 1024 matrix or more.
 9. Computer CPU systems should be running on a high-end workstation platform with UNIX/LINUX/ Window of latest configuration. RAM size must be at least 8 GB or better.
 10. Laser colour printer A4 size, latest model should be provided: 1 nos.

4. Applicators:-

1. Set of cylindrical 0°, 15, 30, 45 bevel applicators from 3 cm to 10 cm in diameter, with at least 1 cm step (32 applicators).
2. The equipment should have a set of bolus of 5mm and 10mm for each applicator (64 boluses).
3. Therapeutic Applicators capable of being Steam Sterilized at temperatures of >120C or plasma sterilization system for sterilisation of applicators.
4. Therapeutic Applicators with diameters of 6cm and less shall have thin walls in order to maximize the therapeutic ratio and reduce incision size.
5. Therapeutic Applicators shall be constructed of a material with density ≥ 1.3 g/cc to minimize radiation leakage through the applicator walls.
6. Set of "Radioprotection Discs", approximately 10mm thick, from 4 - 9 cm or more in diameter (min. 6 protectors).

5. Dosimetry Equipment

1. Vendor must provide relevant QA device, Phantom and dosimetry equipment required for QA and dosimetric calibration.
 - a) **PDA** :- Photo Diode Array: 5 diodes positioned orthogonally to each other to measure the radiation of the miniaturized accelerator. The objective of this test is to assure the isotropy of the emitted beam.
 - b) **PAICH** :- Probe Adjuster Ion Chamber Holder: the output can be checked. An ion chamber is mounted onto the probe adjuster in such a way that the ion chamber window sits right above the tip of the miniaturized accelerator to enable for treatment planning until a coefficient has been computed.

6. Standards, Safety

1. Equipment standard and safety should comply with the national regulatory AERB guidelines and offered model should have AERB type approval and NOC.
2. Equipment should be USA-FDA and/or European CE with 4 digit notified body number certified product.

7. Staff Training

1. The vendor should provide off site training at high volume centre/teaching centre where the same model preferably is installed and being utilised for all established indications. Such centre must be treating at least 100 cases per year with

equipment.

2. Vendor must quote unit rate for Offsite training per person for a period of 2 weeks (including air fare, local logistics and accommodation etc.) cost of 8 persons will be loaded for bid ranking purpose. However, NCI-AIIMS reserve the right to increase or decrease the number of persons being sent for training and accordingly payment will be made on per person basis.
3. The vendor should provide onsite training for user department/s for at least 4 weeks after successful commissioning of the machine.

8. Equipment Warranty and Service Facilities.

1. Vendor will provide 5 years warranty and 5 years CAMC on equipment and other accessories. Warranty to be commenced from the date of first patient treated as per AERB norms. .
2. 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.
3. Spare parts should be available for minimum of 10 years.
4. During the warranty period, all the software updates should be provided without any extra charges.
5. Last Man Out Switch and any other regulatory requirement.
6. Factory trained service engineer/Application specialists should be available in Delhi-NCR to look after the installation and maintenance of the system without patient treatment interruption.

9. General Requirements

1. The system should be integrated and connected to CT-Simulator, MRI/PET-CT, PET-MRI and Treatment planning station of Radiotherapy department, etc.
2. System should be capable of integrating with standard record-and-verify and networking and PACS systems commercially available.
3. The system should have latest technology of hardware and software features commercially available. Any advanced version which is released within 6 months period after LC opening should be provided/upgraded without any extra cost.
4. All claims regarding meeting the specification should be duly supported by appropriate, latest technical catalogues/brochures from the manufacturer.
5. Co-ordinate with OT vendor for OT door interlocking
6. The vendor should provide one CCTV camera to observe the patient during treatment and provide slay monitor (one)

BOQ for IORT (Electron Based)		
Sr.no	Name of the item	Quantity
1	Intra operative radiotherapy machine (electron based) with all necessary hardware, software as specified in the tender document	1

Item No. 3 (Rfx/ Event number 300003421)**IORT Machine (X-Ray Based)**

Intra-Operative radiotherapy system (X Ray based) should be mobile, self-shielded, for intraoperative radiotherapy to be used in unshielded operating room suitable for use in multiple organ system. Offered equipment should be of latest state-of-the art technology based design and latest model.

Equipment should also be capable of integrating with standard networking and PACS systems available in the hospital.

The offered equipment should have the following technical features:-

1 IORT system (X-Ray Based)

1. The machine should be dedicated **Mobile Photon beam LINAC**. It should have a point-source type x-ray emission, Spherical dose distribution around the isocentre of the miniaturized accelerator, Steep dose gradient (approx. $1/r^3$) in water (soft tissue equivalent). Positional accuracy of delivered dose +/- 1 mm.
2. The LINAC should have mounted on mobile stand/mounting for LINAC having multiple axis movement.
3. The equipment should be able to deliver photon energy of at least 50kV and not exceeding 100 kV for intra-operative Radiotherapy.
4. The equipment should have high dose rate to reduce the treatment time.
5. The equipment should have positional accuracy of delivered dose +/- 1 mm
6. It should be able to deliver steep dose gradient.
7. It should have inbuilt internal radiation monitor to enable real time measurement of dose delivered.
8. The IORT system shall be connectable directly to the hospital power supply network.
9. High precision water phantom with < 100 μ m accuracy for independent dose verification should be included in the offer.
10. Integrated high voltage supply to ensure patient protection and to avoid high voltage cables in the body.
11. The equipment should be in use globally for wide range of indications (Breast Cancer, Endometrial Cancer, Lung Cancer, Soft tissue Sarcoma, Skin cancer etc.).

2. Software Management System

1. It should have an integrated treatment planning system which enables treatment planning in pre, post and during beam delivery. TPS should be compatible to DICOM, so that the CT/ MRI/PET-CT/PET-MRI images can be imported for planning and verification.
2. TPS should have 3D treatment planning simulation software for IORT. For pre-, intra- and post-treatment operations. TPS should offer the possibility of case selection and dose computation near critical organs with the Monte Carlo algorithm to correct tissue heterogeneity and enables easy documentation.
3. The software shall be DICOM 3.0 Compliant and HL 7 compliant.
4. The software shall track and record daily QA sessions including:
 - Beam energy and output statistics
 - Functionality Tests
 - Interlocks"

5. It should have one 19" or more TFT flat screen LCD color monitor for display of 1024 x 1024 matrix or more.
6. Computer CPU systems should be running on a high-end workstation platform with UNIX/LINUX/ Window of latest configuration. RAM size must be at least 8 GB or better
7. Laser color printer A4 size, latest model should be provided:-1 no.

3. Applicators of all available dimension:-

1. Spherical Applicator set including spherical applicators from 1 to 5cms with variable diameters for different incision length. The applicators are reusable and sterilizable.
2. Skin Applicators. The applicators are reusable and sterilizable
3. Flat Applicators. The applicators are reusable and sterilizable
4. Needle applicator

4. Dosimetry Equipment

1. Vendor must provide relevant QA device, Phantom and dosimetry equipment required for QA and dosimetric calibration.

5. Standards, Safety

1. Equipment standard and safety should comply with the national regulatory AERB guidelines and offered model should have AERB type approval and NOC.
2. Should be USA-FDA and/or European CE with 4 digit notified body no certified product.
3. There should be provision of interlock/door interlock to avoid chances of radiation exposure.

6. Staff Training

1. The vendor should provide off site training at high volume center/teaching center where the same model preferably is installed and being utilized for all established indications. Such center must be treating at least 100 cases per year with equipment.
2. Vendor must quote unit rate for Offsite training per person for a period of 2 weeks (including air fare, local logistics and accommodation etc.) cost of 8 persons will be loaded for bid ranking purpose. However, NCI-AIIMS reserve the right to increase or decrease the number of persons being sent for training and accordingly payment will be made on per person basis.
3. The vendor should provide onsite training for user department/s for at least 4 weeks after successful commissioning of the machine.

7. Equipment Warranty and Service Facilities

1. Vendor will provide 5 years warranty and 5 years CAMC on equipment and other accessories. Warranty to be commenced from the date of first patient treated as per AERB norms.
2. 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.
3. Spare parts should be available for minimum of 10 years.
 4. During the warranty period, all the software updates should be provided without any extra charges.
 5. Factory trained service engineer/Application specialists should be available in Delhi-NCR to look after the installation and maintenance of the system without patient treatment interruption.

8. General Requirements

1. The system should be integrated and connected to CT-Simulator, MRI/PET-CT, PET-MRI and Treatment planning station of Radiotherapy department, etc.
2. System should be capable of integrating with standard record-and-verify and networking and PACS systems commercially available.
3. The system should have latest technology of hardware and software features commercially available. Any advanced version which is released within 6 months period after LC opening should provide/upgrade for free of charge.
4. All claims regarding meeting the specification should be duly supported by appropriate, latest technical catalogues/brochures from the manufacturer.
5. There should be provision of slay monitors outside the OT room for observing patient vitals
6. The model offered should have supporting validation studies.
7. On-line UPS for the entire system with at least thirty minutes back up supply. In addition to this main UPS, additional UPS systems shall be supplied along with all other computer terminals/workstations/ accessories, wherever applicable. The batteries for the UPS systems shall be maintenance free and shall be looked after/replaced (whenever required) by the vendor throughout the warranty period of the main equipment's and during the CMC period.
8. The vendor should provide one CCTV camera to observe the patient during treatment and provide slay monitor (one)
9. In this regard proof of installation(s) must be submitted (duly translated in English in case the certificate is in other foreign language).

BOQ for IORT (X Ray Based)					
Sr. no	Name of the item			Quantity	
1	Mobile Intra Operative Radiotherapy system (X-Ray Based system) machine with all necessary hardware, software as specified in the tender document			1	
Consumables					
A	B	C	D	E	F
Price of consumables in INR till consignee site but exclusive of GST					

S.No.	Name of the Item	Number of Patients treated with 1 such tube	Number of x-ray tube required for treatment of 1000 Patients (for Bid ranking only) *	Unit Rate#	Grand total for purpose of bid ranking (F= D*E)
1	X-Ray tube				
Grand Total for Bid Ranking					
* A certificate in this regard declaring total number of X-Ray tube required for treatment of 1000 Patients from the OEM to be enclosed in the Technical Bid.					
# Unit Rates quote shall stay valid for the duration of contract and NCI AIIMS reserves the right to procure the consumables from the bidder at quoted rates or from any other source as per actual requirement.					

Item No. 4 (Rfx/ Event number 3000003422)**Mobile CT Scanner for IORT**

E-tenders are invited for the supply of a latest technology based 32 Slice CT Scanner for intraoperative radiotherapy. The CT scanner should be of **large-bore 32 slices per rotation**. It should also be capable of integrating with standard networking and PACS systems available in the hospital. The offered equipment should have the following technical features.

1. Whole body, Mobile 32 CT scanner system

- 1.1. The system should be a 32 Slice mobile CT Scanner .The imaging should be thin section and of high quality image
- 1.2. The system should be mobile with the ability to work in different clinical applications that includes Intraoperative radiotherapy, Brachy Therapy and CT simulation and Image Guided radiotherapy.
- 1.3. The System should have an Image reconstruction matrix of at least 512 x 512
- 1.4. The system should have:
 - a) X-ray Tube Voltage : up to Min 120 kV
 - b) X-ray Tube Current: up-to 250 mA or more
 - c) Focal Spot: 1mm X 1mm or more
- 1.5. The system should be able to run on standard single phase 220 V AC.
- 1.6. The system should have a bore size of 85 cm or more suitable for Intraoperative radiotherapy
- 1.7. The X-Ray detector system should have solid state detector with at least 1.25 mm to 10mm detector width to generate multi slice CT images of soft tissue and bone.
- 1.8. The system should have an Image reconstruction speed of at least 16 images per sec or more
- 1.9. The system should have capability for both axial and helical scan.
- 1.10. The system should allow motorized transportation with a front view camera for easy movement of the system between different Operating Rooms thus adding to its higher utilization
- 1.11. The system should be compatible with OT table for precise imaging in OR.
- 1.12. The system should have built- in battery and it should have adequate cables for recharging as and when required.
- 1.13. The system should have small footprint that allows transport through standard doorways and elevators.
- 1.14. The system should have a minimum scan range of one meter.
- 1.15. The system should be supplied with respective calibration devices to check the CT parameters and Quality control parameters.

- 1.16. The system should support DICOM for connectivity and should have the capability to transfer the scans to PACS.

2. Data Import/Export and Connectivity

- 2.1 System should be able to export image, volume and plan data in DICOM 3.0 standard along with all Radiotherapy specific data and private objects, DICOM RT plans and data sets.
- 2.2 System should be able to import DICOM RT data to IORT Treatment planning system (TPS) available in OR.
- 2.3 system should be possible to integrate with the IORT TPS. The vendor should inspect and will be responsible for complete integration.

3. Equipment Warranty and Service Facilities

- 3.1 Five years warranty to be commenced from first patient treated as per AERB norms.
- 3.2 CMC year-wise for quoted machine, UPS, Battery and other accessories for next 5 years after warranty period.
- 3.3 95% uptime warranty/guarantee during warranty and CMC period.
- 3.4 Spare parts should be available for minimum of 10 years.
- 3.5 During the warranty period, all the software updates and upgradation should be provided without asking for free of charge.
- 3.6 Please quote the rates of consumables recommended as well as other necessary consumables valid for 5 years block
- 3.7 Factory trained service engineer/Applications specialists should be available in Delhi to look after the installation and maintenance of the system without patient treatment interruption.

4. Standards, Safety and Training

- 4.1 Equipment standard and safety should comply with the national regulatory AERB guidelines and offered model should have AERB type approval and NOC.
- 4.2 Should be USA-FDA or European CE certified product.
- 4.3 The vendor should provide comprehensive on-site training on mobile CT and the training period should be at least for two weeks.
- 4.4 On-site Application training should be provided for minimum One week for all staff members in the department.

5 General Terms & Condition

- 5.1 The vendor shall list the number of their mobile CT installation/user in India.
- 5.2 All claims regarding meeting the specification should be duly supported by appropriate, latest technical catalogues/brochures from the manufacturer.

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

- a) The bidders must quote for 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

1. The bidders must be a manufacturer. In case the foreign manufacturer does not quote directly, they may authorise an Indian agent as per proforma of “Manufacturer Authorization Form” as given in the bidding document to quote and enter into a contractual obligation.
2. The Bidder should have supplied and installed at least 1 (one) unit in last Five years from the date of Bid Opening, similar equipment meeting major parameters of technical specification which is functioning satisfactorily.
3. In support of 2, the Bidder shall furnish Performance statement in the enclosed Proforma ‘A’.

The Bidder shall furnish Satisfactory Performance Certificate in respect of above, duly translated in English and duly signed alongwith the bid.

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

Price to be filled in the relevant field strictly as per the Price Format provided in the e-tender portal '<https://etender.lifecarehll.com/irj/portal>' under the RFx No. as per terms of the tender.

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?			
12.	Have you accepted all the terms and conditions of this bidding document?			
13.	Have you submitted the duly signed copy of Integrity pact (At Appendix-A) on non-judicial stamp paper?			

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:_____

APPENDIX-A

INTEGRITY PACT

PRE-CONTRACT INTEGRITY PACT

This Pre-Contract Integrity Pact (herein after called the Integrity Pact) is made on _____ day of the month of _____ Year _____

Between

HLL Infra Tech Services Ltd. [HITES], a wholly owned subsidiary company of M/s. HLL Lifecare Ltd. a Government of India Enterprise with registered office at HLL Bhavan, Poojappura, Thiruvananthapuram 695 012, Kerala, India. (Hereinafter called "HITES", which expression shall mean and include, unless the context otherwise requires, his successors in office and assigns) of the First Party.

And

M/s. _____, with office at _____ represented by Shri _____, _____ (*Designation*) (hereinafter called the "BIDDER/Seller"/Contractor which expression shall mean and include, unless the context otherwise requires, his successors and permitted assigns) of the Second Party.

Preamble

[Both HITES and BIDDER referred above are jointly referred to as the Parties]

HITES intends to award, under laid down organizational procedures, Purchase orders / contract/s against Tender /Work Order /Purchase Order No.

HITES desires full compliance with all relevant laws and regulations, and the principles of economic use of resources, and of fairness and transparency in its relations with its Bidder/s and Contractor/s.

NOW, THEREFORE,

To avoid all forms of corruption by following a system that is fair, transparent and free from any influence/prejudiced dealings prior to, during and subsequent to the currency of the contract to be entered into with a view to:-

1. Enable HITES to obtain the desired materials/ stores/equipment/ work/ project done at a competitive price in conformity with the defined specifications by avoiding the high cost and the distortionary impact of corruption on public procurement; and
2. Enable the BIDDER to abstain from bribing or indulging in any corrupt practice in order to secure the contract by providing assurance to them that their competitors will also abstain from bribing and other corrupt practices and HITES will commit to prevent corruption, in any form, by its officials by following transparent procedures.

The parties hereto hereby agree to enter into this Integrity Pact and agree as follows:

Clause.1. Commitments of HITES

- 1.1 HITES undertakes that HITES and/or its Associates (i.e. employees, agents, consultants, advisors, etc.) will not demand, take a promise for or accept, directly or through intermediaries, any bribe, consideration, gift, reward, favour or any material or immaterial benefit or any other advantage from the BIDDER, either for themselves or for any person, organization or third party related to the contract in exchange for an advantage in the bidding process, bid evaluation, contracting or implementation process related to the contract.
- 1.2 HITES will, during the tender process / pre-contract stage, treat all BIDDERS with equity and reason, and will provide to all BIDDERS the same information and will not provide any such information or additional information, which is confidential in any manner, to any particular BIDDER which could afford an advantage to that particular BIDDER in comparison to other BIDDERS in relation to tendering process or during the contract execution.
- 1.3 All the officials of HITES regarding this Integrity Pact will report to IEM, any attempted or completed breaches of the above commitments as well as any substantial suspicion of such a breach shall not be permitted.
- 1.4 HITES will exclude from the process all known prejudiced persons and persons who would be known to have a connection or nexus with the prospective bidder.
- 1.5 If the BIDDER reports to HITES with full and verifiable facts any misconduct on the part of HITES's Associates (i.e. employees, agents, consultants, advisors, etc.) and the same is prima facie found to be correct by HITES, necessary disciplinary proceedings, or any other action as deemed fit, including criminal proceedings may be initiated by HITES. Further, such an Associate may be debarred from further dealings related to the contract process. In such a case, while an enquiry is being conducted by HITES the proceedings under the contract would not be stalled.

Clause 2. Commitments of BIDDERS/ CONTRACTORS

2. The BIDDER commits itself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of its bid or during any pre-contract or post-contract stage in order to secure the contract or in furtherance to secure it and in particular commit itself to the following:-
 - 2.1 The BIDDER will not offer, directly or indirectly (i.e. employees, agents, consultants, advisors, etc.) any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of HITES, connected directly or indirectly with the bidding process, or to any person, organization or third party related to the contract in exchange for any advantage in the bidding, evaluation, contracting and implementation of the contract.
 - 2.2 The BIDDER further undertakes that it has not given, offered or promised to give, directly or indirectly any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of HITES or otherwise in procuring the contract or forbearing to do or having done any act in relation to obtaining or execution of the contract or any other contract with HITES for showing or forbearing to show favour or disfavor to any person in relation to the contract or any other contract with HITES.

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- 2.3 The BIDDER will not engage in collusion, price fixing, cartelization, etc. with other counterparty(s).
 - 2.4 The Bidder(s) will not pass to any third party any confidential information entrusted to it, unless duly authorized by HITES.
 - 2.5 The Bidder(s) will promote and observe ethical practices within its Organization and its affiliates.
 - 2.6 BIDDER shall disclose the name and address of agents and representatives and Indian BIDDERS shall disclose their foreign principals or associates.
 - 2.7 The Bidder(s) will not make any false or misleading allegations against HITES or its Associates.
 - 2.8 BIDDER(s) shall disclose the payments to be made by them to agents/brokers or any other intermediary, in connection with this bid/contract.
 - 2.9 The BIDDER further confirms and declares to HITES that the BIDDER is the original manufacture or its authorised agent/integrator and has not engaged any individual or firm or company whether Indian or foreign to intercede, facilitate or in any way to recommend to HITES or any of its functionaries, whether officially or unofficially to award the contract to the BIDDER, nor has any amount been paid, promised or intended to be paid to any such individual, firm or company in respect of any such intercession, facilitation or recommendation.
 - 2.10 The BIDDER while presenting the bid or during pre-contract negotiations or before signing the contract, shall disclose any payments he has made, is committed to or intends to make to officials of HITES or their family members, agents, brokers or any other intermediaries in connection with the contract and the details of services agreed upon for such payments.
 - 2.11 The BIDDER will not accept any advantage in exchange for any corrupt practice, unfair means and illegal activities.
 - 2.12 The BIDDER commits to refrain from giving any complaint directly or through any other manner without supporting it with full and verifiable facts.
 - 2.13 If the BIDDER or any employee of the BIDDER or any person acting on behalf of the BIDDER, either directly or indirectly, is a relative of any of the officers of HITES, or alternatively, if any relative of an officer of HITES has financial interest/stake in the BIDDER's firm, the same shall be disclosed by the BIDDER at the time of filing of tender.

The term 'relative' for this purpose would be as defined in Section 2(77) of the Companies Act 2013

- 2.14 The BIDDER shall not lend to or borrow any money from or enter into any monetary dealings or transactions, directly or indirectly, with any employee of HITES.
- 2.15 The BIDDER will not collude with other parties interested in the contract to impair the transparency, fairness and progress of the bidding process, bid evaluation, contracting and implementation of the contract, and will not enter into any undisclosed agreement or understanding with other Bidders, whether formal or informal. This applies in particular to prices, specifications,

certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.

- 2.16 The BIDDER will not commit any offence under the relevant Indian Penal Code, 1860 or Prevention of Corruption Act, 1988; further the Bidder(s)/ Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the HITES as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically. The BIDDER also undertakes to exercise due and adequate care lest any such information is divulged.
- 2.17 The BIDDER will not instigate third persons to commit offences outlined above or be an accessory to such offences.
- 2.18 The Bidder(s)/Contractors(s) of foreign origin shall disclose the name and address of the Agents/representatives in India, if any. Similarly the Bidder(s)/Contractors(s) of Indian Nationality shall furnish the name and address of the foreign Principal(s), if any.
- 2.19 The Bidder(s) shall not approach the courts while representing the matters to IEM and the Bidder(s) will await their decision in the matter.

Clause.3. Previous contravention and Disqualification from tender process and exclusion from future contracts

- 3.1 The BIDDER declares that no previous contravention occurred in the last three years immediately before signing of this Integrity Pact, with any other company in any country in respect of any corrupt practices envisaged hereunder or with any Public Sector Enterprise in India or any Government Department in India that could justify BIDDER's exclusion from the tender process
- 3.2 The BIDDER agrees that if it makes incorrect statement on this subject, BIDDER can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

If BIDDER before award or during execution has committed a contravention through a violation of Clause 2, above or in any other form such as to put his reliability or credibility in question, t HITES is entitled to disqualify the BIDDER from the tender process.

Clause.4. Equal treatment of all Bidders/Contractors / Subcontractors

- 4.1 The Bidder(s)/Contractor(s) undertake(s) to demand from his Subcontractors a commitment in conformity with this Integrity Pact.
- 4.2 HITES will enter into agreements with identical conditions as this one with all Bidders and Contractors.
- 4.3 HITES will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

Clause.5. Consequences of Violation / Breach

- 5.1 Any breach of the aforesaid provision by the BIDDER or any one employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER) shall entitle HITES to take all or any one of the following action, wherever required:-
- i. To immediately call off the pre-contract negotiations without assigning any reason or giving any compensation to the BIDDER. However, the proceedings with the other BIDDER(s) would continue.
 - ii. If BIDDER commits violation of Integrity Pact Policy during bidding process, he shall be liable to compensate HITES by way of liquidated damages amounting to a sum equivalent to 5% to the value of the offer or the amount equivalent to Earnest Money Deposit/Bid Security, whichever is higher.
 - iii. In case of violation of the Integrity Pact after award of the contract, HITES will be entitled to terminate the contract. HITES shall also be entitled to recover from the contractor liquidated damages equivalent to 10% of the contract value or the amount equivalent to security deposit/ performance guarantee, whichever is higher.
 - iv. To immediately cancel the contract, if already signed, without giving any compensation to the BIDDER.
 - v. To recover all sums already paid by HITES, and in case of an Indian BIDDER with interest thereon at 2% higher than the prevailing Prime Lending Rate of State Bank of India, while in case of a BIDDER from a country other than India with interest thereon at 2% higher than the LIBOR. If any outstanding payment is due to the BIDDER from HITES in connection with any other contract for any other stores, such outstanding payment could also be utilized to recover the aforesaid amount.
 - vi. To encash the advance bank guarantee and performance guarantee /warranty bond, if furnished by the BIDDER, in order to recover the payments already made by HITES, along with interest.
 - vii. To cancel all or any other contract with the BIDDER. The BIDDER shall be liable to pay compensation for any loss or damage to HITES resulting from such cancellation/recession and HITES shall be entitled to deduct the amount so payable from the money(s) due to the BIDDER.
 - viii. To debar the BIDDER from participating in future bidding processes of HITES for a minimum period of five (5) years, which may be further extended at the discretion of HITES or until Independent External Monitors is satisfied that the Bidder (s) will not commit any future violation.
 - ix. To recover all sums paid in violation of this Pact by BIDDER(s) to any middleman or agent or broker with a view to securing the contract.
 - x. In cases where irrevocable Letters of credit have been received in respect of any contract signed by HITES with the BIDDER, the same shall not be opened.
 - xi. Forfeiture of performance guarantee in case of a decision by HITES to forfeit the same without assigning any reason for imposing sanction for violation of the pact.

- 5.2 HITES will be entitled to all or any of the actions mentioned in para 5.1(i) to (x) of this pact also on the commission by the BIDDER or any one employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER), of an offence as defined in Chapter IX of the Indian Penal Code, 1860 or Prevention of Corruption Act, 1988 or any other statute enacted for prevention of corruption.
- 5.3 The decision of HITES to the effect that a breach of the provisions of this Pact has been committed by the BIDDER shall be final and conclusive on the BIDDER. However, the BIDDER can approach the Independent External Monitor(s) appointed for the purposes of this Pact.

Clause.6. Fall Clause

The BIDDER undertakes that it has not supplied/is not supplying similar product/systems or subsystems OR providing similar services at a price / charge lower than that offered in the present bid in respect of any other Ministry/Department of the Government of India or PSU and if it is found any stage that similar product/systems or sub systems was supplied by the BIDDER to any to the Ministry/Department of the Government of India or a PSU at a lower price, then that very price, with due allowance for elapsed time will be applicable to the present case and the difference in the cost would be refunded by the BIDDER to HITES, if the contract has already been concluded.

Clause .7. Independent External Monitor(s)

- 7.1 HITES has appointed Sh. A.K. Arora, EX-DG, Indian Defense Service of Engineers as Independent External Monitor(s) (hereinafter referred to as IEM(s)) for this Pact in consultation with the Central Vigilance Commission. Contact details of IEM is as below:

Sh. A.K. Arora
Independent External Monitor (IEM)

Office: HLL Infra Tech Services Ltd
B-14-A, sector 62, Noida 201307, U.P
Tel: 0120 4071500

Residence: B-333, Chittaranjan Park
New Delhi – 110019
Tel: 011 26273406

Mobile: +91 8130588577
Email: iem@hllhites.com

- 7.2 The responsibility of the IEM(s) shall be to review independently and objectively, whether and to what extent the parties comply with the obligations under this Pact.
- 7.3 The IEM(s) shall not be subject to instructions by the representatives of the parties and perform their functions neutrally and independently.
- 7.4 Both the parties accept that the IEM(s) have the right to access all the documents relating to the project/ procurement, including minutes of meetings.
- 7.5 As soon as the IEM(s) notices, or has reason to believe, a violation of this pact, he will so inform the CEO/CMD.

- 7.6 The BIDDER(S) accepts that the IEM(s) have the right to access without restriction to all project documentation of HITES including that provided by the BIDDER. The BIDDER will also grant the IEM(s), upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to subcontractors engaged by the BIDDER. The IEM(s) shall be under contractual obligation to treat the information and documents of the BIDDER/ Subcontractor(s) with confidentiality.
- 7.7 HITES will provide to the IEM(s) sufficient information about all meetings among the parties related to the Project provided such meeting could have an impact on the contractual relation between the parties. The parties will offer to the IEM(s) option to participate in such meetings.
- 7.8 The IEM(s) will submit a written report to the CEO/CMD of HITES within 3 to 5 weeks from the date of reference or intimation to him by HITES/BIDDER.

Clause.8. Criminal charges against violating Bidder(s)/ Contractor(s)/ Subcontractor(s)

If HITES obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or if HITES has substantive suspicion in this regard, HITES will inform the same to the Chief Vigilance Officer, HLL

Clause.9. Facilitation of Investigation

In case of any allegation of violation of any provisions of this Pact or payment of commission, HITES or its agencies shall be entitled to examine all the documents, including the Books of Accounts of the BIDDER and the BIDDER shall provide necessary information and documents in English and shall extend all possible help for the purpose of such examination.

Clause.10. Law and Place of Jurisdiction

Both the Parties agree that this Pact is subject to Indian Law. The place of performance and hence this Pact shall be subject to Delhi/ NCR Jurisdiction.

Clause.11. Other legal Actions

The actions stipulated in the Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings.

Clause.12. Validity and Duration of the Agreement

This Pact begins when both parties have legally signed it. It expires for the Contractor/Successful bidder 12 months after the last payment under the contract or the complete execution of the contract to the satisfaction of the both HITES/Consignee and the BIDDER/Seller, including warranty period, whichever is later, and for all other Bidders/unsuccessful bidders 6 months after the contract has been awarded.

If any claim is made / lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged / determined by Chairman and Managing Director/ CEO of HITES.

Clause. 13. Other provisions

- 13.1 Changes and supplements as well as termination notices need to be made in writing. Both the Parties declare that no side agreements have been made to this Integrity Pact.
- 13.1 If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.
- 13.1 Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions

IN WITNESS THEREOF the parties have signed and executed this pact at the place and date first above mentioned in the presents of following witnesses:

HLL Infra Tech Services Ltd.

Bidder

Witness

Witness

1.....

1.....

2.....

2.....

* Provisions of these clauses would be amended /deleted in line with the policy of the HITES in regard to involvement of Indian agents of foreign suppliers.